41 WB PEDICON

Organised by :
Hooghly Academy of Pediatrics
In Association with West Bengal Academy of Pediatrics

Venue :
Rabindra Bhavan, Chinsurah

Conference Date
17,18 December 2022

DR DILIP MAHALANABIS

12 November 1934 - 16 October 2022

The Man who gave the nectar of life to
billions leaves behind a legacy that
has saved and will save countless
lives in the future – ORS

Tributes from

41 WBPEDICON 2022
West Bengal Academy of Pediatrics

41 WB PEDICON 2022

Souvenir
Published on the occasion of
41 WB PEDICON 2022

Dates
17,18 December 2022

Venue
Rabindra Bhavan, Chinsurah

Published by
Dr Indranil Chowdhury
Organizing Secretary

Printed by
Roshni Enterprise, Kolkata

Organising Secretariat : Child Care Karbala More, Chinsurah, Hooghly

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* Personalities left us for heavenly abode

SCIENTIFIC SCHEDULE - DAY 1 - 17 DECEMBER 2022

Time	Session	Speaker/ Moderator	Panelist	Chairperson/Judges
9.50	Welcome address by co-organising chairperson Dr C K Ghosh			
10.00-10.40	Nephro : How to assess the kidney	Amitava Pahari	Sushmita Banerjee Rajiv Sinha, Subhankar Sarkar Sumantra Raut, S N Roy Deblina Dasgupta	Mousumi Nandi SK Bindai
10.45-11.25	Hematology - A Clinical Update	Pritam Singha Roy	Shubham Bhattacharyya Deepshikha Maiti, Kaustav Nayak, Debmalya Bhattacharya	Biplab Banerjee Jagabandhu Guchhait
11.30-11.45	Invasive Meningitis in 360 summit	Jaydeb Roy		Partha Tripathi
11.50-12.30	Gastro : The importance of the gut microbiome	Bhaswati Acharya	Sutapa Ganguly Dilip Pradhan Subhomoy Das Indu Surana	Prabhabati Banerjee Kripanath Das
12.35-01.15	**Dr Tapan Kumar Ghosh Memorial Oration** UTI—The Rationale for Changing Guidelines	Pankaj Hari		Sushmita Banerjee Indranil Chowdhury
01.20-01.35	Management of Pneumonia in children	Indranil Halder		Subhabilas Bhunia
01.40-02.50	**Award PAPERS/Poster Paper**		**Judges : (Oral)** Jaydeb Ray Debasis Bandopadhyay Sumana Kanjilal	**Judges : (Poster)** Sarbani Misra (Roy) Rakesh Mondal Madhusmita Sengupta
02.55-03.35	Vaccine : Vaccine Campaigns and relation to Routine Immunisation	Sunil Agarwalla	Amita Sinha, Abhijit Sarkar Some Suvra Bose Subhajit Bhattacharjee Rina Ghosh	Ranjana Chatterjee Nanigopal Chakraborty
03.40-04.20	Neurodevelopment : Behavioral problems "How to manage and when to refer"	Kalpana Datta	Nandita Chatterjee,Asok Dutta Jasodhara Chaudhuri Mandira Roy,Sudip Saha Srabani Chakraborty	Sukanta Chatterjee Tarak Nath Ghosh
04.25-04.40	Asthma Mimics	Santanu Bhakta		Subrata Banerjee
04.45-05.00	Childhood Hypertension and role of 24 hrs BP monitoring	Rajiv Sinha		Malay Sinha
05.05-05.45	Violence on doctor	Samik Basu	DM, CP, PP, Arun Manglik, Bichitrabhanu Sarkar, Kaushik Chaki	Pradip Mukherjee Ashok Deb
05.45-06.45	Inauguration			
06.50	AGM			
07.30	Cultural evening & banquet dinner	Cultural evening "**POUSHALI"** A musical evening thought of by Indranil Played by Subhadeep, Chandrima, Abir and team		

SCIENTIFIC SCHEDULE - DAY 2 - 18 DECEMBER 2022

Time	Session	Speaker/ Moderator	Panelist	Chairperson/Judges
10.00-10.40	Cardiology- Clinial - Echo Correlate	Anil Singhi	Amitabha Chattopadhyay Debasree Gangopadhay Nurul Islam, Dhritabrata Das Debabrata Nandi	Arup Roy Vinay Asawa
10.45-11.25	Surgery -Common Issues in Office Practice	Subhasis Saha	Sugata Banerjee T.J Banerjee Parthapratim Gupta	Anup Kr Mangal, Santanu Ghosh
11.30-12.10	Infectious- Whats New in Common Diseases	Subhasish Bhattacharyya	Joydeep Das Sayan Chakraborty Sumon Poddar Dibyendu Raychaudhuri Manjari Basu	Subroto Chakrabortty Prosenjit Ghosh
12.15-12.55	**Dr S P Ghosal Memorial Oration** : Medically Unexplained Symptoms	Subhabilas Bhunia		Kalpana Datta Chandrakanta Ghosh
01.00-01.40	Dematology-Spot Light& Deep	Partha Mukherjee	Sudip Ghosh,Sisir Das Abhijit Dutta, Madhab Datta	Abhijit Datta Sudip Saha
01.45	Valedictory			

From the Desk of Hony Secretary General, CIAP

Dr Vineet Saxena
Hony. Secretary General, CIAP 2022-23

Dear Delegates of 41st West Bengal Annual Conference of Pediatrics, WB Pedicon 2022,

It is my pleasure to greet you all on behalf of Central IAP to the Annual Academic & Social Extravaganza of West Bengal Academy of Pediatrics (WBAP) being held on 17th& 18th December 2022 at Hooghly.

It is the State bodies which are the arms and legs of CIAP without which we cannot move. The vibrancy of WBAP in terms of academics & organizational matters is a great asset to IAP. It is all because of the stalwarts from WBAP and the sheer diligence of its members. The rich cultural and intellectual traditions of W Bengal are centuries old and the Golden Jubilee Celebrations of IAP were held here which are still remembered by all.

The State Conference is the perfect opportunity for the Faculty from the State to make their mark and get prepared for the bigger stage. It is the time to reward to the hard work of selfless volunteers of IAP. It is the opportunity for the Postgraduates to get their research abilities tested. From here they gain invaluable experience and exposure.

It is getting tougher to organize Conferences by each passing year and I wholeheartedly applause the hard work of the Organizing Chairperson & Organizing Secretary and their entire team for the tremendous hard work they have put in. I salute the Team WBAP led by DrSushmita Banerjee the President, WBAP &DrIndranil Chaudhary, Hony Secretary of WBAP who have made this mega show possible. I wish all the delegates & faculty a rich learning from WB Pedicon.

Warm Regards & Best Wishes

Dr Vineet Saxena

HSG – 2022-23

From the Desk of President, WBAP

Dr Sushmita Banerjee
President, WBAP

Dear WBAP Members, Delegates, and Faculty,

I welcome you all to our Annual State Conference 2022, convened in Rabindra Bhaban,Chinsurah.

December in West Bengal, with a nip in the air, is a good time to relax with friends and colleagues while sharing knowledge and expertise, at theWBAP State Pedicon.

We hope you will enjoy the scientific program, which has beenselected to deal with topics relevant to our clinical practice. Several panel discussions have been included, to allow an interactive mode of presentation. We have received a large number of abstracts showcasing original academic work from post-graduate students, and the best of these will be presented at the Award and Poster Paper sessions:- we are indeed very happy to welcome these developing Pediatricians to the WBAP family. In addition, to all these academic sessions, the organisers have planned a fabulous social program.

In 2022, we have had a resurgence of academic activities, to more than make up for the last couple of covid affected years. Although we started with mostly online programs, soon the physical conferences took over and members attended with renewed interest and energy. WBAP initiated a few novel actions in 2022. Several Sub-Committees were formed to increase member participation and reach of EB activities. The members of the Academic, Social Welfare and Cultural Committees deserve special mention for their involvement and enthusiasm. Apart from our routine yearly calendar, new programs such as Journal Clubs, as well as Health Camps for deprived childrenwere held. A donation was made from WBAP to an NGO involved with childrens' educational support, as per decision of the EB of 2021, in consultation with immediate Past President, Dr Subroto Chakrabarty.

I would like to thank all the 2022 WBAP Office Bearers, Executive Body Members, Sub Committee members, and organisers of the many CME programs, for their contributions to make the WBAP academic year successful.

My thanks tothe indomitable Dr Indranil Chowdhury, Hon Secretary, and Dr Abhijit Dutta, Scientific Chairperson, for their hard work throughout the year.

Special thanks to my seniors and Past Presidents, Dr Sutapa Ganguly and Dr Arun Manglik for their constant support and guidance.

I thank all the Conference Faculty for the time and effort they have put into their presentations and academic deliberations.

My gratitude to the Organising Committee of Hooghly District Branch for hosting this State Pedicon.

And always, thanks to the WBAP office staff, Beladi, Somnath,Susanta and Kailas for their help and support.

Finally, a big thanks to all attendees, I wish you a successful conference and a healthy and fulfilling year ahead.

Dr Sushmita Banerjee

President, WBAP 2022

From the Desk of Scientific Chairperson

Dr Abhijit Datta
Scientific Chairperson, 41 WB PEDICON 2022

Dear All,

At first I like to thank The Almighty to let us meet again in this 41st edition of WBPEDICON and 3rd, here, in Chinsurah .

We foenixed back to fly in the main stream with our very own HAPCON,2022 and then ventured a leap forward for this PEDICON with high hope to do justice to our legacy.

Inspite of different logistics difficulties , we are confident about your satisfaction in all aspects of our presentation which everybody will cherish for many more years to come .

This could not have been possible without earnest endeavour and honest exercise of willpower of all WBAP members with dedicated support from our team of the whole scientific committee and organizing committee ,with ever smiling support from Somnath, Beladi, Susanta.

I specially than Dr. Susmita Banerjee, Indranil Chowdhury, C.K.Ghosh, Partha Tripathi, Subhabilas Bhunia, Subrata Banerjee,Ranjan Som, Avishek Saren for helping out in depicting a panoramic presentation of our scientific program .

Long live WBAP

Long live HAP

Thanking you

Dr. Abhijit Datta

Scientific Chairperson

Best Thesis

Title Of The Article: Xmn1 Polymorphism Of Hbg2 Gene: A Silver Lining For Hydroxyurea Therapy In Non Transfusion Dependent Thalassemia

Author ; Saheli Roy
Guide: Prof Dr Mrinal Kanti Das
Co-guides: Prof Dr Malay Kumar Sinha, Dr Paramita Bhattacharya

Abstract:

Background: Fetal hemoglobin (HbF) inducers like hydroxyurea have revolutionized the treatment of Non transfusion dependent thalassemia (NTDT) patients. Xmn1 polymorphism is characterized by substitution (C>T) at -158 position of γ-globin gene (HBG2). There are three variants of this polymorphism: CC(wild), CT(heterozygous variant) and CC(homozygous variant). The role of Xmn1 polymorphism as modifier of efficacy of hydroxyurea is an area of interest in current research.

Objective: To estimate the prevalence of Xmn1 polymorphism and determine its impact on efficacy of hydroxyurea in NTDT children of Eastern India.

Study design: This wasa hospital based observational ambispective analytical cohort study conducted in Department of Pediatrics,IPGME&R.

Participants:Study was conducted on 28 NTDT patients of 4-12 years age who were receiving hydroxyurea for less than 1 month.

Interventions:Relevant molecular analysis was done, data on transfusion requirement, height and HbF(%) before starting hydroxyurea was derived from past records and the same parameters again recorded after 6 months of completion of hydroxyurea. Prevalence of Xmn1 polymorphism was estimated and Wilcoxon Signed Ranks Test was used for statistical analysis where p value <0.05 was considered significant.

Results:Prevalence of CC and CT was 43% and 57% respectively, with none having TT genotype. A statistically significantdecrease in transfusion requirementand increase in height was noted following hydroxyurea therapy in both groups, but change in patients with CT (pCT=0.001) was more significant compared to CC (pCC=0.003).

Conclusion: Presence of T allele of Xmn1 polymorphism has favorable impact on efficacy of hydroxyurea in NTDT patients.

Keywords:Thalassemia, NTDT, Hydroxyurea, Xmn1-polymorphism.

Manuscript:

Introduction:

Thalassemia syndromes are a group of genetic disorders characterized by quantitative hemoglobinopathy which eventually leads to chronic hemolytic anemia. β -thalassemia occur from decreased production of β globin chains and this is one of most common single gene disorder worldwide, inherited in autosomal recessive manner with particularly high prevalence among South East Asian and Mediterranean population. Compound heterozygosity of β -thalassemia with HbE leads to HbE-β thalassemia which is quite common in Eastern India. HbE- β thalassemia is thus found to be one of the predominant symptom producing thalassemia apart from β thalassemia major and intermedia in this part of the country (1). Clinically thalassemia can be categorized as follows, the more severe Transfusion dependent Thalassemia (TDT) and the relatively less severe Non-Transfusion dependent Thalassemia (NTDT). HbE- β thalassemia has varied clinical presentation ranging from TDT to NTDT. It is noteworthy that although the global burden of TDT is significant, NTDT constitute only a smaller ill-defined number (2).

Blood transfusion together with iron chelators have been the mainstay of treatment for symptomatic thalassemia syndrome. Though transfusion ameliorates many symptoms and improves growth but it is associated with risk of blood borne infections and iron overload, the latter being attenuated by iron chelators to some extent. This has led to search for alternative modalities of treatment, out of which fetal hemoglobin (HbF) inducer has become quite popular. Among this group of drugs, hydroxyurea has been the most commonly used and studied especially in NTDT patients and its use has also been recommended by Thalassemia International Federation (TIF) (3). But it is still a topic for further research as gaps exist in knowledge about the mechanism of action, efficacy, modifiers of response and safety profile of this drug.

Efficacy of hydroxyurea is said to be influenced by few modifiers; one such important modifier is a single nucleotide polymorphism (SNP) known as Xmn1 polymorphism characterized by substitution(C>T) at -158 position of γ globin gene 2 (HBG2) of β globin locus (HBB) present in >1% of population. Single nucleotide polymorphism database (dbSNP) is a free public archive of broad range of SNP wherein a particular non-redundant number known as Reference SNP (rs) number is assigned to individual SNP which facilitates easy and uniform identification of a particular SNP from the database. Xmn1 polymorphism is designated by rs7482144 and it results in 3 genotypes: wild (CC), heterozygous variant (CT) and homozygous variant (TT). The presence of T allele (CT/TT) has shown to have better response to this drug compared to those without T allele (4). However, this is not the only determinant for the response of hydroxyurea therapy, thus explaining the variable response seen in thalassemia patients with hydroxyurea.

Among all the HbF inducers, hydroxyurea is most widely used but considering its drug toxicity profile and benefit only in a subset of patients, targeted therapy is desirable. Hence, there is need to evaluate the efficacy as well as modifiers of its response so as to derive maximum benefit at the expense of minimum adverse effect. Although few relevant studies have been conducted in different parts of the world, such studies are scarce in Eastern India, particularly West Bengal. Moreover, most available studies are in TDT with very limited information in NTDT. This study was conducted to fill the gaps in existing research with the objective of (a)estimating prevalence of Xmn1 polymorphism in study cohort; (b) Assessing the efficacy of hydroxyurea (c) Determining impact of Xmn1 polymorphism on efficacy of hydroxyurea in NTDT patients of Eastern India.

Methods:

This observational ambispective cohort study was conducted from March 2020 to July 2021 in the Department of Pediatrics, IPGME&R, a tertiary hospital in Kolkata, West Bengal, Eastern India after approval from the Institutional Ethics Committee. All the consecutive eligible children with NTDT initiated on hydroxyurea at thalassemia control unit of the institution were included in this study after taking informed consent and assent (in children aged 7-12 years). The criteria for inclusion were (a)Children with NTDT confirmed by hemoglobin high performance liquid chromatography (Hb HPLC) or molecular analysis; (b) Age group of 4 to 12 years; (c) Hydroxyurea started within 1 month prior to inclusion in the study; (d) Adequate medical records available which was sufficient to extract the necessary data. Children were excluded from the study if any of the following criteria were met (a) Patients who received blood transfusion within last 4 weeks; (b) Patients who did not agree to attend for regular follow up till 6 months of therapy.

At the time of enrolment in the study, baseline data before starting hydroxyurea including annual transfusion requirement, height and HbF (%) were collected from past medical records. The children were thoroughly examined for any adverse effect of the drug clinically and aided by laboratory tests like complete blood count (CBC), liver and renal function tests (LFT & RFT). Also, relevant molecular analysis like Polymerase chain reaction – Restriction fragment length polymorphism (PCR RFLP) for detection of Xmn1 polymorphism[Fig1] and HbE mutation, Amplification refractory mutation system PCR (ARMS PCR) for detection of common β-thalassemia genotypes (IVS1-5(G>C), Cd 8/9(+G), Cd 41/42(-CTTT) and 619-bp deletion) and Sanger sequencing, if required were actively carried out in the associated genetic laboratory of the institute free of cost. Dose of hydroxyurea was adjusted between 10-15 mg/kg/day as a single dose. Owing to the availability of this drug in only capsules of 500 mg in the study setup, in some cases it was administered on alternate days to suitably adjust the requirement as per weight. All these children were also given folic acid supplementation during the entire duration of study and they were transfused when hemoglobin dropped below range of 5 to 6g/dl. Children on hydroxyurea were followed-up prospectively in the outpatient department during total 6 months of therapy. During this time patients were periodically

evaluated for any adverse effect and drug was temporarily stopped if any of the following was noted (a) Absolute neutrophil count (ANC) <1500 /µL; (b)Platelet count < 1,00,000/µL; (c)More than 2 folds rise in serum hepatic transaminases from baseline; (d)More than 50 % rise in serum creatinine from baseline (5). After normalization of parameters, drug was again started and patient closely monitored, however it was permanently discontinued in whom same adverse effect was noted after reintroduction. At the end of 6 months of therapy, annual transfusion requirement (by extrapolating data of 6 months post onset of hydroxyurea), height of the children using stadiometer was recorded and HbF(%) estimation was done with cation exchange method using Biorad Variant II machine for comparison with baseline. HbF at any point of time was estimated only in those patients who had a minimum gap of 2 months from the last transfusion.

Statistical Analysis:

For statistical analysis data were entered into a Microsoft excel spread sheet. Categorical variables were expressed as number of patients and percentage of patients and compared across the groups using Pearson's Chi Square test for Independence of Attributes or Fisher's Exact Test as appropriate. Continuous variables were expressed as Mean, Median and Standard Deviation and compared across the groups using Mann-Whitney U test. Comparison over time was done using Wilcoxon Signed Ranks Test. The statistical software SPSS version 22 was used for the analysis. An α level of 5% was taken, i.e., if any p value was <0.05 it was considered as statistically significant.

Results:

Twenty-eight NTDT children on hydroxyurea therapy was followed prospectively for total 6 months from the start of therapy, out of which 1 patient was lost to follow up while in 2 patients' drug had to be discontinued owing to adverse effects. Thus, therapy could be successfully completed in 25 patients on which the comparative data analysis was done. Baseline characteristics of the study population is summarized in Table 1. All patients in the study population turned out to be HbE-β thalassemia and the commonest β-thalassemia genotype was IVS1-5 (G>C). Thus, IVS1-5 (G>C) & HbE mutation in compound heterozygous state accounted for majority 21(75%) of the population. Prevalence of CC and CT genotype of Xmn1 polymorphism was 12(43%) and 16(57%) respectively with none having TT genotype.

In the study 28 HbE-β thalassemia patients were on hydroxyurea at a mean dose of 10.46+ 1.40mg/kg/day and within range of 10-15 mg/kg/day. One patient was lost to follow up and drug toxicity developed in 6(21%) patients with permanent discontinuation needed only in 2(7%) patients. Most common drug toxicity encountered was myelosuppression with a prevalence of 50% while transaminitis (33%) and elevation in creatinine level (17%) were found in the remaining few. In 25 patients who completed 6 months of hydroxyurea, the average number of transfusions was significantly lower ($p<0.001$) and mean height was significantly higher ($p<0.001$) at the end of therapy. HbF was compared over time in 13 patients who fulfilled the criteria of a minimum gap of 2 months from the last transfusion and revealed a significant increase

in its level at the end of therapy (p=0.023).

Comparative analysis of response was done between two groups of patients having CC and CT genotypes at the end of study in terms of annual transfusion requirement, height and HbF (%) compared across time before and after the study. Results of the analysis are summarized in Table 2. A statistically significantdecrease in transfusion requirementand increase in height was noted following hydroxyurea therapy in both groups, but change in CT (pCT=0.001) was more significant compared to CC (pCC=0.003) [Fig 2]. However statistically significant association was not found between Xmn1 polymorphism and change in HbF level in the present study (pCT=0.139, pCC=0.068).

Discussion:

In the current study cohort, all patients with NTDT turned out to be compound heterozygous for HbE-β thalassemia. This is in accordance with previous literature by Fucharoen S et al. and Williams TN et al.(6,7). In this study population the most common β-thalassemia genotype was IVS1-5 (G>C) accounting for 21(75%) of the population which was similar to findings of studies by Sharma N et al. and Moghaddam EM et al. (8,9). Prevalence of CC and CT genotype of Xmn1 polymorphism in the study population was 12(43%) and 16(57%) respectively with none having TT genotype. The frequency of T allele in female and male was equal (50%), thus indicating no significant correlation between Xmn1 polymorphism and sex of the patient (p=0.524) which was similar to findings of a study by Motovali-Bashi M et al.(4).

The response to hydroxyurea in the present study was comparable to that of Keikhaei B et al. (10). At the end of 6 months of therapy the annual transfusion requirement was significantly lower (p<0.001), mean height (p<0.001) and HbF (%) was significantly higher(p=0.023) in this study population. Drug toxicity profile was similar to a study by Suthar K et al.(5) with 6(21%) patients developing drug toxicity and permanent discontinuation needed only in 2(7%) patients, at a mean dose of 10.46 + 1.40mg/kg/day. Most common drug toxicity encountered was myelosuppression with a prevalence of 50% while transaminitis (33%) and elevation in creatinine level (17%) were found in the remaining few. However, it is noteworthy that toxicity developed at a much lower dose (10.46 + 1.40mg/kg/day) in the current study compared to 20 mg/kg/day in other similar studies(5).

Analysis of response among different genotypes of Xmn1 polymorphism in the current study revealed a statistically significantdecrease in annual transfusion requirementand increase in height following hydroxyurea therapy in both groups, but change in CT (pCT=0.001) was more significant compared to CC (pCC=0.003) genotype. Thus, a relatively favorable response was indeed noted in patients with T allele of Xmn1 polymorphism which corroborated with findings of studies by Ghosh D et al.; Banan M et al. and Italia KY et al. (11,12,13). However statistically significant association was not

found between Xmn1 polymorphism and increase in HbF level in the current study (pCT=0.139, pCC=0.068) which was similar to findings of a study conducted by Motovali-Bashi M et al.(4).

Most of the similar studies conducted till date on NTDT patients were on β-thalassemia, with very few studies on HbE-β thalassemia. One such study was conducted by Italia KY et al.(14) on 11 TDT and only 2 NTDT HbE-β thalassemia patients in Mumbai, India and another by Ghosh D et al. in Burdwan, West Bengal on HbE-β thalassemia (TDT) patients(11). Thus, to the best of knowledge the current study was first of its kind in Eastern India to evaluate the impact of Xmn1 polymorphism on efficacy of hydroxyurea in non-transfusion dependent HbE-β thalassemia patients.

However, this study had few limitations like small sample size with short follow up period inadequate to assess long term efficacy, inability to assess efficacy of higher permissible dosage of the drug, lack of TT genotype of Xmn1 polymorphism in the study population and lack of evaluation of other parameters (SNPs in BCL11A and HBS1L-MYB intergenic region and co-inheritance of α-thalassemia) likely to influence the response of hydroxyurea in these patients. Still, we believe that the study added substantially to the pre-existing knowledge in rational use of hydroxyurea in NTDT variety of HbE-β thalassemia patients of Eastern India.

Hydroxyurea is an effective adjunct treatment for non-transfusion dependent thalassemia patients, but due to its potential serious adverse effects cautious and targeted use of this drug is warranted, in which Xmn1 polymorphism can act as a potential guide. As presence of T allele of this polymorphism is associated with relatively better response to hydroxyurea, benefits of use of this drug preferably in those patients with T allele can outweigh the risks. However future research with a larger sample size including all other modifiers may further substantiate results of this study.

Acknowledgements:
Institutional Ethics Committee, Dept. of Pediatric Medicine, Thalassemia Control Unit, Dept. of Pathology and Dept. of Biochemistry, IPGME&R, Genetic Services Unit, PG Polyclinic, National Institute of Biomedical Genomics, Kolkata

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Key message

What is already known?

Fetal hemoglobin inducers (HbF) like hydroxyurea are known to have some beneficial role in non transfusion dependent thalassemia(NTDT) patients where it can reduce the blood transfusion requirement and its associated complications.

What this study adds?

Considering the potential adverse effects of hydroxyurea, a rational use of the drug is warranted. This study emphasizes on the role of Xmn1 polymorphism as a modifier of efficacy of hydroxyurea therapy in NTDT patients, thus highlighting its potential of guiding the judicious use of the drug.

Table1: Table depicting the baseline characteristics of the study population

Baseline characteristics of study population		N= 28
Gender	Male n(%)	16 (57%)
	Female n(%)	12 (43%)
Median age of study population (years)		8 ± 2.6
Median age of onset of transfusion (years)		4 ± 1.8
Median baseline transfusion requirement (number/year)		6.5 ± 3.6
Stature	Normal n(%)	7 (25%)
	Moderate Stunting n(%)	14 (50%)
	Severe Stunting n(%)	7 (25%)
Family history of similar disease n(%)		13 (46%)

Table 2: Table depicting comparison of various parameters before and after hydroxyurea therapy

Annual transfusion requirement, height and HbF level were compared in the study population before and after hydroxyurea therapy using Wilcoxon Signed Ranks Test (SPSS Version 22) among different genotypes of Xmn1 polymorphism. There was a statistically significant decrease in annual transfusion requirement and increase in height in both CT and CC genotypes following therapy, but change in CT (p=0.001) was more significant than CC (p=0.003). Change in HbF level was however statistically insignificant in both the genotypes.

Parameters	Before hydroxyurea						After hydroxyurea						Comparison of parameters before and after hydroxyurea	
	CT			CC			CT			CC			CT	CC
	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD	P value	
Annual transfusion requirement (number/year)	7.13	6.00	3.22	7.50	7.00	4.27	3.36	4.00	1.86	4.18	5.00	2.79	0.001	0.003
Height (cm)	112.66	114.25	15.59	108.29	106.00	15.12	115.86	118.50	16.35	116.59	109.00	11.93	0.001	0.003
HbF(%)	24.67	23.40	13.95	26.50	24.90	7.54	31.81	32.00	11.05	35.38	37.10	12.01	0.139	0.068

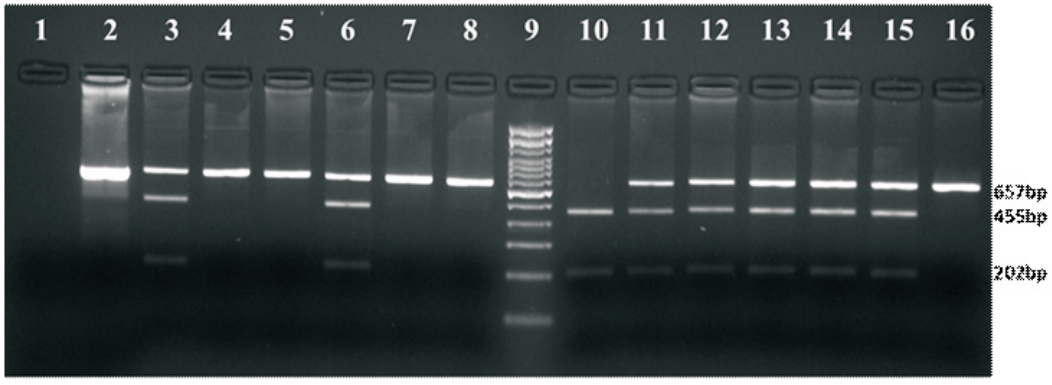

Fig 1: Ethidium bromide stained photograph of an agarose gel showing PCR RFLP for Xmn1 Polymorphism. Lane1: No template control, Lane 2: Negative control undigested, Lane 3-16: Digested products, Lane 3,6,11,12,13,14,15: CT, Lane 4,5,7,8,16: CC, Lane 10: TT, Lane 9: 100 bp ladder

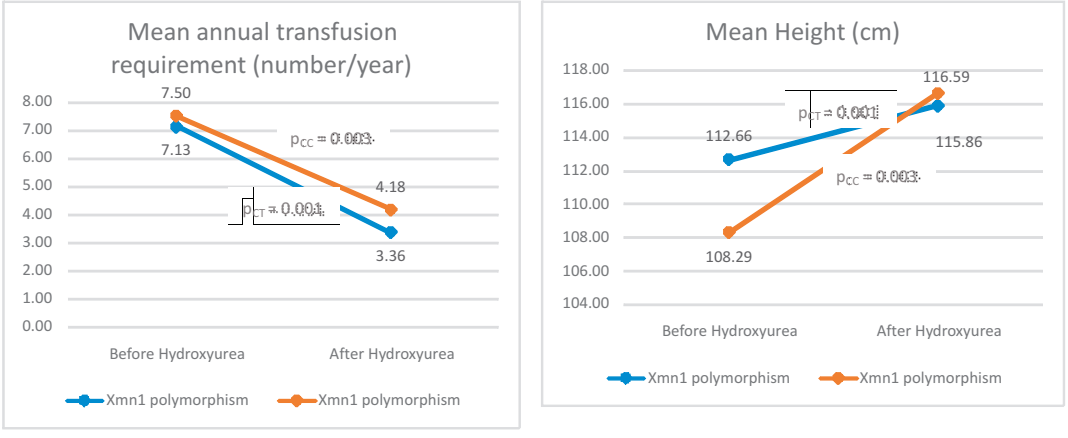

Fig 2: Line diagrams demonstrating change in transfusion requirement and height before and after hydroxyurea along with respective p values in different genotypes of Xmn1 polymorphism in the study population. Figure shows a statistically significant decrease in transfusion requirement and increase in height in both groups following hydroxyurea therapy with change in CT genotype (p=0.001) being more significant than CC genotype (p=0.003).

Oral paper

Incidence and risk factors of Acute Kidney Injury among childhood Nephrotic Syndrome: A prospective cohort study

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Background: Acute kidney injury (AKI) is an independent risk factor in increasing morbidity and mortality among hospitalized children. We hereby assess the predictive value of risk factors in causing AKI among children with Nephrotic Syndrome (NS).

Objective: To formulate a predictive index for the risk of AKI (KDIGO definition) in children hospitalized with NS.

Study design: Prospective observational study

Participants: Children (1-18 years) hospitalized with NS.

Interventions: 265 consecutive hospital admissions for idiopathic NS were screened. 200 admissions in 176 patients were included.

Outcomes: in children developing AKI after admission, we found following admission variables FeNa% ≤ 0.2, male gender, evidence of infection, nephrotoxic drug exposure and albumin ≤ 1.4g/dl to strongly predict subsequent development of AKI.

Results: AKI occurred in 18% (n=36) admissions with none having AKI in repeat admissions. 53% (n=19) had AKI on day 1, 39% (n=14) on day 3, 6% (n=2) on day 5 and 1 (3%) on day 7 of admission. Multivariate analysis revealed the following risk factors to be significantly associated with AKI: FeNa% ≤ 0.2(OR 12.77; 95% CI 3.5-46.4; p<0.001), male gender (OR 6.38; 95% CI 2.76-14.74; p=0.001), evidence of infection(OR 5.44; 95% CI 2.4 – 11.86; p=0.03), exposure to other nephrotoxic drugs (OR 4.83; 95% CI 2.21 – 10.54; p <0.001) and albumin ≤ 1.4g/dl(OR 4.35; 95% CI 1.55 – 12.8; p <0.01)

Conclusion: AKI is common in children hospitalized with NS. Male sex, serum albumin ≤ 1.4g/dl, FENa ≤ 0.2%, nephrotoxic drugs and underlying infection correlated strongly with subsequent development of AKI and can be used in future studies to validate a 'nephrotic renal angina index' to predict the risk of AKI.

Oral paper

ClinicoPathological profile of Pediatric Lupus Nephritis: data from a tertiary care hospital in Eastern India

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Background: Lupus nephritis (LN), with an overall incidence of about 70% in children, is the most important determinant of long term prognosis in children with systemic lupus erythematosus.

Objective : Primary : to study the diversity in initial clinical presentation, biochemical parameters, immunological markers and histopathological staging ; Secondary : to assess the outcome of various immunosuppressive agents in inducing remission at the end of one year .

Study design : Cross sectional observational study .

Participants : Children aged 1-18 years with biopsy proven lupus nephritisfrom January 2020 to October 2021were included.

Methods : Quantitative data was expressed as either mean with standard deviation or median with interquartile range whereas qualitative data was expressed as percentage.Student's t-test for parametric values ,Kruskal–Wallis one-way analysis of variance for non-parametric values and Chi square test were used .

Results: 48 were females (80%) and 12 were males (20%).MMF was given as the sole induction agent in 48.3 % (n=29) while Cyclophosphamide in 20.5% (n=16). Children with proliferative LN were found to have higher proteinuria and lower eGFR at presentation .Themedian NIH Activity Index Score was 7 (IQR: 4-12);Response at 1 year in 53 children who had at least 12 months of follow up: 23 (43.4%) had attained complete response (CR), 22 (41.5%) partial response (PR) while 8 (15.1%) responded poorly or no improvement (NR).Incidence of Flares was 0.14/person year. No significant association between GFR,proteinuria at 1 year and number of flares thereafter with CR/PR/NR at last follow up in those with proliferative LN with atleast 3 years follow up.

Conclusion: Although a difficult disease to treat, early diagnosis and timely aggressive management leads to better response rates as seen in 56% of our patients (41.5% - CR) at 1 year. The efficacy of the use of Cyclophosphamide and MycophenolateMofetil in pediatric lupus nephritis needs further elaborative studies with larger sample size.

Keywords : Childhood Lupus, glomerulonephritis, cyclophosphamide, mycophenolatemofetil

Oral paper

Predictive value of Full Outline of Unresponsiveness (FOUR) Score and Glasgow Coma Scale (GCS) in outcome of children admitted with altered sensorium in Pediatric Intensive Care Unit: A prospective observational study.

BAGESHREE SAHA

Objective: To compare the predictive values of FOUR score with that of pGCS in outcomes of children with altered sensorium admitted in PICU of a tertiary care teaching hospital.

Methodology: This prospective observational study was conducted in department of paediatrics of a tertiary care centre in eastern India. Demographic data, clinical details, biochemical parameters, treatment with clinical outcome were recorded. The mean GCS and mean FOUR score at 0,12 and 24hour of each group (survivors and non-survivors) were compared with the outcome parameters like mortality and functional outcome of survivors at discharge, PICU related morbidity in terms of PICU stay, inotrope, invasive mechanical ventilation requirements, and among disease groups.

Results: Hundred children with median age of 3.8 (6.1) years were included who were admitted between June 21 to June 2022 in PICU with altered sensorium. Of these, 48 % had Primary neurological abnormalities consisting of AES, Meningitis, Intra-cranial hemorrhage/ SOL, Seizure disorder and Hypoxic Ischemic Encephalopathy sequalae or structural abnormalities. While, remaining 52% were secondary CNS insult with Metabolic encephalopathy, Acute gastroenteritis leading to electrolyte imbalance and Postoperative hypoxic brain injury being the disease groups. Significant difference between survivors and non-survivors were observed with the following clinical characteristics of the study population shock, hypoxia, pallor, icterus, edema, abnormal pupillary reaction, tone abnormalities, Abnormal deep tendon reflexes; and laboratory parameters hemoglobin, platelet count, arterial pH and Lactate. 80% children required inotropic support at some point of PICU stay, which was statistically significant in terms of outcome at a p value of 0.001.83% required some forms of Positive Pressure Ventilation. FOUR score on admission performs significantly better (p value= <0.004) than pGCS in predicting Invasive mechanical ventilation requirement. Children admitted with FOUR score >10.5 were less likely to require IMV (OR 0.088).In-hospital mortality in our study was 53%. Mortality in Secondary CNS insult group (59.6%.) was higher than Primary Neurological Abnormalities group (45.8%). For both primary and secondary neurological abnormalities, FOUR Score at 24 hours is the best predictor of outcome (AUC= 0.969 and 0.936) and children admitted with primary neurological abnormalities are more likely to survive even with lower FOUR Score (>8.5) in contrast to those with secondary CNS insult.

For predicting overall survival, FOUR Score has highest Sensitivity (93.6%) and NPV (93%) at 12 hours , while maximum Specificity (90.56%) and PPV (88.88%) was found at 24 hours. Also, odds of survival increases by 8 times, 2.01 times and 8.7 times per unit rise in FOUR score at admission, 12 and 24 hours respectively. But no such relation with survival is observed for sequential changes in GCS.

Conclusion: Thus we can conclude that similar to the previous studies, we too observed FOUR score was as good as GCS and performed better than GCS in certain instances like predicting IMV requirement. Also, it improves communication and provides the most pertinent neurologic details required to make decisions on the care of comatose patients owing to the inclusion of brainstem reflexes and respiration patterns. Yet to establish superiority over a time-tested scale like GCS, more studies with larger sample size are required.

Oral paper

Burden and Epidemiological Factors Contributing to Iron Deficiency Anaemia in Children Between 6 Months to 5 Years Age : An Experience in a Tertiary Care Hospital

Surojot Bhattacherjee

Introduction : Anaemia is a global health problem affecting both developing and developed countries with major consequences for human health as well as social and economical development. Iron deficiency anaemia is the most common nutritional anaemia in the world.The objective of the study is to determining prevalence and risk factors contributing to iron deficiency anaemia between 6 months to 5 years age group children admitted in our hospital.

Aims and Objectives: 1 .To study prevalence of iron deficiency anaemia

2. To study factors affecting iron deficiency anaemia.

Methods : This was a hospital based observational cross sectional study of 100 children admitted at the pediatric department , Midnapore Medical College between 6 months to 5 years of age. The study was done with the help of a pretested questionnaire, clinical examination and blood parameters including hemoglobin,serum iron profile to confirm the diagnosis.

Results: The prevalence of iron deficiency anemia was 65% among the study population . 81% low birth weight babies were affected with iron deficiency anemia compared to those whose birth weight were normal (more than equal 2.5 kg) p value 0.00279 which was significant. Low serum ferritin was found in 92% patient with iron deficiency anemia. 81% were suffering from iron deficiency anemia whose complementary feeding started late p value is 0.0237 which was statistically significant . Low socioeconomic status , overcrowding , malnutrition and those who started cow milk at an early age were also found to be risk factors in our study which was statistically significant. Those who received albendazole for deworming after 2 years of age have less prevalence of iron deficiency anemia which was statistically significant. 40% children having iron deficiency anemia were taking facilities of the National Iron Plus Initiative and 80% having anemia in children who did not receive iron supplements under the National Iron Plus Initiative , which was statistically significant.

Conclusion: Prevalence of iron deficiency anemia remains a major health problem in our country. Low socioeconomic status, overcrowding, malnutrition plays a major role in it and serum ferritin is the most sensitive marker of iron deficiency anaemia, it helps to diagnose early in its course and taking facilities of National Iron Plus Initiative also helps to prevent iron deficiency anaemia in most of the children.

Oral paper

EARLY PREDICTION OF ABNORMAL NEUROLOGICAL OUTCOME IN INFANTS WITH ACUTE BILIRUBIN ENCEPHALOPATHY

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Introduction: Acute bilirubin encephalopathy (ABE) remains one of the importantcauses of neonatal mortality and child disability and early identification and intervention can improve outcomes. The purpose of this study was to evaluateearly predictors of abnormal neurological outcome in infantswith ABE.

Methods:Newborns of gestational age ≥ 35 weeks and diagnosed with ABE (Bilirubin-induced neurological dysfunction (BIND) score ≥ 1) were includedin the study. Risk factors (ABO, Rh incompatibility, G6PD deficiency, hypothyroidism), peak totalserum bilirubin (TSB) value was determined they were managed with phototherapy ± exchange transfusion (ET) and followed up with OAE (Oto acoustic emission) at discharge and with BERA (brainstem evoked response audiometry), neurodevelopmental assessment and MRI brain at 3 months of age. Abnormal neurological outcome was defined if any of BERA, MRI brain or neurodevelopmental assessment was abnormal.

Results：37 neonates were included in the study out of which 1 succumbed and outcome data of rest 36 infants were used for analysis，of which 22 infants got abnormalneurologicaloutcome. Correlation study showed that G6PD deficiency was significantly associated with abnormal OAE finding （p value .045）. ROC curve and parallel tests revealed peak TSB 〉 29. 8 has 81. 25% sensitivity of predicting poor neurodevelopmental outcome and BIND score 〉4 has 94. 12% specificity of predicting abnormal MRI brain. BIND score 〉6 has very high risk of mortality and morbidity.

Interpretation： Although there was no significant correlation between peak TSB and BIND score，peak TSB and BIND score individually can predict abnormal neurological outcome.

Oral paper

Validation of Puberty Interpreter, a mobile application-based evaluation of pubertal disorders

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Background: Assessment of pubertal disorders is challenging for the pediatricians causing unnecessary evaluation on one hand while missing pathology on the other. The paucity of pediatric endocrine centers further adds to the problem in resource poor settings. We have developed puberty interpreter, a mobile application that provides instantaneous guidance regarding diagnosis and management of children and adolescents with concern for pubertal disorders based on the input of age, tanner staging (breast, pubic hair, and menarchal status in girls; testicular volume and pubic hair status in boys), and growth parameters (height and height SDS for bone age).

Aim: To evaluate the predictive accuracy of puberty interpreter in children and adolescents with concerns of early or delayed puberty.

Methods: The study involved the development and validation of the mobile application. The diagnostic algorithm was based on published protocols for evaluating pubertal disorders using clinical data (height, age, pubertal status, and bone age). The algorithmswerethen uploaded to our Mobile application. The guidance provided by the application was compared to clinical diagnosis in 408 children (126 boys) presenting with concern for pubertal disorders (247 with early and 161 with delayed puberty).

Results: The application guidance was concordant with clinical diagnosis in 401 (98.3%) cases. Discordance with clinical diagnosis included an erroneous diagnosis of central cause in a boy with CAH with triggered puberty and the labelling of three girls with central cause as peripheral. In subjects with delayed puberty the application guidance included an inaccurate diagnosis of obstructive cause in a girl with acquired hypogonadism, CDGP in a girl with hypopituitarism and Complete androgen insensitivity syndrome in a girl with systemic disease.

Conclusion: Puberty Interpreter based guidance for the assessment of pubertal disorders is expected to allow a rational point of care evaluation in the community.

Poster Paper

A Rare presentation of cutaneous manifestation of covid -19 infection in small child

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Introduction

With more than 241 million cases and 4.91 million deaths worldwide, coronavirus-2019 (COVID-19) has been a significant global economic and healthcare burden .Several complications have been noted in patients of COVID-19.Vasculitis is the inflammation of blood vessels.It is triggered by autoimmune disorders, infections, and trauma.So far 8 cases has been reported of covid 19 associated vasculitis.

Case

A 9 month old boy born out of 3rd degree consanguineous marriage came to paediatric's OPD of Malda Medical College and Hospital with chief complaints of multiple emerging skin lesions all over the body including scalp, face ,extremities, back, abdomen from 5-7 days duration.The skin lesions were of different colour , violaceous to blackish, some fading away and itchy and palpable in nature, with various shapes and size(1-4cm).Patient had a history of febrile episode of illness 20-22 days before this episode.

On Examination child was irritable, vitals stable with mild pallor and no hepatosplenomegaly, no lymphadenopathy, no bleeding manifestations.

Investigations done platelet count was normal, but PT, APTT were extremely elevated>120secs(Beyond measuring range). By suspecting DIC immediately we gave the patient FFP, Vit K and on the next day spots started fading out and disappears within 72 hours and PT, APTT normalises.We sent other investigations also to rule out the other causes infectious causes like dengue, scrub typhus, Anti SARS COV- 2 Antibody, viral antibodies, coagultion factor assay but all reports came negative except for Anti SARS

COV-2 Antibody titre was >250 IU/L

Conclusion

In this type of cases, we should have high index of suspicion for Sars-Cov2 infections in this time period of covid pandemic era.

Poster Paper

The validation of Diabetes interpreter, amobile application-based tool, in classifying childhood and adolescent diabetes

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Background:

The classification of childhood and adolescent diabetes involves a combination of clinical and laboratory workup, making a cost-effective tool for the same desirable. We have developed a Diabetes interpreter, a mobile application-baseddevice that provides individualized guidance regarding the classification of diabetes.

Aim:

To validate the diagnostic accuracy of a Diabetes interpreter in classifying children and adolescents with diabetes.

Methods:

Records of 247 children and adolescents with diabetes (146 boys, 8.4 ± 4.0years, 205 Type 1, 31 Type 2, six neonatal, five monogenic) presenting to our center from January 2018 to December 2020 were analyzed using the application. The application guides diagnostic work-up after entering clinical parameters (age, ketoacidosis at presentation, weight, height, and insulin dose).

Results:

The guidance provided by the application was concordant with clinical diagnosis in243 (98.7%) with discordance in three normal-weight adolescents with Type 2 Diabetes and one with CEL-related diabetes within one year of diagnosis. The clinical criteria allowed diagnosis in 197 (79.7%), with the need for GAD antibody in 39(15.8%)and genetic studies in 11 (4.5%).

Conclusion-

Diabetes Interpreter has high accuracy in classifying diabetes in children and adolescents while restricting the extent of the diagnostic work up.

Poster Paper

A Rare Case of Pancreatic Ascites Secondary to Chronic Pancreatitis

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Ascites is a collection of fluid within the peritoneal cavity. In children hepatic, renal and cardiac disorder are the most common cause. Portal hypertension and sodium, fluid retention are the vital factors in the pathophysiology of ascites. Pancreatic ascites is a challenging problem faced by clinicians.

This is a report on a child who presented with pancreatic ascites In pediatric ward of RGKMCH.A 10 yr old girl presented with pain abdomen for last 3-4months & generalized swelling of whole body for past 2.5months.H/O low grade fever one month back. No contact h/o tuberculosis. On systemic examination abdomen distended,flanks full, umbilicus flushed, shifting dullness present. Patient is euglycemic, routine blood counts, renal function tests are normal.No dyselectremia was detected. CXR PA view within normallimit. LFT within normal limit. Serum amylase was significantly elevated. Ascitic fluid was mildly hemorrhagic, amylase was raised, lymphocytosis was observed. The serum -ascites albumin gradient (SAAG) is the best test for classifying ascites into portal hypertension(SAAG>1.1g/dl) and non portal hypertension(SAAG<1.1g/dl).Here SAAG value was 1.UGIE-normal study. Following large volume paracentesis patient became hemodynamically unstable and shifted to PICU for combating shock .Ionotropes support , 20% albumin infusion was initiated along with TPN and injection octreotide.Patient became stable here and ascites reduced. CECT whole abdomen shows mild ascites and pancreatic parenchymal thinning with prominent Main Pancreatic Duct ,(MPD) likely chronic pancreatitis. These findings suggestive of no pancreatic leakage or pseudocyst.After 2wks of PICU stay patient referred to a specialized Gastroenterological Department of a superspeciality hospital for MPD stenting. In conclusion we state that pancreatic ascites must be considered in differential diagnosis of intractable ascites in children. CECT abdomen and ERCP will give a road map in deciding the type of intervention. On follow-up after one month the child is doing well with resolution of ascites without doing Endo therapy.

Poster Paper

A Rare Complication Of Post Streptococcal Glomerulonephritis : Posterior Reversible Encephalopathy Syndrome

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INTRODUCTION:

Developing hyepertensive encephalopathy following Post-streptococcal glomerulonephritis is a known but uncommon manifestation and developing posterior reversible encephalopathy syndrome in such a situation is extremely rare.

CASE PRESENTATION:

An eleven year old boy born of a nonconsanguinous marriage presented with fever, two episode of convulsion (generalised tonic clonic in nature) within a span of 12 hours. At the time of admission child was febrile, drowsy responsive only to painful stimuli, no neck rigidity, negative kernig sign and no focal neurological deficit. Blood Pressure was 152/90 mmHg (>99th Percentile).immediate stabilisation was done. A provisional diagnosis of encephalopathy was made and MRI Brain suggested. MRI Brain showed bilateral cerebral hemispheric multifocal post-ictal edema which were compatible with radiological diagnosis of posterior reversible encephalopathy syndrome(PRES). Subsequently the child developed oliguria, microscopic hematuria, facial puffiness and after detailed history taken from parents, it was revealed that there was a history of facial puffiness and a sore throat about 2weeks prior admission in this hospital. With the help of relevant history, clinical examination and laboratory investigation a diagnosis of post streptococcal glomerulonephritis(PSGN) was made and child was managed accordingly. Follow up MRI Brain done after 10 days and showed normal study.

DISCUSSION:

The possible diagnosis of PRES following hypertensive encephalopathy secondary to acute PSGN was made based on clinical presentation, laboratory and imaging data. Althogh seizures occurring with severe hypertension could be due to hypertensive encephalopathy, seizures are one of the commonest manifestations of PRES.

Poster Paper

Rare Cases of Congenital MuscularDystrophy:TheCollagenVI-RelatedMyopathies

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Background:

Floppy infant refers to an infant with severely reduced muscle tone, an attributable cause being Congenital Muscular Dystrophy (CMD). Collagen VI-related Myopathies are extremely rare among the CMDs, resulting from mutation ineither of the three genes-COL6A1,COL6A2orCOL6A3 ,encoding Collagen-VI. They represent a spectrum of overlapping clinical phenotypes, with BethlemMyopathy (BM) at milder end and Ullrich Congenital Muscular Dystrophy (UCMD) at more severe end.

Case Description: A 3-year-old male patient (with history of 30 consanguinity)presented to us with inability to sit unsupported and too “floppy” to other children of same age. Clinically, he had generalized muscle wasting and weakness since birth, motor developmental delay, hypotonia, proximal joint contractures, hypermobility of distal joints; and raised CPK and LDH among laboratory parameters.

Another1-year-old female child, born out of non-consanguineous marriage, presented withdelayedmotordevelopment,generalizedhypotonia,headlag,bilateralankleand3rdmetacarpophalangealjointcontractures,earlyonsetmuscleweaknesswithoutgrosslyvisiblemusclewasting,tonguefibrillationsandnormal CPK but raised LDH. The clinical features and investigations were suggestive of CMD in both cases. Subsequent genetic testing of the two patients confirmed UCMD and BM respectively, with common gene involvement(COL6A3mutation).

Conclusion: A close resemblance exists between the clinical features and genomics of BM and UCMD. Hence, UCMD and BM can justifiably be regarded as being positioned at the flanking ends of a continuous spectrum of disease.

Keywords: Ullrich Congenital Muscular Dystrophy, Bethlem Myopathy

Poster Paper

A STUDY ON CLINICAL PROFILE AND NON-COVID RESPIRATORY VIRAL INFECTIONS IN A NON-COVID TERTIARY CARE HOSPITAL IN KOLKATA DURING COVID PANDEMIC

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Objectives:

To evaluate the clinical picture and viral aetiologies (other than SARS-CoV-2) of acute respiratory tract infections in under- five children during the COVID-19 pandemic.

Methods:

This was a hospital based, prospective, observational and cross-sectional study carried out among under-five children admitted at IPGME & R, Kolkata, satisfying both inclusion and exclusion criteria. During the study period of one and a half year, after taking consent from the parents, clinical data were collected in pre-formed questionnaire and rt-PCR was implemented to detect respiratory viral pathogen. The statistical analysis was done by using Statistica version 8.

Results:

A total of 142 children of mean age 13.18 months with Acute Respiratory Infection (ARI) and COVID RT-PCR negative were included in this study. Passive smoking (p-value 0.023), partially completed vaccination (p-value 0.041), non-exclusive breast-feeding in first 6 months of life (p-value 0.031), history of low birth weight (p-value 0.044) and family history of recent contact of ARI has statistically significant positive correlation with ARI (0.018). Rhinorrhoea was the most common symptom (prevalence 84%). RSV-A was the most common viral pathogen (33.10%). The death was most strongly associated with adenovirus (RR= 7.962; OR= 28.846; 95%CI= 2.795- 297.719). CCF, secondary bacterial pneumonia, acute otitis media and acute gastroenteritis were the most prevalent complications.

Conclusion:

The results provided aetiology, prevalence, seasonality, and clinical manifestations of upper respiratory tract infections and the association of complications and death with each pathogen during the COVID-19 pandemic. Further studies will detect broader range of viruses for better clinico-virological correlation.

Poster Paper

DELVING INTO EMPYEMA- BRUTON AGAMMAGLOBULINEMIA

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INTRODUCTION:

Bruton agammaglobulinemia is a X-linked (XLA) immunodeficiency disorder characterized by the absence of mature B cells, resulting in severe antibody deficiency and causing recurrent infections. It is caused by a mutation in the Bruton Tyrosine Kinase (BTK) gene that encodes a protein involved in B cell maturation.

CASE REPORT:

A 1 year old boy born of a consanguineous marriage presented with left sided empyema with history of recurrent lower respiratory tract infection and recurrent ear infection in the past. On general examination baby was found severely malnourished and had pallor and angular cheilitis.The laboratory examination revealed anemia and thrombocytosis.The child was managed by placing ICD and giving IV antibiotics with additional thrombolytic therapy.For further evaluation his immunological profile was sent and it was suggestive of hypogammaglobulinemia.Then he was given intravenous immunoglobulin for suspecting as a case of primary immunodeficiency disorder and then flowcytometry was sent for confirmation which showed absent CD 19 positive B cell. Genetic analysis identified mutation of BTK geneand final diagnosis of Bruton Agammaglobulinemia was made. The child was then discharged and advised to receive IVIG on monthly basis.

CONCLUSION:

X- linked agammaglobulinemia is an immune disorder that may present with severe to milder form of the disease. The diagnosis of XLA comprises clinical suspicion by history, especially family history, and physical examination followed by laboratory and genetic tests.

Poster Paper

Distal renal tubular acidosis presenting as a case of Rickets

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Case presentation:

We present a case of an eight year oldmale child whoreported to the department of Pediatrics with complaints of not gaining adequate height for last six years.Mother also noticed thatfor the last three years, child's wrist,elbow and ankle were getting inappropriately widened and lower limbs were gradually bending over the last one year. Mother also complained that for last two years,he was drinking more water throughout the dayand passing high volume urine very frequently.

On investigation, his blood sugar was 97mg/dl, serum Calcium and Phosphate report was8.6 mg/dl and 4.1mg/dlrespectively. ABG report showed pH , HCO3- 15meq/lt with hypokalemia (K+2.5 meq/lt). Anion gap was 11 and Chloride level was 115 meq/lt.Then we performed 24hr. urinary citratewhich came as 13.3mmol/l(increased),urinary calcium 8.4mg%, urinary K+13.1 meq/lt. Radiological picture of bones showed rickety changes. Finally the diagnosis was made as Distal renal tubular acidosis.After giving alkali supplements,patient responded both clinically and biochemically further clinching the diagnosis.

Discussion:

Distal RTA (RTA type 1) is a rare renal disorder,where alpha intercalated cells of the cortical collecting duct of the distal nephron fail to secrete acid into the urine,resulting in an urinary pH of less than 5.5,non-anion gap hyperchloremic acidosis and hypokalemia.

Conclusion:

As the child presented with severe growth restriction and features of rickets at the age of eight years, so our case is unique from the point that the condition was undetected till eight years of age.

Key words: Acidosis,Renal, Rickets

Conflicts of interest: None

Poster Paper

ASSOCIATION BETWEEN LOWER 25 -OH VITAMIN D LEVELS AND EARLY ONSET NEONATAL SEPSIS

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Objective

To evaluate the effect of neonatal vitamin D levels on early onset neonatal sepsis.

Methods

This hospital based descriptive study was conducted in the SNCU of a tertiary care teaching hospital in West Bengal, Eastern India from October 2021 through September 2022. The study group consisted of term neonates with clinical and laboratory findings suggestive of early onset sepsis infection admitted to SNCU within the first three postnatal days of life who were 37weeks of gestation. The control group consisted of neonates with no signs of clinical infection admitted to SNCU.

Results

Out of total of 120 neonates (55.8%) was male and (44.2%) was female. No significant difference was found between two groups in terms of sex, birth weight, gestational age, mode of delivery, sun protection. 25-OHD levels in the study group were significantly lower compared with those in the control group ($P<0.05$). Proportion of leucocytosis was much higher among study participants with vitamin D deficiency (61.4%). .Platelet count markedly reduced (31.6%) among study participants with vitamin D deficiency. CRP level markedly increased (87.7%) among study participants with vitamin D deficiency. All finding was statistically significant ($p<0.05$).

Conclusions

This study report shows significantly lower vitamin D levels in term neonates with early onset sepsis compared to the healthy control group without sepsis.

Keywords 25 OH vitamin D, Neonatal sepsis

Poster Paper

Neonatal Arrhythmia-sinister in disguise

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Keyword:

SVT(Supraventriculartachycardia) ,Neonate,Inj. Amiodarone,

Background:

SVTs are the most common symptomatic arrhythmia in all children, including neonates.SVTs usually have -rate>200 beats/min,frequently fixed with no beat-to-beat variation in rate.SVT in neonates is almost always reentrant.Rentry or reciprocating types of SVT includes-AVRT and AVNRT.AVRT is not only the most common meachanismof SVT but also the most common tachyarrhythmia seen in paediatrics age group.

Case presentation:

A 3 days old baby came to the SNCU with complaining of yellowish discoloration of eyes and skin .After admission distress feature seen like- irritability,excessivecrying,refuse feedings and rapid respiratory rate.Onroutine clinical examination and monitoring found that heart rate of the baby is 265 beats/min and oxygen saturation is 85% in room air. No congenital anomallynoted.On blood examination CBC,Sodium,Potassium,Calcium,Thyroid and ABG findings are within normal limit. Only Bilirubin report is derranged.On Chest Xray no abnormality noted.OnECG findings tachycardia,no p waves and narrow QRS complex noted.

Conclusion:

PSVT can occur in healthy baby who has no complication during and after delivery. So, we need to measure heart rate after birth irrespective of gestational age,birth weight and monitoring also needed.

Poster Paper

BONE MINERALDENSITY INDEX OF PEDIATRICS PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND JUVENILE RHEUMATOID ARTHRITIS ATTENDING IN A EASTERN INDIAN TERTIARY CARE HOSPITAL

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Introduction:

Osteoporosis in adult is well known entity but in pediatric age group it is less studied area. Though there are few studies in western countries regarding osteoporosis in children with pediatric rheumatological disorders, studies from Indian subcontinent are lacking.Causes of osteoporosis in children may be primary or secondary.Among the secondary causes rheumatological disorders constitute a major portion.

We determined BMD in Indian children with Systemic Lupus Erythematosus (SLE) and Juvenile Idiopathic Arthritis (JIA) and controls &to evaluate the relationship between disease-related variables and BMD

Patients & Methods:Patients with age range 5-17 years consecutively attending a pediatric rheumatology clinicand healthy age & sex matched controls who are willing to participate in the study were enrolled in a cross-sectional study between 2021 and 2022. We have asked some question to assess when they have entered in puberty.We have measured the height,BMI(Body mass index)on the day of DEXA scan.Data like cumulative dose of steroid & duration of steroid collected from OPD record section.We have measured DEXA score of lumbar spine in GE LUNAR DPX DEXA machine . The correlation between BMD and cumulative dose of steroids, disease duration, disease activity, height, BMI,onset of puberty and age was investigated.Some basic blood investigations calcium ,phosphate,alkaline phosphorus has been done to know the bone status.

Results:

BMD in patients is significantly lower in patients than controls,though in between JIA & SLE there is no significant difference of BMD.Cumulative dose of steroid, duration of illness,duration of treatment with steroid have negative effects on BMD.Though disease activity doesn't significantly changes the BMD,BMI has good effect on BMD i.e. higher BMI is associated with better DEXA score.2 of our patients had compression fracture in the vertebra.

Conclusion

:From our study we concluded that compared to controls, cases with rheumatological disorder had more chances of osteoporosis. The major contributing factors were disease duration, increased duration therapy,cumulative dose of steroids. These associations suggest that not only drugs, but increased disease duration meant longer periods inflammation which may have lead to osteoporosis. So in conclusion we would like to emphasize the fact that timely diagnosis and early intervention not only prevents deformities but also decreases the chance of osteoporosis.Many of our patients is now on 6 monthly zoledronate therapy along with diet modification & vitamin D and calcium supplement and they are doing well now despite very poor BMD.

Poster Paper

Macrophage Activation Syndrome as Onset of Paediatric Systemic Lupus Erythematosus

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Introduction:

Systemic Lupus Erythematosus (SLE), a prototype chronic autoimmune disease is characterized by immune dysregulation and multisystem inflammation due to circulating autoantibodies directed against self-antigens. It affects almost every organs, most frequently skin, joints, kidney, central nervous system and haematopoietic cells with systemic signs of inflammation like fever and lymphadenopathy.

Macrophage Activation Syndrome (MAS), a rare and potentially life-threatening complication is mostly seen in Juvenile Idiopathic Arthritis. MAS, which may infrequently occur in SLE, very rarely occurs as the initial presentation in paediatric SLE.

Case presentation:

A 9y old female patient was brought to our Emergency with high-grade fever, constitutional symptoms, hyperpigmented maculopapular rash on bilateral lower limbs, generalized lymphadenopathy, hepatosplenomegaly, oral ulcer on the hard palate and a toxic sick look. Blood investigations revealed bicytopenia (anaemia and thrombocytopenia), elevated AST, falling trend of ESR, hyperferritinemia, hypertriglyceridemia and elevated Lactate Dehydrogenase (LDH). Subsequentlybone marrow aspiration cytology revealed the picture of hemophagocytosis. MAS was identified timely and was treated aptly with a course of IV Methylprednisolone followed by oral prednisolone. Meanwhile ANA came out to be 4+, coarse speckled pattern and positive anti Sm and anti dsDNA antibodies. Renal biopsy and histopathology revealed Lupus Nephritis Class 3 and hence, was treated with Cyclophosphamide pulse therapy as per NIH protocol, along with hydroxychloroquine and prednisolone.

Conclusions:

Thus, under high clinical suspicion, prompt diagnosis and implementation of appropriate treatment is crucial for preventing serious complications and improving patient outcomes.

Poster Paper

A Study on Role of Expressed Breast Milk in Pain Relief During Heel Prick in Late Preterm Neonates Using the PIPP score

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Introduction:

Pain is an unpleasant sensory and emotional experience to every living body. Researches have shown that repeated and prolonged pain experienced by the neonates can affect their long term neurodevelopment. Therefore, the assessment and alleviation of pain is required for the newborn to prevent long term deleterious consequences. Non pharmacological measures like breast feeding is considered as safe and recommended modality to reduce acute procedural pain in newborns.

Aims and objectives:

In this study, the aim was to measure the efficacy of expressed breast milk as analgesic agent during heel lance for late preterm neonates using the PIPP score.

Materials and methods:

Randomly selected 100 healthy late preterm newborns were divided into intervention (receiving EBM as analgesic agent) and control group (without any analgesic agent) for the study. Maximum HR, minimum SpO2 and facial expressions were noted at different time instances after heel prick for the mentioned groups to obtain the PIPP score. Unpaired t-test was used to compare the PIPP scores of both the groups, whereas Chi-square test was used to analyse the categorical variables, considering significance level of 5%.

Results:

Mean PIPP scores of the intervention group computed at different time intervals were found to be lower than the control group. In addition, the difference was significant ($p<0.05$) according to the analysis.

Conclusion:

Heel lancing produced moderate pain response in both groups. Feeding with EBM reduced moderate pain to minimal or no pain in the intervention group and worked as an effective analgesic agent.

Poster Paper

A STUDY ON CLINICO-ETIOLOGICAL SPECTRUM AND OUTCOME OF PAEDIATRIC STROKE IN A TERTIARY CARE HOSPITAL

DR MADHURIMA GANGULY
MENTORED BY: DR PRANAB KUMAR DEY, DR DHIMAN DAS
R G kar Medical College and Hospital

BACKGROUND:

Stroke is defined as a sudden onset, focal neurological deficit resulting from irreversible focal ischaemic or hemorrhagic damage to the brain parenchyma secondary to cerebro-vascular disorder. Paediatric stroke is relatively rare, however, due to non-specific signs and symptoms and varied manifestations, diagnosis is difficult and it can influence outcome.

METHODOLOGY:

A single centre institution based prospective study was conducted on 30 children in the age group 6 months to 12 years for 1 year aimed at finding out the clinical features and etiology of paediatric stroke and outcome of neuro-deficit at discharge and at 3 months with the help of Modified Rankin score(MRS).

RESULTS: T

his study showed mean age of paediatric stroke was 6 years with male predilection. Ischemic stroke with anterior circulation was commonly involved. Hemiparesis followed by headache was the most common clinical manifestation. Most common etiology was prothrombotic state followed by vasculitis. Prior history of fever, seizures and leucocytosis had a statistically significant association with infectious etiology. Thrombocytopenia was significantly associated with non-infectious etiology. Inflammatory markers had no association with any etiology. Neurological outcome had no association with etiology and neurodeficit improved at 3 months as compared to discharge as per MRS.

CONCLUSION:

Stroke is an important cause of morbidity and mortality in children. Finding out the etilogy can have significant impact on outcome and quality of life.

Poster Paper

VASCULOPATHY- A RARE ETIOLOGY OF RECURRENT POSTERIOR CIRCULATION CHILDHOOD ARTERIAL ISCHAEMIC STROKE(PCAIS)

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BACKGROUND:

Childhood arterial ischaemic stroke accounts for 1.6 per100000 cases per year with involvement of posterior circulation being less common entity. Etiology of recurrent posterior circulation stroke in children includes cardioembolism, vasculopathy, inherited prothrombotic states, moya moya disease, sickle cell disease, structural heart disease etc. We present a case of recurrent posterior circulation stroke in a child due to vasculopathy.

CASE:

A 4.5 year old boy developmentally normal, born out of non-consanguineous marriage with uneventful birth history presented with recurrent episodes of vomiting followed by drowsiness and ataxic gait without any history of trauma. The child underwent diffusion-weighted Magnetic resonance imaging of brain which revealed right sided cerebellar infarct. Ultrasound Colour Doppler of neck vessels revealed reduced right vertebral artery flow which was further confirmed in neck vessel imaging as hypoplastic right vertebral artery. Complete blood count, Echocardiography and Electroencephalogram was within normal limit. The child was discharged on oral salicylates. 2 months later, the child presented with similar symptoms and subtle seizure. Neuroimaging at this point was suggestive of left sided cerebellar infarct with brain-stem involvement. Repeat MR angiography further revealed narrowing of bilateral vertebral and basilar artery. A progressive course at this point prompted us to investigate further, hence digital subtraction angiography was done and beaded appearance of vessels noted with significant enhancement in vessel wall of bilateral vertebral and basilar artery. Erythrocyte sedimentation rate was elevated with positive Von-willebrand factor antigen assay. ANA, ANCA, C3 AND C4 was within normal limit. The child received pulse methylprednisolone with cyclophosphamide for 6 cycles with symptomatic improvement and is being followed up.

CONCLUSION:

We present a rare case of recurrent posterior circulation childhood arterial ischaemic stroke with an even rarer etiology of primary CNS angitis.

Poster Paper

A Rare presentation of cutaneous manifestation of covid -19 infection in small child

Dr Shreya Dutta

Introduction : Ascites is the pathological accumulation of fluid within the peritoneal cavity attributed to the sequelae of the underlying disease . In children hepatic, renal disease are the most common causes but ascites can be caused by cardiac cause, trauma, infection , neoplasm. [1]It is the most common complication of cirrhosis and a sign of advanced liver disease.[2]

Objective : To study the clinical and epidemiological profile, etiology of ascites in children.

To study the different diagnostic interpretations and outcome of ascites among the study population.

Material and Methods : This is a hospital based, prospective ,observational study, conducted in department of Pediatric medicine, R.G. Kar Medical College , Kolkata .Duration of study was one year(March 2021- February 2022). Sample size was 62. Detailed history, complete physical examination and necessary investigations were done in all patients and recorded in case proforma sheet.

Results : In our study out of 62 patients ; 16.1% patients were 2-5yrs of age ,83.9% patients were >6yrs of age; among them 61.3% patients were female and 38.7% patients were male. In our study ascites due to pancreatitis was observed in 16% of total patient .But in a similar study of ascites in children done in Dhaka Medical College Bangladesh ,2019 by Hossen K etal[3], not a single case of pancreatitis leading to ascites in children was documented . This is of interest as children in WB and Bangladesh have very similar dietary habits and have near similar socio-economic status .Karnsakul et al [4], did a study on Ascites in children : A Single Center Experience of 27 years where pancreatitis was seen in 5% of cases. Yachha S, Poddar U etal[5] conducted a study on ascitic fluid infection , where SBP (Spontaneous Bacterial Peritonitis) was found in 17% of cases. In Hossen K [3] etal recorded SBP in 16.67% . In our study SBP was observed in 24.2%patients which is substantially more than above two studies.

Conclusion : The cause of increased incidence of pancreatic ascites in this study in Eastern Region of India, cannot be attributed to any single cause , and further studies are required for research purpose .

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Poster Paper

Barraquer-Simons syndrome In A Case of Systemic Lupus Erythematosus

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Introduction:

Barraquer-Simons syndrome is a rare entity characterized by progressive loss of subcutaneous tissue in face and/or upper half of the body and can associate with autoimmune conditions such as systemic lupus erythematosus. The condition has female predisposition with female to male ratio 4:1. Here we report a case of 11years male child diagnosed with SLE with renal involvement developed facial lipodystrophy.

Case:

A 11years old male child presented with periungual fungal infection, angular stomatitis, recurrent blisters on face, arthritis with contracture around knee and elbow. The patient has history of failure to thrive with senile look, short stature. The patient came positive for ANA 4+ titre homogenous,DCTand Anti-Ds-DNA. Urine analysis shows nephritic range albuminuria with occult blood and CBC shows bicytopenia (anemia& thrombocytopenia). Renal biopsy revealed Focal Lupus Nephritis ClassIII. MRI brain shows intracerebral calcification.The patient diagnosed with SLE with Disseminated DLE with renal involvement. He kept on maintenance with prednisolone, hydroxychloroquine and cyclophosphamide pulse therapy. After 1month he presented with bilateral symmetrical partial lipodystrophy over the temporal region of face.There wereno such lesions elsewhere in his body and other system examination was unremarkable. A diagnosis of Barraquer-Simons syndrome in background of SLE was made.

Conclusion:

Barrequer-Simons syndrome is rare form of lipodystrophy. Weare reporting this case because of atypical presentation, associationwith SLE and its importance of regular follow-up to prevent metabolic and renal complications.

Poster Paper

Landau-Kleffner Syndrome: A rare epileptic syndrome with acquired aphasia: A case report

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Landau-Kleffner syndrome is a rare syndrome characterized by aphasia and seizure occurring in previously healthy child with normal language skills and development.[1]We are presenting a case of LKS admitted and treated in our hospital.

Key words: Landau-Kleffnersyndrome, aphasia, seizure, EEG, autism.

Introduction: Landau-Kleffnersyndrome is an acquired aphasiacharacterized by triad of language regression, seizure and behavioural problems.[2]Symptoms develop between 4 to 7 years of age.[3]The pathophysiology of LKS is not well understood though genetic predisposition and autoimmune mechanism have been postulated.[4,5]

Case report:A 5 year old boy presented with new onset GTCS followed by signs of gradual language deterioration for last 6 months. He was born out of non consanguineous marriage with unremarkable birth history, normal growth and development until this illness. According to parents, there were some behavioural problems at the beginning such as irritability, aggression, hyperactivity. His neurological examination including vision and hearing was normal except for aphasia. Investigations including CSF study and MRI were normal. However, EEG revealed high amplitude spike and wave discharges from temporal lobes.Based on history, clinical findings and EEG, the child was diagnosed with LKS.

Treatment was started with oral sodium valproatebut seizure was not controlled and behavioural problems mimicking autism were increasing. Dose of valproate was titrated and intravenous methyl prednisolone pulse therapy was given followed by oral prednisolone. We added clobazam due to inadequate response and improvement in language skills, reduction in behavioural problems and seizure were observed. On follow-up for next 1 year significant improvement in speech and control of seizure were achieved.

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Poster Paper

A mystery of myelodysplastic syndrome and Tuberous sclerosis

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INTRODUCTION:

Myelodysplastic syndrome (MDS) in childhood is a diverse group of clonal hematopoietic stem cell disorders characterized by peripheral cytopenia, ineffective haematopoiesis, morphological dysplasia. MDS disorders have been referred to as “preleukemia’s” because of their tendency to transform into acute myeloid leukaemia(AML).Monosomy 7 is themost common chromosomal abnormality, often occurring as a sole abnormality. Almost half of all pediatric cases refractory cytopenia is the most common MDS subtype.

CASE SUMMARY:

9 years old male child admitted due to clinically evident pallor. Known case of Tuberous Sclerosis from the age of 5years, after being evaluated for seizure. MRI(B) and other skin manifestation was typical with Tuberous sclerosis. After admission , relevant investigation was done which revealed pancytopenia. PRBC and platelet was transfused. Bone marrow aspiration was done for evaluation of cause of pancytopenia. Which was suggestive of erythroid hyperplasia. Repeated aspiration also suggest the same finding. Child also received short course of steroid. Child had history of repeated admission due to pallor and gum bleeding, and received multiple PRBC and platelet transfusion. Nutritional deficiency and infection origin are ruled out. Further bone marrow aspiration was planned, and this time bone marrow aspiration suggest possibility of (childhood)MDS with excess blast.

CONCLUSION:

Though myelodysplastic syndrome is a rare cause to evaluate pallor. Initial evaluation of patients, such as nutritional deficiency (e.g., vitamin B12, folate, copper), anaemia of inflammation, human immunodeficiency virus (HIV) infection, and non-MDS neoplasms should ruled out. In ambiguous cases, the presence of an MDS-associated cytogenetic abnormality can confirm the diagnosis.

Poster Paper

OPSOCLONUS MYOCLONUS ATAXIA AS A RARE PARANEOPLASTIC SYNDROME IN A CASE OF NEUROBLASTOMA

SAHERIN JESMIN,DR.SUPRATIM DATTA, DR.SANANDA PATI
Department of pediatrics, IPGME&R and SSKM hospital

Introduction:

Neuroblastomas are embryonal cancers of the peripheral sympathetic nervous system with heterogeneous clinical presentation and course, ranging spontaneous regression to very aggressive tumors unresponsive to intensive multimodal therapy.

Opsoclonus- myoclonus –ataxia syndrome is a paraneoplastic syndrome of neuroblastoma characterized by myoclonic jerking and random conjugate eye movements with/without cerebellar ataxia. This condition is immune mediated, may not resolve with tumor removal, often exhibit progressive neuropsychologic sequelae.

Case:

A 1yr 10 months old male child presented complaint of inability to walk, sits without support since 6months prior to admission , swaying to sides while trying to stand or sit with supports , chaotic conjugate movements of eyes and tremor of lower limbs. Patient also had occasional fever and vomiting for the similar period. On evaluation chest X ray revealed opacity in the left lung field. CECT revealed posterosuperior mediastinal paravertebral soft tissue lesion.MRI screening revealed T2 hyperintense mass from D1 to D3 level in left paravertebral region in left lung apex to left neural foramina. Thoracotomy done ;biopsy showed Ganglioneuroblastoma;intermixed type, where there is no role of chemotherapy.for opsoclonus myoclonus methylprednisolone followed by oral prednisolone given. Opsoclonus reduced, myoclonus decreased,ataxia resolved.

Conclusion:

The diagnosis and treatment of OMAS requires high level of suspicion and systematic approach for neuroblastoma and future collaborative studies are required to determine whether early aggressive therapy will improve the long term neurological outcome in this kind of rare presentation.

Poster Paper

ETIOLOGICAL PROFILE AND CLINICAL SPECTRUM OF SEIZURES IN CHILDREN ADMITTED IN A TERTIARY CARE HOSPITAL IN A NORTHERNDISTRICT OF WEST BENGAL

Dr Sukanya Dey

Background and Aims:

Seizure is one of the common and frightening symptoms presenting in paediatric emergency. Recognition and determination of various aetiologies still remain difficult job. Prompt recognition and understanding proper aetiologies and adequate treatment have long term effect in the child's prognosis.The epidemiological trends,various clinical spectrum, aetiologies and outcome of seizure in this study have been evaluated thoroughly. There are very few studies in this region of West Bengal regarding this.

Methodology:

This observational-prospective study was done at Malda Medical College & Hospitalin the department of paediatrics. Consecutive 250 children of 2 months to12 years age admitted with history of seizure were included randomly. Their epidemiological trends, various symptomatology,clinical examination findings,laboratory investigations results & outcomes were assessed from admission to discharge.

Results

250 cases were included in our study. Out of which, 58% was boys and girls were 42%.The incidence of seizure was highest in the age group of 2 months to 1year(39.6%).The commonest type of seizure was generalized tonic clonicseizure(94.8%), followed by Focal(2.4%),Infantile spasm(2%), Myoclonus(0.8%). Fever(66.8%), altered sensorium(64.4%), vomiting(41.2%) were the common associated symptoms.67 patients underwent EEG of which 46 recordings were suggestive of Generalised cerebral dysrrythmia and 5 had hypsarrhythmia.In our study most common cause of seizure was febrile seizures(28.8%).Of the 67 cases of febrile seizure, 14 cases had a family history.

Conclusion:

Thisstudy provides in-depth understanding of the epidemiological, clinical and etiological aspects of seizure in this region of West Bengal for developing effective public health prevention and control programs.

Acknowledgement:Special respect for the college authority and department of paediatrics.

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Poster Paper

Short Term Follow-up and outcome of Patients with Paediatric Inflammatory Multisystem Syndrome Temporarily Associated with SARS-Cov (PIMS-TS) at a Tertiary Hospital in Eastern India - A Retrospective Study

Dr Debabrata Manna,Dr Suparna Guha,Dr Sumita Basu,Dr Kaushik Sur
Vivekananda Institute Of Medical Sciences,RKMSP,KOLKATA

Background:

PIMS-TS is the new entity recently defined by WHO after the pandemic of COVID-19 in Last 2 years. Regarding acute conditions there are plenty of studies, but regarding follow up of these patients there are scarcity of study worldwide.

Aim& Objective-

To study PIMS-TS patients in the acute phase and their follow-up at 6 months

Methods:

This retrospective study was conducted at the Department of Pediatric Medicine in VIMS, a tertiary care hospital in Eastern India. All patients less than 12 years of age admitted from June 2020 to August2021 with PIMS-TS(fulfilling the WHO criteria) were included in the study. The data regarding the acute phase of the disease was obtained from the in-patient records

Follow-up data at 6 months was obtained from the hospital out-patient department

Findings:

21 patients (13 male, 8 female) were included in this study. Median age of presentation was 3 years. The commonest presentation was fever (100%), rash (70%) followed by neurological (66%) and gastrointestinal (50%) manifestations. 14 patients had significant findings in Echocardiography. Most of them needed immunomodulation in the form of steroids, IVIG, and biologics.

At 6 months follow up, majority had completely recovered. Significant dilatation of coronary artery persisted in only 2 patients.

Conclusions:

Though many patients had very serious presentation, most of them recovered by 6 months.

Poster Paper

A CASE OF CEREBRAL VENOUS SINUS THROMBOSIS IN A NEONATAL DIABETES WITH KCNJ11 MUTATION

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BURDWAN MEDICAL COLLEGE AND HOSPITAL

INTRODUCTION:

Neonatal diabetes mellitus (NDM) is a rare endocrinological disorder in first 6 month of life . Abnormalities in genetic loci have been associated with NDM. Cerebral venous sinus thrombosis(CSVT) in children is a rare disorder. CSVT can be caused by diabetes mellitus due to hypercoagulable condition.

CASE REPORT:

A 2 month old girl child first born of a non-consanguineous marriage weighing of 3 kg was presented with severe hyperglycemia(1199mg/dl) and ketoacidosis(pH-6.9,HCO3-8.2,urine ketone-positive).Baby was managed in the line of diabetic ketoacidosis with intravenous fluid and IV regular insulin.Baby developed 2 episode of GTCS in hospital which was managed with anticonvulsants and MRI brain was performed..The laboratory investigations were normal except hypernatremia(171),hyperkalemia(6.6), raised urea(142.5) and increased hemoglobin A1c(6.70%).After correction of diabetic ketoacidosis subcutaneous insulin was started with basal bolus regimen along with exclusive breastfeeding but the blood sugar was poorly controlled with occurrence of few episode of hypoglycemia followed by rebound hyperglycemia.Metabolic diseases were rulled out as metabolic screening was negative. Her MRI brain shows cerebral venous sinus thrombosis and then low-molecular weight heparin(s/c) was started with regular PT,APTT,INR monitoring.Genetic analysis identified a novel missense mutation in the KCNJ11 gene and oral sulfonylurea was started along with insulin (s/c).Then insulin was tapered gradually and finally stopped.The baby was discharged with oral sulfonylurea and blood sugar was well controlled noticed in regular follow-up of the child.

CONCLUSION:

Cerebral venous sinus thrombosis can occur in neonatal diabetes mellitus associated with a novel mutation of the KCNJ11 gene.

Poster Paper

Neonatal Arrhythmia-sinister in disguise

Dr.Sanjoy Bishnu, Dr.Saumyen De, Dr.Sandip kr. Mandal

Keyword:

SVT(Supraventriculartachycardia) ,Neonate,Inj. Amiodarone,

Background:

SVTs are the most common symptomatic arrhythmia in all children, including neonates.SVTs usually have -rate>200 beats/min,frequently fixed with no beat-to-beat variation in rate.SVT in neonates is almost always reentrant.Rentry or reciprocating types of SVT includes-AVRT and AVNRT.AVRT is not only the most common meachanismof SVT but also the most common tachyarrhythmia seen in paediatrics age group.

Case presentation:

A 3 days old baby came to the SNCU with complaining of yellowish discoloration of eyes and skin .After admission distress feature seen like- irritability,excessivecrying,refuse feedings and rapid respiratory rate.Onroutine clinical examination and monitoring found that heart rate of the baby is 265 beats/min and oxygen saturation is 85% in room air. No congenital anomallynoted.On blood examination CBC,Sodium,Potassium,Calcium,Thyroid and ABG findings are within normal limit. Only Bilirubin report is derranged.On Chest Xray no abnormality noted.OnECG findings tachycardia,no p waves and narrow QRS complex noted.

Conclusion:

PSVT can occur in healthy baby who has no complication during and after delivery. So, we need to measure heart rate after birth irrespective of gestational age,birth weight and monitoring also needed.

Poster Paper

A STUDY ON ELECTROLYTE IMBALANCE AND ACID BASE DISORDERS IN CRITICALLY ILL CHILDREN IN A TERTIARY CARE HOSPITAL IN THE LIGHT OF PRISM III AND PIM II SCORES

Dr Ahitagni Banerjee

The patterns and persistence of electrolyte imbalance and acid base disorders can act as readily available prognostic tools in critically ill patients.

Background: 132 patients.

Methodology :

Longitudinal and Observational study.

Results:

132 patients (admitted at PICU between February 2021 and June 2022)were assessed at admission, at 48 hrs and again on D7 for electrolyte and acid -base derangements. PRISM III and PIM II scoring was done simultaneously to assess prognosis. Outcome was measured in terms of recovery, partial recovery and death. Presence of electrolyte imbalance affected length of PICU stay (p 0.064) , duration of mechanical ventilation use (p 0.013) and vasopressor use ($p < 0.001$) . Mortality was higher in patients with electrolyte imbalance (42; 46.67%) and acid base disorders (45; 59.21%). 48 hrs calcium value (p 0.022) may act as a prognostic marker. PRISM III COMPONENT 2(non neurologic) is a more sensitive marker of mortality in patients with electrolyte imbalance as compared to COMPONENT 1. PIM II can more effectively predict differences in prognosis between transient and persistent electrolyte imbalance.

Conclusion:

The correlation between electrolyte imbalance and acid base disorders with commonly used prognostic scores (PRISM III, PIM II) in assessing prognosis and monitoring course of treatment may completely revolutionize treatment of critically ill paediatric patients.

Poster Paper

FAILURE TO THRIVE DUE TO BARTTER SYNDROME: A RARE ENTITY

R. PRITI MAJUMDER, DR. RAMESH CHANDRA HALDER
Department of Pediatric Medicine, R. G. Kar Medical College and Hospital, Kolkata.

Background:

Bartter syndromeis a rare autosomal recessive disease (1 in 1000000 children), characterized by hypokalemia, hypochloremic, metabolic alkalosis with hypercalciuria, hyperreninemia and hyperaldosteronism, normal blood pressure and salt wasting.

Case summary:

A 3 yearold girl with history of intermittent episodes of AGE along with inadequate weight gain, polyuria polydypsia since early infancy, presented to us this time with AGE and severe dehydration and electrolyte imbalance in the form of hypokalemia, hyponatremia, hypochloremia and metabolic alkalosis. Even after correcting dehydrationelectrolyte imbalance and metabolic alkalosispersisted. Child was normotensive.Birth history revealedpremature deliveryand maternal polyhydramnios. Anthropometry showed height and weight below 1st percentile. We ruled out anatomical,CVS, Endocrine,respiratory, neurological and infective cause of FTT. There was normal serum Mg, urinary Cl was >20meq/l, hypercaliuria, high serum renin and aldosterone level, nephrolithiasis on USG.From this we ruled out Cystic Fibrosis and Gitelman syndrome and she was diagnosed as a case of “Bartter syndrome” and treatment was started with oral indomethacin @2mg/kg/day. Within 5 days of treatment, serum potassium and chloride got corrected, and after 6 months of treatment there was significant height and weight gain.

Discussion:

In a case ofFTT, BP and ABG/VBG areimportant. As in Bartter syndrome, the defective functioning tubular cells in kidney can not be corrected, treatment is lifelong.

Poster Paper

A Rare presentation of cutaneous manifestation of covid -19 infection in small child

Dr Anupama Roy(3rd year pgt)
Under guidance of Dr Sarbani Misra, Roy(Associate professor)
Medical College, Kolkata

Introduction

With more than 241 million cases and 4.91 million deaths worldwide, coronavirus-2019 (COVID-19) has been a significant global economic and healthcare burden .Several complications have been noted in patients of COVID-19.Vasculitis is the inflammation of blood vessels.It is triggered by autoimmune disorders, infections, and trauma.So far 8 cases has been reported of covid 19 associated vasculitis.

Case

A 9 month old boy born out of 3rd degree consanguineous marriage came to paediatric's OPD of Malda Medical College and Hospital with chief complaints of multiple emerging skin lesions all over the body including scalp, face ,extremities, back, abdomen from 5-7 days duration.The skin lesions were of different colour , violaceous to blackish, some fading away and itchy and palpable in nature, with various shapes and size(1-4cm).Patient had a history of febrile episode of illness 20-22 days before this episode.

On Examination child was irritable, vitals stable with mild pallor and no hepatosplenomegaly, no lymphadenopathy, no bleeding manifestations.

Investigations done platelet count was normal, but PT, APTT were extremely elevated>120secs(Beyond measuring range). By suspecting DIC immediately we gave the patient FFP, Vit K and on the next day spots started fading out and disappears within 72 hours and PT, APTT normalises.We sent other investigations also to rule out the other causes infectious causes like dengue, scrub typhus, Anti SARS COV- 2 Antibody, viral antibodies, coagultion factor assay but all reports came negative except for Anti SARS

COV-2 Antibody titre was >250 IU/L

Conclusion

In this type of cases, we should have high index of suspicion for Sars-Cov2 infections in this time period of covid pandemic era.

Poster Paper

Dr Sumit Sarkar

INTRODUCTION: Acute Disseminated Encephalomyelitis (ADEM) is the most common demyelinating disease of central nervous system in children. It is an immune mediated, inflammatory, non- vasculitic event with polysymptomatic neurological presentation accompanied by encephalopathy and changes compatible with demyelination on MRI. Near complete neurological recovery is usual.

OBJECTIVES: To describe the behavioral outcome of children with ADEM on short term follow-up.

METHODS: This was a hospital based observational case series from the pediatric department of SSKM hospital and pediatric neurology unit of BIN in the study period from Feb, 2021 to August, 2022. Children ≥ 1.5 years at the time of discharge were included. All cases were assessed for behavioral abnormality at six months post discharge with CBCL 2-3 years and 1992 profile or CBCL 4-18 years and 1991 profile as appropriate.

RESULTS: Twenty-nine children diagnosed as ADEM at discharge were enrolled. At the point of behavioral evaluation twenty-two (75.9%) had no behavioral abnormality but seven (24.1%) children were found to have some or other behavior abnormalities as per CBCL syndrome scale (T score was in "borderline" or "clinical" range). Among 6 children in the age range of 24 to <48 months, three had developed behavioral problems: 1(16.7%) "withdrawn" (clinical) and 2 (33.3%) "sleep problem" (clinical). Similarly, among 23cases in the range of 48 to 144 months, 4 had shown behavioral abnormality: 1(4.3%) "attention problems" (clinical), 1(4.3%) "aggressive behavior" (borderline) and 3 "aggressive behavior" (clinical).

CONCLUSION: A small subset of ADEM paients showed behavioral disorders in short term outcome.

KEYWORDS: ADEM, CBCL, Behavioral outcome.

Poster Paper

A case of non-syndromic SRY negative, 46 XX testicular disorder of sexual differentiation

Dr Bakul Sarkar

46, XX testicular disorder of sexual differentiation (DSD) is a rare form of gender dysplasia that is characterized by inconsistency between chromosomal and gonadal sex. Children with 46, XX testicular DSD can present as classical XX males with infertility, XX males with ambiguous external genitalia at birth or as XX true hermaphrodites with ambiguous internal and external genitalia. Human testis development starts from around 42 days post conception with a transient wave of SRY expression followed by up-regulation of testis specific genes and down regulation of anti testes genes. The furin-domain containing peptide R-spondin1 (RSPO1) has recently emerged as an important regulator of ovary development through up-regulation of the WNT/β-catenin pathway to oppose testis formation. R-spondin1 is upregulated during critical stages of early human ovary development and may function as a tissue-specific amplifier of β-catenin signaling to oppose testis determination. I am presenting a 8-months child with ambiguous genitalia, was negative for SRY gene and had a heterozygous mutation in RSPO1 gene while homozygous loss of function mutation is reported to cause 46 XX testicular DSD being autosomal recessive. SRY negative XX DSD is extremely rare with less than 100 literature reported cases so far. Molecular mechanism behind SRY negative testicular DSD is still not completely elucidated and need further research.

Keywords: SRY negative XX testicular DSD, ambiguous genitalia

Poster Paper

ASSOCIATION OF DIGITAL MEDIA WITH DEVELOPEMENT IN EARLY LIFE: AN ANALYTICAL CROSS SECTIONAL STUDY

Soumyadip Paria

Introduction :

Gone are the days of playing in the greens. Technology is playing a major part in children's brain development these days. Children abusing digital media have social, developmental and academic problems including attention deficit, lack of imagination, impaired memory, difficulty in planning and organisation.

Aims & objectives :

1. To find the association between use of digital technology and physical, social and mental health of children.

2. To study association between use of digital media with level of developmental milestones in children .

Materials and methods :

an Analytical Cross sectional study was conducted at Paediatrics OPD of CNMC&H among 288 children of 1 to 5 years of age over 4 months(January,2022 to june,2022).Children with any kind of gross motor delay, k/c/o congenital hearing and vision abnormality, profound intellectual disability were excluded. For < 2years any use and for >2 to 5 years ,>1 hour use was considered to be overuse as per IAP screen time criteria. Childrens were divided in 2 groups of overuse and normal use of digital media. Physical health was assessed by anthropometry, visual aquity, pure tone audiometry. Denver Developmental Screening Test-II score was used to assess development at all spheres. Emotional disturbance such as Hyperactivity , temper tantrum , Sleep disturbance like Delay in falling asleep &/or awakening up at night were sought.

Results :

213 (74%) children was found to overuse digital media. Myopia & accommodation defect was found in higher in overuse population(p = 0.03). Language and speech delay was seen in 41 % of children who overuse digital media (P=0.01). No difference was seen in other developemental milestones. Hyperactivity, tamper tantrum sleep disturbance was found to be more in population overusing digital media. (p=0.04).

Conclusion :

Abuse of digital media has taken a havoc toll on language and speech development. Others problems like emotional, sleep disturbances are also increasing. We must be alert about this grim reality and monitor digital media use.

Poster Paper

SPECTRUM OF VOIDING DISORDER IN PAEDIATRIC OPD; A SHORT TERM FOLLOW UP STUDY

DR. URMIMALA BHATTACHARYA
Under Guidance of DR. SUMITA PAL, Associate Professor, Department of Pediatrics, CNMCH & Dr. KOUSHAMBI BASU, RMO, Department of Pediatrics, CNMCH

Background-

Voiding disorders consist of essentially functional, abnormal patterns of micturition in the presence of intact neuronal pathway and without any congenital or anatomical abnormality of the urinary tract. According to the International Children's Continence Society (ICCS) the lower urinary tract symptoms encompasses overactive bladder, voiding postponement, underactive bladder, infrequent voiding and pollakiuria, vaginal reflux, giggle incontinence etc.

Objective:

To study the pattern of voiding disorder among the pediatric patients.

To study the outcome for follow up of these patients with voiding disorders.

Methodology

Study design- prospective observational longitudinal study

Study population- children 5-12 years who presented with lower urinary tract symptoms.

Study period: 6 month (3 month study + 3 month follow up)

Exclusion- major congenital anomaly and k/c/o GDD

Study parameters: blood RE, Urea, creatinine, Urine RE,ME,C/S; Imaging of the urinary tract: USG, MCU, DMSA if required. Urodynamic study: Uroflowmetry if required.

Result –

Enuresis was the most common complain followed by increased frequency. Among comorbidities, constipation was present in one-third patients. It was associated with significant anxiety in parents and interferes with schooling. Treatment is usually a combination of 'standard therapy', behavioural therapy, bladder training, physiotherapy, and medical treatment. Success rate is 70%.

Conclusion- Voiding disorders and lower urinary tract symptoms are common and very often neglected complaint in the outpatient setting. Uroflowmetry could not be done to all patients except a few owing to our resource restricted setting.

Poster Paper

Congenital Hear Diseases in Neonates: Their complications and outcome

Dr. Nairit De* Dr. Gobinda Chandra Das**
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**Professor & HoD, Dept of Pediatrics, R.G.Kar Medical College & Hospital

Introduction :

Congenital Heart Diseases is one of the most common neonatal and childhood disease causing various complications. It is also one of the leading cause of mortality in neonatal and childhood age group.

Objective:

In this study we assessed complications occurring to the neonates with congenital heart diseases during hospital stay and their outcomes .

Method:

Studywasconducted in the nursery of R. G. Kar Medical College, Kolkata from February 2021 till June 2022. Echocardiography proven Congenital heart diseases were taken as cases. All complications were monitored closely and managed accordingly. Relevant information thus obtained were recorded and analyzed.

Result :

77.9% of the study subjects had one or multiple Complications. out of 71 acyanotic cases, 71.8% had Complications whereas 24 Cyanotic cases 95.8% had Complications. Here we found that 48.4% of cases have Shock , 45.3% cases have sepsis. Heart failure is seen in 40% , hypoglycemia(29.5%),electrolyteimbalance (11.6%), hyperbillirubinemia(12.6%), meningitis(5.3%), convulsion (10.5%) persistent pulmonary hypertension(11.6%)..Out of 70 acyanotic heart disease patients 78.6% were survived but 47.8% of Cyanotic heart disease patients were expired

Conclusion :

We should diagnose heart defect at earliest to predict any complication and start treatment to avoid mortality as far as possible. Bed side Echocardiography should be done in all children to avoid missing any heart defect which later may lead to irreversible complications. Maintaining sepsis preventing protocol is utmost important in nursery to prevent any death due to infection.

Poster Paper

AN UNSUAL PRESENTATION OF POST STREPTOCOCCAL GLOMERULONEPHRITIS

DR SUKANYA DEB

11 years old boy presented with diarrhoea and vomiting for 7 days with low grade intermittent fever, gradually progressive swelling of face and legs, decreased urine output for 3 days. There was no history of sore throat, rashes, dysuria and no such previous episodes were noted in past.

On examination, periorbital puffiness with facial swelling and bipedal oedemaalong with mild pallor was seen. Urinalysis showed haematuria, proteinuria and dysmorphic RBCs.

Blood investigations revealed anemia, thrombocytopenia with severely deranged urea and creatinine which signified stage 3 Acute Kidney Injury requiring haemodialysis. C3 was low and ASO Titre was negative, Urea, Creatinine remained deranged and child required 2 more episodes of haemodialysis in next 2 days.

A diagnosis of Rapidly Progressive Glomerulonephritis was made, methylprednisolone given in pulse dose for 3 days, thrombocytopenia resolved but the child required 5 more episodes of haemodialysis in next 2 weeks, renal biopsy was planned.

HaemolyticUremic Syndrome was being suspected on the basis of clinical and laboratory findings.

At 3rd week of illness, proteinuria gradually resolved but microscopic haematuria persisted, the renal biopsy showed resolving POST STREPTOCOCCAL GLOMERULONEPHRITIS.

The child was followed up sequentially, post 6 months of illness, there was no haematuria, proteinuria, renal function test was normal, ASO titre was positive.

Thus, this was a case of PSGN with its rare complication of AKI requiring multiple episodes of haemodialysis and atypical feature of thrombocytopenia.

Poster Paper

A Study of Serum 25(OH)Vitamin D3 Status and Bone Age In transfusion dependent thalassemia and non transfusion dependent thalassemia in children in a tertiary care hospital

Dr. Arnab Ghoshal
PGT Paediatrics, IPGME&R and SSKM Hospital

To find out prevalence of Vitamin D deficiency and bone age delay in Thalassemia patients as compared to normal control and help us in its better management.

Background-

Twenty-four children of TDT (group A) and twenty-one children of NTDT (group B) was the sample size. Twenty-one ages matched (>2 years) control (group C) was also being included in this study.

Methodology-

Observational and cross-sectional study.

Results:

The prevalence of Vitamin D deficiency among cases was 31%. A higher association of

Vitamin D deficiency seen among TDT patient than NTDT with 66% of TDT and 30% of

TDT having Vitamin D deficiency and insufficiency respectively and 80% of NTDT

having Vitamin D insufficiency and 19% have Vitamin D sufficiency. The odds of finding Vitamin D subnormal (insufficient/deficient) inthalassemia patents was 84 times that in control population with 95% CI (LL=10.33,UL=222.29).None of the cases had significant delayed bone age>24 months34,35, however lower bone age was seen in children of TDT than NTDT which was

statistically significant. A negative correlation(r= -0.477) was found between Vitamin D and Serum ferritin, with no statistical significance probably due to lowerstudy population.

Conclusion:

Vitamin D deficiency and bone age delay are common in patients of thalassemia so Vitamin D supplements are required for their better management.

Poster Paper

Habib Mostofa

Place of Study: Department of Paediatrics , Burdwan Medical College & Hospital

Sub-speciality: Respiratory System

ABSTRACT:

Introduction: Pneumothorax-the penetration of air in the pleural space between the lung & chest wall is a common finding in otherwise healthy adolescents.Primary Spontaneous Pneumothorax occurs without any precipitating traumatic or iatrogenic mechanism and Secondary Pneumothorax is considered when a cause is known .The incidence of spontaneous pneumothorax is estimated to be3.8 to 18 cases per 100000.

Case: It usually presents with acute onset of pain at rest or during mild physical activity & sometimes cough and dyspnea.

We present a case of 5months old girl child admitted with sudden onset respiratory distress associated with mild cough and cold.

On examination- the child is irritable, afebrile, Tachypneic , on palpation- crunchy sounds felt over chest wall , Hyperresonance notes heard over left chest wall on percussion with decreased breath sound on left lung field on auscultation.Urgent Chest-X-ray done which shows Left sided pneumothorax. HRCT Thorax done , showing-large emphysematous bulla noted in the left hemithorax cavity & diagnosed as a case of **Spontaneous Pneumothorax.**The child treated with moist oxygen, nebulisation, iv antibiotics,iv fluid &Intercostal chest tube drain.

Discussion: Emphysematous bleb (21%), asthma(10%) and tobacco (4%) use are most commonly associated with spontaneous pneumothorax.

Conclusion: Primary spontaneous pneumothorax in children is common & incidence has increased over time .Treatment for small pneumothorax is supportive and for moderate and large pneumothorax it includes placing a chest tube or definitive treatment with surgery.

Poster Paper

Unilateral pulmonary hypoplasia in a newborn: A case report

Dr. Nandita Bhattacharya
3rd year PGT, Department of Paediatrics, Burdwan Medical College & Hospital.

Pulmonary hypoplasia involves decrease in number of both alveoli and airway generation to varying degrees.Clinical course depends on degree of hypoplasia present.[1]This condition is frequently associated with other congenital anomalies.[2]Here a case of right lung hypoplasia in a newborn is described.

Key words: Pulmonary hypoplasia, Congenital anomaly, Oligohydromnios, HRCT thorax, ECMO.

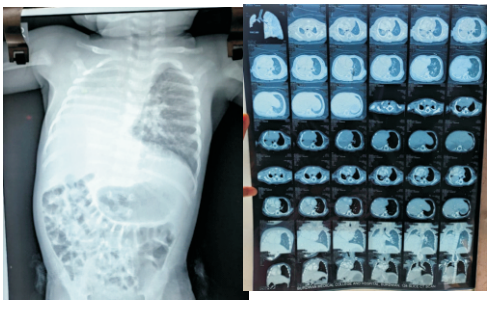
Introduction:Hypoplasia of lung usually occurs secondary to intra-uterine disorders impairing normal lung development.

Treatment comprises of medical as well as surgical care. Mechanical ventilation and ECMO may be required to support gas exchange.Prophylaxis for RSV, Pneumococcus, Influenza infections are recommended.[2]

Case report: A 26 days old neonate was brought to our institution with complaintsof intermittent respiratory distress since birth and failure to thrive. The baby was born at 37 weeks of gestation by elective caesarean section due to oligohydromnios as found in antenatal USG. No anomaly scan was done.There was no obvious congenital anomaly or dysmorphism.

CXR showed diffuse opacity over right lung field and treatment for right sided pneumonia was started. Even after 10 days of injectable antibiotics and other supportive management, condition of the baby was not improving. USG thorax was done which excluded pleural effusion.

HRCT thorax revealed hypoplastic right lung with agenesis of right lower zone resulting in ipsilateral mediastinal shift and pulling up of right dome of diaphragm.
To rule out other congenital anomalies, a series of investigations were done including Echocardiography, CECT of abdomen and MRI brain. Nothing significant was found.



This baby presented here belongs to group III according to Monaldi[3]andthird categoryaccording to Boyden[4].

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Poster Paper

Demographics Of Children Attending A Paediatrics Asthma Clinic In A Tertiary Care Centre In Eastern India: Caregivers Perspective On The Disease And Management

DeblinaSarkhel*, RajashreeSinha, Kapana Datta***, Sankar Das******
Under guidance of Dr Sarbani Misra, Roy(Associate professor)
Medical College, Kolkata

Background and Aims:

To investigate the demographic factors in childrenattending a pediatric asthma clinic in a tertiary care hospitaland to identify awareness of caregiversregarding asthma and its treatment and their view regarding the transition of care from pediatrician to general physician.

Methods:

In this descriptive, observational study, 65 children and adolescentsof 6 months -15 years attending pediatric asthma out-patient clinic of a tertiary care institute, categorized into 3 age groups- <6 years, 6-10 years and >10 years, were studied since May-July, 2022. The assessment of clinical severity was based on Global Strategy for Management and Prevention, 2022 updated guidelines. Awareness of the disease and the ongoing treatment among the caregivers were assessed through a simplified questionnaire with documentation of their opinion regarding transition of care from Pediatrics to General Medicine Department.

Results:

Among study population 51% were of >10 years, 18% among 6-10 years and 31% <6 years. 54% of all children were well controlled as per GINA guidelines. Among the asthmatic children 49% had Mild Asthma and 51% had Moderate asthma. Among the caregivers 56% were well-knowledged regarding the disease and treatment requirement, 25% maintained asthma diary, 36% followed up regularly and 37% persistently used prescribed medications. Regarding transition of care, 77% were satisfied with the present treatment protocol, were more comfortable to communicate with pediatricians and were eager to pursue treatment in the Pediatric Asthma clinic.

CONCLUSIONS:

Satisfactory outcome of the treatment, variable awareness but inclination towards continuation of treatment under pediatrician were observed among caregivers in this study.

KEYWORDS

Asthma, Caregivers, Transition of care

Poster Paper

MOYAMOYA DISEASE PRESENTING AS ALTERNATING HEMIPLEGIA

ASHFAQUE AHMED

Moyamoya disease is an uncommon cerebrovascular condition characterized by progressive narrowing of large intracranial arteries and the secondary development of prominent small-vessel collaterals.Repeated ischemic episodes in children and intracranial hemorrhage in adults with Moyamoya disease is usually noted.We present a case of 2 years 5-month-old male child who got admitted with right sided hemiparesis and aphasia and seizure. The child had history of left sided hemiparesis one month back which showed gradual resolution of weakness with physiotherapy.The child was investigated with MRI brain with MR angiogram and was diagnosed as Moyamoya disease. The child was treated conservatively and referred to a higher Centre for specific neurosurgery. But neurosurgical intervention could not be done due to hemodynamic instability.

Poster Paper

LEUCOCYTE ADHESION DEFECT TYPE - 1

Rajkumar Gayen
Department: Pediatrics, Nil Ratan Sircar Medical College and Hospital

A 4month year old male child born out of nonconsanguineous marriage presented with history of ulcer over perianal region for 15 days, discharge from both ear for 15 days, and fever for 6 days. Patient had prolonged history of umbilical discharge and abscess of right eye lid.On examination pallor with hepatosplenomegaly without lymphadenopathy was present. Other systemic examination was within normal limit. Blood investigations shows anemia with persistent neutrophilic leucocytosis. Immunoglobulin panel was normal. C3,C4 and ANA was normal and bone marrow was also normal. T cell marker was low.Immunophenotyping for CD18 leucocyte on neutrophil shows CD18 andCD11a expression on gate neutrophilis markedly reduced in patient sample consistent with leucocyte adhesion defect type-1.Leukocyte adhesion deficiency type-1 (LAD-I) is a rare, inherited combined deficiency disorder of the immune system;it affects 1 in 1 million people annually.

Poster Paper

Comparing Crib Ii And Snappe Ii As Predictor Of Mortality And Neurodevelopmental Outcome At 1 Year Of Age For Newborns Less Than 32 Weeks Of Gestational Age Admitted In NICU

1. DR. ABHINANDAN BAYEN, PGT,DEPT. OF PAEDIATRIC MEDICINE
PROF. DR. DILIP KUMAR PAUL, PROFESSOR
DR. SAUGATA CHAUDHURI, ASSISTANT PROFESSOR
B.C. ROY P.G.I.P.S,

INTRODUCTION:

Preterm babies are at increased risk of mortality and morbidity due to risk factors in antenatal, intra-natal, postnatal period. There are a number of illness severity scoring systems to predict mortality among babies admitted in NICU. Two most widely used such scoring systems are CRIB-II and SNAPPE-II respectively.

AIM:

To compare the power of predictability of mortality and morbidity of CRIB-II and SNAPPE-II at admission in NICU in neonates less than 32 weeks gestational age.

METHODS:

The study was conducted involving 57 preterm newborn babies with gestational age less than 32 weeks admitted in NICU of DR. B. C. ROY PGIPS during February 2021 to August 2021. Those who survived were followed up for 1 year for their neurodevelopmental outcome. 15 patients were died and rest of 42 survived patients were enlisted for follow up.

RESULTS:

It was found in our study with 57 preterm newborns that, a CRIB-II score larger than or equals to 6.5 correctly predicted mortality with sensitivity 87% and specificity 74%. Similarly a SNAPPE-II score 31 or more correctly predicted mortality with sensitivity 86% and specificity 86%. Area under the ROC curve for CRIB-II was 0.862 (95%CI: .743-.981) and the area under the ROC curve for SNAPPE-II was 0 .92 (95%CI: 0.840-0.998). At 1 year of corrected gestational age it was found that there was no significant correlation between CRIB-II and HINE (r=-0.27, P-value=.202). Whereas, significant moderate negative association existed between SNAPPE-II and HINE (r=-0.48, P-value=0.02). When we compared SNAPPE-II and CRIB-II with respect to DASII score we found that at 1 year of corrected gestational age SNAPPE-II was better predictor than CRIB-II.

CONCLUSIONS:

It could be concluded that SNAPPE-II was a better predictor of mortality than CRIB-II. Also both CRIB-II and SNAPPE-II scores could be used as a tool to predict the neurodevelopmental outcome at 1 year of age and SNAPPE-II had better predictability than CRIB-II.

KEY WORDS: CRIBII,SNAPPEII,HINE,DASII,Mortality,Morbidity,Neurodevelopmental outcome

Poster Paper

A Rare presentation of cutaneous manifestation of covid -19 infection in small child

Dr Anupama Roy(3rd year pgt)
Under guidance of Dr Sarbani Misra, Roy(Associate professor)
Medical College, Kolkata

Introduction

With more than 241 million cases and 4.91 million deaths worldwide, coronavirus-2019 (COVID-19) has been a significant global economic and healthcare burden .Several complications have been noted in patients of COVID-19.Vasculitis is the inflammation of blood vessels.It is triggered by autoimmune disorders, infections, and trauma.So far 8 cases has been reported of covid 19 associated vasculitis.

Case

A 9 month old boy born out of 3rd degree consanguineous marriage came to paediatric's OPD of Malda Medical College and Hospital with chief complaints of multiple emerging skin lesions all over the body including scalp, face ,extremities, back, abdomen from 5-7 days duration.The skin lesions were of different colour , violaceous to blackish, some fading away and itchy and palpable in nature, with various shapes and size(1-4cm).Patient had a history of febrile episode of illness 20-22 days before this episode.

On Examination child was irritable, vitals stable with mild pallor and no hepatosplenomegaly, no lymphadenopathy, no bleeding manifestations.

Investigations done platelet count was normal, but PT, APTT were extremely elevated>120secs(Beyond measuring range). By suspecting DIC immediately we gave the patient FFP, Vit K and on the next day spots started fading out and disappears within 72 hours and PT, APTT normalises.We sent other investigations also to rule out the other causes infectious causes like dengue, scrub typhus, Anti SARS COV- 2 Antibody, viral antibodies, coagultion factor assay but all reports came negative except for Anti SARS

COV-2 Antibody titre was >250 IU/L

Conclusion

In this type of cases, we should have high index of suspicion for Sars-Cov2 infections in this time period of covid pandemic era.

Poster Paper

Severe Ketoacidosis with Erosive gastritis , a rare presentation of Wolcott-Rallison Syndrome

Dr. Subhamoy Mal , Prof. Dr. Kaustav Nayek , Prof. Dr. Taraknath Ghosh
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EIF2AK3 gene mutation causes Wolcott-Rallison syndrome ,a rare autosomal recessive disease . It is the most common type of syndromic variety of monogenic Neonatal DM .Usual age of presentation is 3 months .It presents commonly with skeletal dysplasia ,growth retardation ,episodic liver failure ,renal dysfunction ,pancreatic exocrine insufficiency

,neutropenia with recurrent infection ,hypothyroidism and mental retardation. But in our case it presented with Severe ketoacidosis with erosive gastritis .This variety of Neonatal DM is insulin dependent and carries poor prognosis .

We present a case of EIF2AK3 mutation in a 2 month 15 days old boy admitted with fever for 3 days ,refusal to feed for 2 days and decreased activity and breathing difficulty for 1 day . This boy was delivered at 38 weeks gestation with IUGR .The baby was on EBM till the day of his admission . There was no h/o consanguinity . On admission the baby had severe shock , GI bleeding , respiratory distress ,hyperglycemia and severe ketoacidosis .The baby was treated according to BSPED guidelines and other conservative managements. On admission RBS was high , Urinary ketone was 2 + , VBG showed PH 6.96 , HCO3 7.6 . PT ,APTT,INR were within normal limits, platelet count was adequate . Further reports shows Blood ketone 1.18mmol/l, C-peptide 0.04 , HBA1c- 8.7 . Blood culture shows no growth . Gradually the baby was shifted to S.C Insulin . Next generation gene sequencing was sent as this is a case of neonatal DM and it revealed EIF2AK3 mutation (c.1814G>T variant , Exon 11,Homozygous) . The baby was discharged with S.C Insulin therapy .

CONCLUSION :

EIF2AK3 gene mutation causes Wolcott-Rallison syndrome . Severe ketoacidosis with erosive gastritis is a rare presentation of this syndromic Neonatal DM . Early suspicion is necessary for timely diagnosis . Genetic study is a must for both prognostic and therapeutic kind of view.

Poster Paper

CLINICO-EPIDEMIOLOGICAL PROFILE AND ASSESMENT OF LIVER FUNCTION TEST IN SEROPOSITIVE SCURB TYPHUS CASES

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Department of Paediatrics Burdwan Medical College and Hospital

INTRODUCTION:

Scrub typhus, a zoonotic disease, caused by Orientiatsutsugamushi, common cause for undifferentiated fever in children, has become endemic in many parts of india and it presents with fever,diffuse lymphadenopathy, myalgia, rash, organomegaly, jaundice,capillary leak syndrome and meningoencephalitis.

AIMS & OBJECTIVES:

Aim of the study was to evaluate clinical and epidemiological features and to assess the utility of deranged liver function test for early recognition and prediction of severity of scrub typhus.

MATERIALS & METHODS:

A hospital based prospective observational study was conducted on 90 children between 1 year to 12 year of age, who are IgM MAC ELISA positivefor scrub typhus,coming to paediatric ward of Burdwan Medical College and hospital. Detailed history was collected, a thorough physical examination and liver function test was carried out.

RESULTS:

The study shows 97.8% patient had fever(>104˚F), 54.4% had headache, 58.8% had rash, 24.4 % had vomiting and 17.7% patient had pain abdomen. On examination it was found that 53.3% had eschar,57.7% had lymphadenopathy, 90% patient had organomegaly and 12.2 % patient had seizures. In this study deranged liver function tests were found in form of raised bilirubin in 21.11% cases with mostly conjugated hyperbilirubinemia (16.6%), AST were raised in 57.78% , ALT were raised in 52.2% cases,ALP were raised in 47.78% cases and hypoalbuminemia were found in 22.22% cases.

CONCLUSIONS:

Liver function test can be utilised as the surrogate marker along with clinical findings to strengthen the provisional diagnosis and to start early treatment.

Poster Paper

STUDY OF ETIOLOGICAL AND CLINICAL PROFILE OF SHORT STATURE IN CHILDREN IN A TERTIARY CARE HOSPITAL IN EASTERN INDIA

Shreya Sarkar (Junior Resident), Prof (Dr.) Kanai Lal Barik (Professor), Dr. Moshihur Rahaman(RMO-CT)
Dept of Pediatrics, BMCH.

Introduction:

Short-Stature is a common finding in pediatric practice with various etiologies. However, data addressing short stature in India is limited.

Aims and Objectives:

1. Primary objective was to evaluate children with short-stature to identify the cause.
2. To identity the clinical presentations of children with short stature.

Materials and Methods:

This is an Observational, Analytical study, conducted from September 2021 to August 2022, in the Department of Pediatrics, Burdwan Medical College and Hospital, Burdwan, West Bengal. 100 children, aged 2yrs to 12years, were enrolled in the study. Clinical history, Examination and laboratory evaluations were done to assess the cause of Short-Stature. Data was analyzed using SPSS.

Results:

54% was females and 46% was males. The causes of short-stature were found to be Chronic anaemia (35%), hypothyroidism (21%), Constitutional (17%), Familial Short-Stature (11%), Small for gestational age with failure to catch-up (9%), Growth-hormone deficiency (4%), Syndromic causes (3%). Among the cases with chronic anaemia, thalassemia (71%), iron-deficiency anaemia (18%), anaemia due to chronic disease (7%), sickle cell anaemia(4%).

Lethargy and inattentiveness were noted in 72% cases of hypothyroidism. 28% of the cases with SGA had seizure disorder. Fatigue was seen in cases with chronic anemia.

Conclusions:

In the present study the most common cause of short stature was Chronic Anaemia, followed by Hypothyroidism.

Poster Paper

STUDY OF SERUM CALCIUM LEVELS IN NEONATAL SEPSIS: A PROSPECTIVE COMPARATIVE STUDY.

Shreya Sarkar(3rd year Post-Graduate Trainee), Prof(Dr.) Tarak Nath Ghosh
Dept. of Paediatrics, BMCH.

INTRODUCTION:

Neonatal sepsis remains to be a major cause of neonatal mortality. Despite the recentadvances, the importance of serum calcium levels has not been explored in details.There are studies on the prognostic values of ionised calcium levels in neonatal sepsisbut fewer studies on serum calcium as prognostic marker for neonatal sepsis

AIMS AND OBJECTIVES:

1. To assess potential association of serum calcium levels and prognosis of neonatalsepsis.

2. To look for any specific symptoms in babies with decreased or increased serumcalcium levels.

MATERIALS AND METHODS:

The study was a prospective comparative study conducted in the NICU, BMCH in thetime period of October 2021 to September 2022. A total of 200 subjects were taken inthe study satisfying the inclusion and exclusion criteria of which 90 subjects wereculture positive sepsis and 110 were free of infection. Relevant blood and radiologicalinvestigations done. Serum calcium levels were measured on the day when their sepsisscreen was positive. Statistical analysis was done by SPSS.

RESULTS:

The comparison of neonates with and without sepsis highlighted significantdifferences in serum Calcium levels.Patients with hypocalcemia presented with loose stool(74%), vomiting(52%), Multi-organ failure(10%), DIC(8%). Those with severe hypocalcemia had a longer hospitalstay. Mortality was high in hypocalcemia group(8.98%) whereas the total mortality was13.19%.

CONCLUSION:

The present study suggests that hypocalcemiacan be a prognostic marker of neonatal sepsis.

Poster Paper

Outcomes of Preterm neonates receiving surfactantadministration with LISA versus InSurE methods: ARetrospective Cohort study.

Dr. Shreya Sarkar (Junior Resident), Dr. Mukut Banerjee (Associate professor),Department of Paediatrics, BMCH

Background:

Respiratory distress Syndrome is the most common respiratory problems in preterms. The treatment of RDS depends on metabolic, circulatory and respiratory stability, adequate oxygenation and ventilation, and Surfactant Replacement Therapy. Surfactant administration is usually done by endotracheal intubation. Less invasive surfactant administration (LISA) has become widespread recently.

Aims:

1. To compare the efficacy of LISA and INSURE techniques of surfactant administration.

2. To compare the mortality and morbidity of LISA and INSURE techniques.

Methods:

Premature infants (<34wks) admitted from September 2021 to September 2022 in NICU, BMCH, receiving lung surfactant, satisfying the inclusion-exclusion criteria, were taken in our study. Data was collected from records of NICU, BMCH. The intratracheal administration of surfactant was performed either by using a 8Fr feeding tube in LISA, or, by Intubation, Surfactant administration, and Extubation to NIPPV in InSurE. Statistical analysis done using SPSS.

Results :

100 subjects were taken, 50 in each group. Samples were gestational-age, birth-weight matched.Requirement of Mechanical Ventilation is higher in INSURE group. Death rate was high in the INSURE group ($p< 0.001$). Higher rate of pneumothorax inINSURE ($p<0.05$). Duration of nCPAP requirement was high in the LISA. Duration of hospital stay was significantly different across the 2 groups.

Conclusions :

LISA can be an alternative method for surfactant administration in premature babies with decreased requirement of invasive ventilation and reduced hospital stay.

Poster Paper

Leptospira presenting as bilateral blindness

RUCHI SINGH
3rd Yr PGT, Department Of Pediatrics
Nil Ratan Sircar Medical College And Hospital

Leptospira is a zoonotic disease. It has become an emerging cause of acute febrile illness in children around the monsoon period in India.It presents with a variety of symptoms, including the rare and less studied neurological manifestations. A 8 yr old girl presented with diminished vision in both eyes for 4 days with history of high-grade intermittent fever for 7 days. Gradual diminution of vision started on 7th day of fever and by day 14, she could appreciate hand movements only. On admission her vitals were normal without any localizing signs.On Ophthalmological evaluation she could appreciate hand movements close to face with decreased color vision and normal fundus without papilledema and Relative afferent pupillary defect. Routine evaluation showed neutrophilic leukocytosis with normal renal and liver function tests. CSF analysis confirmed meningitis. Serology for Leptospira in blood was positive . MRI showed bilateral hyperintensities in optic nerve without brain parenchyma involvement with prolonged latency in Visual Evoked potential. After gauging the clinic-radiological findings, diagnosis of Leptospirosis with aseptic meningitis complicated with retrobulbar optic neuritis was made. The child was started on IV Pulse methyl prednisolone and before discharge the vision showed marked improvement in visual acuity and color vision . Thus my case is a rare presentation of leptospira causing optic neuritis and its good clinical response to corticosteriod therapy.

Poster Paper

Recurrent Spontaneous Pneumothoraxand Secondary HLH In Early Infancy: A Rare Case of Langerhans Cell Histiocytosis

Dr. Nivedita Manna
Post Graduate Trainee, Dept of Paediatrics, NRS Medical college, Kolkata

Background:

Langerhans Cell Histiocytosis (LCH) is a rare disorder characterized by infiltration of either single or multiple organs by S100 and CD1a positive cells. Patients with pulmonary LCH are susceptible to pneumothorax due to destructive changes in the lung parenchyma. Here we report a case of multisystem LCH with recurrent pneumothorax and features of secondary HLH.

Clinical description:

A 5-month-old female infant presented high grade intermittent fever for 15 days with gradual abdominal distension and sudden onset grunting and respiratory distress. On examination the baby was dyspnoeic, pale with huge hepatosplenomegaly. Chest X-ray revealed bilateral cystic lesion with right sided pneumothorax. Laboratory investigations revealed bicytopenia and markers of secondary HLH to be positive. Total count (16500/cumm), fever profile, blood & urine C/s, serology, CBNAAT and viral panel was negative. Peripheral blood smear and BM biopsy were also inconclusive. Meanwhile, the child developed crusted eruptive lesion over palm and sole, a punch biopsy was done and histology and IHC were consistent with Langerhans Cell Histiocytosis.

Management and course of illness:

Right sided chest drain was inserted, and IV antibiotics were started. Chemotherapy was initiated with prednisolone 2mg/kg/day, followed by vinblastine injection 3mg/m2 once weekly and drain was removed. But patient had second episode of right sided pneumothorax after 5 days, became neutropenic, probably due to septic process. Her respiratory conditions deteriorated, and mechanical ventilation was needed. The child succumbed to death on day 48 of admission.

Conclusion:

Recurrent pneumothorax and secondary HLH in Langerhans cell Histiocytosis are rare in infancy and should be considered an important differential for diffuse cystic lung disease. Moreover, cutaneous clues are never to be missed as it often leads to destination.

Poster Paper

Dermatological Manifestations in Covid Related Illness in Children: A Retrospective

Dr. Nivedita Manna
Post Graduate Trainee, Dept of Paediatrics, NRS Medical college, Kolkata
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Objectives:

To identify the spectrum of cutaneous manifestations and to evaluate temporal relationship between each type of dermatological lesions and the severity of COVID 19 related illness in pediatric population.

Methods:

Retrospective observational study on 35 children (upto12 years) from Kolkata and different district areas of West Bengal, admitted to our tertiary care hospital with Covid related illnesses [COVID-19 and/or multisystem inflammatory syndrome in children (MIS-C)].

Results:

Maculopapular rash was heading the list (n=18, 51.4%) followed by chilblain-like lesions (n=12, 34.2%), vasculilitc lesion (n=8, 22.8%), vesicular rash (n=5, 14.3%) and urticaria (n=3, 8.5%). In majority of patients (n=26, 74.2%), dermatologic manifestations preceeded (n=16, 45.7%) or merged (n=10, 28.6%) with the onset of systemic symptoms. In rest of the patients (n=9, 25.7%) skin manifestations occurred after the systemic symptoms, particularly in vascular lesions. 57.1% children required PICU admission. All children with vasculitis (n=8) required PICU admission and 87.5% (n=7) of them needed Inotrope support. IVIG was mostly given in children with chilblains (n=11, 92%). Methylprednisolone and repeat dose of IVIG was mostly needed in patients with vasculitis (75% and 25% of vasculitis children respectively). Duration of PICU stay was least in patients with vesicular rash (4.4±2.5 days) and longest in vasculitic lesions (18.75±1days), highest being 56 days. The overall mortality rate among MIS-C patients with cutaneous manifestations was 25.7% (n=9) while patients with vasculitic lesions had the highest mortality rate of 50% (n=4).

Conclusion:

Our study finding reveals that covid related disease severity highly depends on type of skin lesions but not just on mere occurrence of skin manifestations. Lesions like maculopapular, chilblains and vesicular rash had good prognosis and vasculitis had poor prognosis.

Poster Paper

Bug That Bites The Tract

Dr. SushamaSaren*, Dr. Sumanta Laha**
*PGT, **Associate Professor, Dept. Of Paediatrics, Burdwan Medical College

Scrub Typhus is an acute undifferentiated febrile illness with varied nonspecific manifestation.This is a case of 11yrs Old female child who was admitted in Burdwan Medical College n hospital, with fever for 10 days followed by weakness of both lower limbs , pain abdomen and retention of urine. Clinical evaluation shows positive meningeal sign, reduced tone and power of both lower limbs along with hepatomegaly. CSF study shows features of viral meningitis; Blood investigation shows positive IgM for Scrub Typhus; MRI Brain and Spine was advised which revealed Long Segment Demyelination at dorsal vertebral level. Patient was treated with Doxycycline and Methylprednisolone followed by oral Prednisolone. Recovery was satisfactory. Scrub Typhus is a reemerging disease with typical and atypical manifestations.

Poster Paper

Cardiovascular complications in patients with Kawasaki disease: A case study on admitted patients in paediatric ward of a tertiary care hospital, West Bengal, India

Dr Sayani Pan*, Dr Taraknath Ghosh**
*Senior resident, **Professor, Department of Paediatrics,
Burdwan Medical College and Hospital

Introduction:

Kawasaki disease (KD), an acute self-limiting systemic vasculitis involving medium and small-sized arteries. It may soon replace rheumatic fever to become the commonest cause of acquired heart disease in Indian children. Coronary artery aneurysm (CAA) remains the most dreaded complication of KD

Objective:

To diagnose spectrum of cardiovascular complications in patients with KD and assessment of risk for developing CAA in the patients under study.

Methods:

52 children diagnosed with KD (1 month to 12 years of age) were included. All the patients were followed up for 6 months. Echocardiography was performed at diagnosis, at 2nd week of the disease and following that, repeated as necessary depending on the coronary artery status. Univariate and multivariate analysis were done for assessment of risk factors.

Results:

Cardiovascular complications were observed in 51.9% patients including coronary artery aneurysms in 35.5%. Duration of fever ≥10 days, IVIg resistance, thrombocytopenia, low hematocrit, ALT ≥100U/L, Hypoalbuminemia, and raised NT-proBNP were proven to be significant risk factor for development of CAA on univariate analysis. Thrombocytopenia and raised NT-proBNP came across as significant on binary logistic regression.

Conclusion:

Cardiovascular complications are the chief cause of morbidity and mortality in Kawasaki disease. Our study is a small step towards devising an Indian risk scoring system for CAA so that it becomes possible to assess the probability of CAA early in the course of the disease and take necessary measures to minimize the fatality of this condition.

Poster Paper

Refractory Ricket in the form of Vitamin D Dependent Ricket type 1B (VDDR 1B)

Dr Malay Biswas, Dr Biswanath Basu
Dept. of Pediatrics, Nilratan Sircar Medical College and Hospital

Introduction:

Rickets is a disease of growing bone caused by unmineralized matrix at the growth plates in children only before fusion of the epiphyses. One of the leading cause of rickets is nutritional vitamin d deficiency, but now a days the prevalence of this cause is little reduced by administration of vitamin d drop routinely in all new born baby up to 1 year of age and administration of calcium orally specially in low birth weight baby. Rickets may result from the deficiency of eighter calcium or phosphorus or vitamin d. Hence all cases of rickets are being treated with adequate doses of oral vitamin D with calcium phosphorus preparation. But many cases do not respond to this treatment clinically and radiologically; thenit is termed as a case of refractory rickets. It may be caused by malabsorption, defective vitamin d metabolism, chronic kidney disease, renal tubular acidosis and rarely chronic liver disease.

Case discussion:

7 years girl child born out of non-consanguineous marriage presented with history of difficulty in walking since 2years of age and gradual bowing of the legs for the same duration with history of leg pain on walking. Initially 25 hydroxy vitamin d, serum calcium, phosphorus were measured outside which were low, by this report patient was treated as a case of nutritional rickets and treated with oral vitamin d at 2000IU daily with oral calcium and phosphorus supplement for many months but clinically as well as radiologically there was no improvement and there after patient was brought to our institution. We stamp the case as a refractory rickets and tried to find out the etiology. On history taking birth weight was 2.8kg and she was given vitamin d drop orally up to 1 year. Nutritional history was normal, there was no history of chronic diarrhoea which makes the case rarely due to malabsorption. On examination patient's height was below 3rd percentile, there was bowing of legs with widening of wrist and knee. We further investigate and it reveals high ALP, low normal calcium & phosphorus, low 25-hydroxy vitamin d and low normal 1-25 dihydroxy vitamin d and normal iPTH without hyper-phosphaturia and hypercalciuria, there was no acidosis in ABG, RFT and LFT was normal all this features goes with VDDR-1B and treated with calcitriol and calcium phosphorus supplement. Patient shows clinical, radiological and biochemical improvement on follow-up.

Conclusion:

Although nutritional rickets are common in our country yet, we have to think of other possible etiology to diagnose and treat the case as early as possible, because some bony changes occurs in chronic rickets can not be fully reverted in spite of adequate treatments only because of delay in initiation of treatment.

Poster Paper

A Rare presentation of cutaneous manifestation of covid -19 infection in small child

Dr Anupama Roy(3rd year pgt)
Under guidance of Dr Sarbani Misra, Roy(Associate professor)
Medical College, Kolkata

Introduction

With more than 241 million cases and 4.91 million deaths worldwide, coronavirus-2019 (COVID-19) has been a significant global economic and healthcare burden .Several complications have been noted in patients of COVID-19.Vasculitis is the inflammation of blood vessels.It is triggered by autoimmune disorders, infections, and trauma.So far 8 cases has been reported of covid 19 associated vasculitis.

Case

A 9 month old boy born out of 3rd degree consanguineous marriage came to paediatric's OPD of Malda Medical College and Hospital with chief complaints of multiple emerging skin lesions all over the body including scalp, face ,extremities, back, abdomen from 5-7 days duration.The skin lesions were of different colour , violaceous to blackish, some fading away and itchy and palpable in nature, with various shapes and size(1-4cm).Patient had a history of febrile episode of illness 20-22 days before this episode.

On Examination child was irritable, vitals stable with mild pallor and no hepatosplenomegaly, no lymphadenopathy, no bleeding manifestations.

Investigations done platelet count was normal, but PT, APTT were extremely elevated>120secs(Beyond measuring range). By suspecting DIC immediately we gave the patient FFP, Vit K and on the next day spots started fading out and disappears within 72 hours and PT, APTT normalises.We sent other investigations also to rule out the other causes infectious causes like dengue, scrub typhus, Anti SARS COV- 2 Antibody, viral antibodies, coagultion factor assay but all reports came negative except for Anti SARS

COV-2 Antibody titre was >250 IU/L

Conclusion

In this type of cases, we should have high index of suspicion for Sars-Cov2 infections in this time period of covid pandemic era.

Poster Paper

Profile Of Neurocutaneous Disorders In Children Presenting At A Tertiary Care Hospital In Eastern India : A Cross Sectional Observational Study

TANIA ROY
PGT, Dept. of Paediatrics, NRSMCH

INTRODUCTION: The neurocutaneous syndromes (NCS) include a heterogeneous group of disorders characterized by abnormalities of both the integument and central nervous system. Cutaneous manifestation usually appears early and may progress with time but neurological features usually occur later with age. Early identification of cutaneous changes may act as clue for early suspicion of neurological changes and thereby help in early diagnosis of disease. Moreover, there is paucity of data regarding behavioural changes associated with these diseases.

AIM : Objective of our study was to evaluate the profile of neurocutaneous disorders in children including types of Neurocutaneous disorders in children, clinical presentation of each of them, other rare systemic manifestations including behavioural and psychological changes of these patients.

METHODS : It was a cross-sectional observational study.Children between 0 to 12 years age presenting with features of neurological disease along with characteristic dermatological marker and fulfilling the diagnostic criteria of neurocutaneous syndrome were includedin the study.Data obtained by detailed evaluation have been analysed using rates, ratios, percentage, statistically significant diagrams and tables using appropriate statistical methods.

RESULTS: A total of 29 children with NCSwere included in the study of which 16 were boys (55.17%) and 13 were girls (44.82%). Mean age of presentation was4.897 with ranging between 1 year to 12 years with standard deviation of 3.0804 . Among different types,48.27%Tuberous sclerosis complex,20.83%Sturge weber Syndrome,10.34%Neurofibromatosis 1,10.24%Linear nevus syndrome, 6.89% Incontinentiapigmenti-and 0.34% each of PHACE syndrome, Phakomatosispigmento-vascularis type II were detected. All the cases (100%) presented with characteristic cutaneous manifestations. Among neurological manifestation 51.72 % presented with convulsion,44.82 % with developmental delay, and 55.17% with different kind of behavioural abnormalities. On detailed behavioural assessment CPMS scale has been used. Among 29 study subjects, CPMS was not applicable for 10 children (due to age criteria).Amongrest of 19 children by CPMS scale scoring, 78.94%were found to be positive for neuropsychiatric manifestations.Among other systemic features, only 1 boy with Tuberous sclerosis showed Rhabdomyoma, 1 case of Neurofibromatosis 1 (33.33%) had soft tissue sarcoma of renal origin ,1 case(20%) with Sturge-Weber syndrome associated with Acute lymphocytic leukaemia (ALL) and glaucoma.

CONCLUSION: Neurocutaneous syndrome is not uncommon in the pediatric population. When a child present with any neurocutaneous marker we should look for other systemic manifestation of the disease specially neurological abnormalities and associated psychiatric features which are commonly overlooked.

Poster Paper

Clinico-epidemiological, serological and inflammatory profile of newly diagnosed childhood arthritis in a tertiary care centre of Eastern India

Emilee Das (PGT), Dr. Malay Kumar Sinha(Prof), Dr. Sananda Pati(Asst. prof), Dr. Supratim Datta(Prof,HOD)
Pediatric Medicine Dept, IPGMER

BACKGROUND:-

Arthritis in childhood has dynamic etiology, presentation , and pertains to significant morbidity as well as mortality. Knowledge of the clinico-epidemiology and lab profile is important with respect to diagnosis , prognostication and treatment.

AIMS AND OBJECTIVES:

Clinico-epidemiological, serological and inflammatory profile of newly diagnosed childhood arthritis in the age group of 1 month till 12 years and correlation of clinical and laboratory profile.

MATERIALS AND METHODS:-

Children aged 1 month till 12y, admitted from February 2021 till July 2022 at Pediatric medicine department at IPGMER with arthritis examined and investigated according to preset proforma and recorded (cross sectional study) . Arthralgia, bone tumor, trauma excluded.

RESULTS:-

Total 68 cases included, most common were rheumatological diseases(67.6%) , JIA being commonest (30.9%). Post MISC arthritis has come out as new entity. Among JIA, Polyarticular JIA and Systemic JIA are commoner and oligoarticular JIA is least common. None presented with uveitis. Carditis, nephritis and ILD were other debilitating complications. Two RF positive poly JIA, one JDM and hemophilic arthropathy presented with deformities. Most are from lower and lower middle socioeconomic group; male :female ratio : 1.2:1. Platelet count had significant difference among Chronic rheumatological arthritis(CRA) and others. Triglyceride had significant difference among CRA vs non CRA. Mortality was nil among our patients.

CONCLUSION:

JIA is the Most common rheumatological arthritis in childhood . Platelet count and Triglyceride values are significantly different among CRA and others. Early diagnosis and initiation of treatment and managing complications are crucial in childrens wellbeing.

Poster Paper

DWELLING IN AMBIGUITY: THREE VARIED PRESENTATIONS OF DISORDER OF SEX DEVELOPMENT – A CASE SERIES

DR. BUSHRA ASLAM*, DR. KAUSTAV NAYEK**
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INTRODUCTION: Disorders of sex development (DSD) constitute various congenital conditions attributed to abnormality in chromosomal, gonadal, or anatomical sex differentiation. The estimated prevalence is1 in 5000 live births. We report a case series comprising three cases of DSD with variable age of presentation, etiologies, and management.

CASE SERIES :CASE 1: A 7-month-old infant presented with atypical genitalia and unilateral undescended testis.Imaging showed presence of male gonads. Blood investigations revealed male karyotype, normal testosterone but lowdihydrotestosterone (DHT)levels.Beta human chorionic gonadotropin stimulation test was done after which low levels of DHT were recorded.

DIAGNOSIS: 5a reductase deficiency (46,XYDSD).

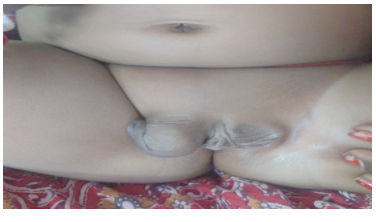
CASE 2: A 4-year-old child, reared as a female, presented with ambiguous genitalia. Clitoromegaly and blind vagina were seen on examination. Imaging revealed absence of Mullerian structures.Bilateral ectopic testes were found. Blood investigations revealed male karyotype and low testosterone levels.

Diagnosis: Testosterone synthesis defect (46,XY DSD).

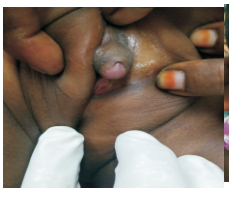
CASE 3: A neonate presented with failure to thrive and ambiguous genitalia. Hyperpigmentation of external genitalia was seen. Mullerian structures were seen in USG pelvis with female karyotype. Low blood glucose, deranged serum electrolytes and high levels of 17-OH-Progesterone (200ng/ml) were found. Patient improved on oral Hydrocortisone and fludrocortisone.

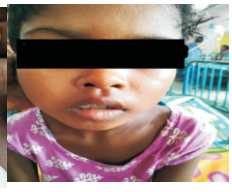
DIAGNOSIS: Congenital Adrenal Hyperplasia (21-a-Hydroxylase deficiency) (46,XX DSD).

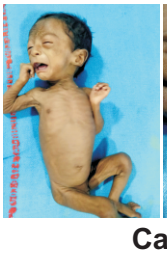
CONCLUSION:DSD is a social and medical emergency requiring multidisciplinary team for proper management. Most of the well-treated DSD patients lead a normal life in adulthood. Therefore, our cases after diagnosis were referred to higher centre for further cytogenetic analysis,hormonal replacement therapy and surgical treatment.

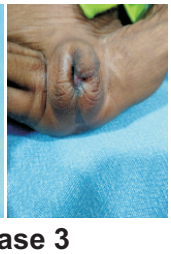


Case 1









Case 2 **Case 3**

Poster Paper

UNCOVERING HYPOTONIA IN AN INFANT

Dr Sampurna Roy

Background: Pompe disease is type 2 glycogen storage disorder which occurs due to deficiency of Acid Maltase and shows significant cardiac involvement.

Case Presentation: A 6month old girl infant presented with complaints of repeated episodes of cough and coryza since 1.5 months of age. There was also a history of delayed achievement of milestones.Birth history was not significant. Significant family history reveals consanguineous marriage of her parents. She has a historyof sibling (girl) death who also had similar history.

Examination:

- HEAD TO FOOT
- Depressed nasal bridge
- Low set ears
- Slanting eyes, hypertelorism
- Macroglossia
- Central Nervous System
- Sensorium: Normal
- Hypotonia: Present in all four limbs
- Power: 4/5 in all four limbs
- Rest: normal limits
- Abdominal examination
- Liver is enlarged with a span of 10cm.
- Spleen is palpable 5cm along 10th rib.
- Cardiovascular
- Mid systolic murmur

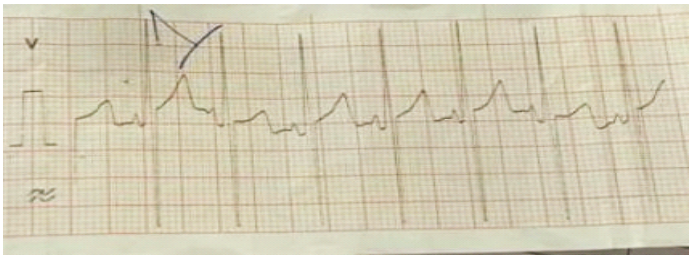
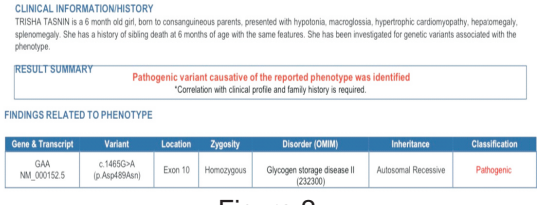


Figure 1

Investigations

- Complete Blood count: total count 20500(neutrophilic)
- Liver function test: elevated AST
- Serum Creatine kinase: 2100 IU/L
- Lactate Dehydrogenase: 3096 U/L
- Chest Xray: Cardiomegaly
- Electrocardiography: Broad QRS complex, short PR interval(figure 1)
- Echocardiography: Hypertrophic Obstructive cardiomyopathy (HOCM)
- Muscle biopsy: shows glycogen accumulation
- Genetic test: Confirms PompeDisease(figure 2)



CLINICAL INFORMATION/HISTORY

TRISHA TASNIN is a 6 month old girl, born to consanguineous parents, presented with hypotonia, macroglossia, hypertrophic cardiomyopathy, hepatomegaly, splenomegaly. She has a history of sibling death at 6 months of age with the same features. She has been investigated for genetic variants associated with the phenotype.

RESULT SUMMARY

Pathogenic variant causative of the reported phenotype was identified

*Correlation with clinical profile and family history is required.

FINDINGS RELATED TO PHENOTYPE

Gene & Transcript	Variant	Location	Zygosity	Disorder (OMIM)	Inheritance	Classification
GAA NM_000152.5	c.1465G>A (p.Asp489Asn)	Exon 10	Homozygous	Glycogen storage disease II (232300)	Autosomal Recessive	Pathogenic

Figure 2

Prognosis was explained, the patient was dischargedandfollowed up in OPD.

Conclusion: This case merits a mention ashypotonia with HOCM led to the diagnosis ofPompe disease.

Poster Paper

Evans' Syndrome – A case report

Dr. Srutosome Dikshit*, Dr. Abhay Charan Pal, Dr. SubhenduSaha**
*Post Graduate Trainee, **Professor & head, , *** Assistant Professor
Department of Paediatrics, Bankura Sammilani Medical College and Hospital, West Bengal

Introduction:

Evans' Syndrome is defined as thesequential association of Autoimmune Hemolytic Anemia with Immune Thrombocytopenia and rarelyautoimmune neutropenia. Immune dysregulation with antibodies against RBC, Platelet and/or WBC may be the underlying pathophysiology. It was first described by Dr. Robert Evans in 1951 and now is under NORP (National Organization of Rare Diseases) database.

Case Report:

A 3 years old girl presented with multiple petechiae and ecchymoses all over body for1 week. History of similar episode was present 2 months back without history of fever or recurrent respiratory infection. On examination, there wassevere pallorwith no organomegaly.

Complete hemogram revealed haemoglobin of 6.4 g/dl with 20000/cmm platelet and normal WBC levels. On peripheral smear, reticulocyte count was 4% with background of anisopoikilocytosis. MCV and MCH were significantly decreased with normal MCHC (36.4g/dl). No blast cell was present.

Bone marrow aspiration study showed increased megakaryopoiesis which was suggestive of ITP. Marked erythroid hyperplasia was seen as well.

Blood for DCT waspositive which was suggestive of Autoimmune hemolyticanemia.

Values of serum ANA and Anti ds DNA Ab were significantly increased.

Patient was given oral Prednisolone @ 2mg/kg/day along with Mycophenolate mofetil @ 50mg/kg/day under close monitoring. Gradually all cutaneous bleeding manifestations disappeared. Platelet counts were checkedin each follow up and they gradually rose up.

Conclusion:

Evans' syndrome primarily presents with thrombocytopenia along with either anaemia or neutropenia. SLE can be the underlying disease in Evans' syndrome. Hence, careful assessment of underlying etiology may guide towards treatment.

Poster Paper

Anti-gamma aminobutyric acid B autoimmune encephalitis in an Indian child with early onset seizures with neurodegeneration and brain calcification due to NRROS variation- the first reported case worldwide.

Dr. Aritra Kapat
3rd year MD pgt, Dr B C ROY PGIPS

A 1.5-years-old boy presented to us, with history of normal growth and developmental parameters till 6 months, but having multiple types of seizures from 7 months of age, initially complex febrile seizures, followed by afebrile and unprovoked seizures. Multifocal clonic, generalised tonic-clonic, and myoclonic (multifocal and generalised) were the evolving seizure types. He had truncal hypotonia, but his appendicular hypotonia progressed to hypertonia over next few months, and further to decorticate posturing. Brain magnetic resonance imaging showed generalised atrophy, predominantly fronto-temporal, without any focal signal abnormalities or contrast enhancement. Computed tomography showed speckled calcification in subcortical white matter. Electroencephalogram showed bilateral fronto-temporal epileptiform discharges with secondary generalisation. His cerebrospinal fluid had normal cytology and biochemical results, but was positive for anti-gamma aminobutyric acid B antibodies. Whole exome sequencing showed likely pathogenic, novel autosomal recessive homozygous variation of NRROS gene on chromosome 3 [c.1487G>A (p.Trp496Ter)], which impairs the functioning of anti-inflammatory cytokine TGF-β, resulting in a pro-inflammatory state within the central nervous system and thereby, promoting autoimmune encephalitis. Parental Sanger sequencing validated the variation in both his parents. He was treated with both pulse methylprednisolone (30 mg/kg/day for 5 days) and intravenous immunoglobulin (2 grams/kg), followed by slowly tapering of oral prednisolone and monthly intravenous immunoglobulin infusion (1 grams/kg). There was significant reduction in seizure frequency and disappearance of epileptiform discharges from the electroencephalogram. However, the motor andancognitive improvement did not occur, and he had microcephaly and growth failure at the last follow-up. This is the 11th case report of neurodegeneration associated withNRROS gene variations, but the first report of autoimmune encephalitis being triggered by the variation in a child.

Poster Paper

IRON DEFECIENCY ANEMIA MANIFESTING WITH HUGE HEPATOSPLEENOMEGALY AND HEMOLYTIC FACIES

Dr. Nikahatjahan Awati, Dr Sanjoy Bishnu, Dr.Sandip Kumar Mandal, Dr. Saumyen De

Case presentation:-

We present a case of an two years two month old male child who reported with complaints of fever for 1week and Icterus for last 4days.On examination there was icterus,pallor, firm hepatospleenomegaly and hemolytic facies

On initial investigation,his Hb was 5.4 g/dl,MCV:- 60, MCH:-12.8, MCHC:21.4.Peripheral blood smear showed microcytic hypochromic RBCs, anisopoikilocytosis,target cells,tear drop cells and nucleated RBCs.Iron profile showed reduced iron ,ferritin and transferrin saturation with increased TIBC, suggestive of iron defeceincy anemia. Icterus was due to hepatitis A, which subsided after 1week.On further workup G6PD,Hb Electrophoresis (HPLC),Reticulocyte count and direct coombs test were found to be within normal limits . Due to anemia with huge hepatospleenomegaly bone marrow aspiration was done which showed micronormoblastic erythroid hyperplasia. Storage disorders were also ruled out. So after all workup we diagnosed that this is a uncommon presentation of iron deficiency anemia and started on iron supplements and positive response with gradually increasing Hb level is seen during follow up.

Discussion:-

Iron defeciency anemia is the most common nutritional deficiencies in children throughout the world ,particularly in developing countries.Blood loss can also be considerd as a possible cause of iron defeciency anemia.

Conclusion :-

As the child presented with fever, anemia and huge firm hepatospleenomegaly,hemolytic facies and diagnosed with Iron deficeincy anemia.so our case is unique from the point that even iron defeciency anemia can present with some features of hemolytic anemia like hemolytic facies and hepatospleenomegaly

Key words:- Anemia,Hepatospleenomegaly,Iron defeceincy anemia,Hepatitis -A.

Conflict of interest:- None

Poster Paper

A STUDY TO COMPARE THE EFFICACY OF PHENOBARBITONE AND LEVETIRACETAM IN NEONATES WITH SEIZURES FOLLOWING PERINATAL ASPHYXIA

Dr.Subha Roy , Prof. Dr. Taraknath Ghosh

Introduction:

Neonatal seizures are the most frequent clinical manifestation of central nervous system dysfunction in the new-born, with an incidence of 1.5–3.5/1000 in term newborns and 10-130/1000 in preterm newborns. Seizures in the new-born frequently signal significant brain pathology, such as hypoxic-ischemic injury, stroke, intracranial infection, hypoglycemia, inborn errors of metabolism, or brain malformations.

Aims:

To determine the efficacy of Levetiracetam as first line AED for neonatal seizures following perinatal asphyxia, to compare the efficacy of Levetiracetam with the conventional Phenobarbitone as first line AED in the management of neonatal seizures following perinatal asphyxia.

Materials and method:

The present study was a Hospital based observational study. This study was conducted at Neonatal unit, Department of Pediatrics, Burdwan Medical College &Hospital. 63 patients were included in this study.

Result:

We showed that, majority number of patients had [27 (84.4%)] Clinical Seizure Free Period more than 24hours in Levetiracetam compared to Phenobarbitone [16 (51.6%)] it was statistically significant (p=0.0052). Lower number of patients had [5 (16.6%)] need for Other AEDs in Levetiracetam group compared to Phenobarbitone group [15 (48.4%)], it was statistically significant (p=0.0052).

Conclusion:

We observe that efficacy of levetiracetam is more than phenobarbitone in neonates with seizures following perinatal asphyxia.

Keywords: AED, Levetiracetam, Phenobarbitone and asphyxia.

Poster Paper

SWELLING OF BILATERAL PAROTID GLANDS : AN UNUSUAL SYMPTOM OFMULTISYSTEMLANGERHANSCELLHISTIOCYTOSIS

Dr Sandip Mondal

Introduction:

Langerhans cell histiocytosis is an unusual disorder of unknown etiology with heterogenous clinical behaviours and variable outcomes. It can involve one or moreorgans or systems, but to our best knowledge ,parotid gland involvement in Langerhans cellhistiocytosisis extremely rare.

Method:

We report a 17month old girl who presented with bilateral parotid swelling aspresenting symptom. She was misdiagnosed for 4 months but final diagnosis was multisystem Langerhanscellhistiocytosis.

Result:

After being treated for the initial phases and diagnosis, the patient taken to another specialised centre for the disease,by her parents.

Conclusion:

Langerhans cell histiocytosis may involve any organ ,in patients with parotidenlargement ,Langerhans cell histiocytosis should be kept in mind in the differential diagnoses. Biopsy for histologic evaluation should be done as soon as possible and evenrepeatedlyif initial results are negative for Langerhanscellhistiocytosis.

Keywords : Langerhanscellhistiocytosis, parotidgland

Poster Paper

The Big Black-Brain

Dr. Nibedita Mondal, Dr. Suman Das, Dr. Some Suvra Bose, Dr. Sonali Mitra
Dr. B.C.Roy PGIPS

BACKGROUND

Cerebral Infarction following Acute Subdural Hematoma (CIASDH) which is also known as “big black brain” where cerebral infarction occurs from the day of SDH onset to several days after the onset. A probable mechanism is the presence of hematoma in the subdural space causing activation of Trigemino-vascular system which also supplies the proximal Pial arteries & causing wide spread vasospasm & infarction.

CASE REPORT

A 4 months old baby boy presented with fever for 3days followed by vomiting, multiple ecchymotic patches, altered sensorium & convulsion. CBC revealed severe anemia with neutrophilic leukocytosis & normal platelet counts but coagulation profile was deranged. Treatment started with PRBC, FFP transfusion along with antibiotics according to AES protocol with anti-edema & anti-seizure medications. NCCT brain revealed minimal subdural hematoma but extensive infarction involving the entire right hemisphere along with deeper structures. CSF study revealed pleocytosis with increased protein & viral PCR confirms the diagnosis as Ebstein-Barre Virus meningo-encephalitis. Other investigations ruled out vasculitis, metabolic encephalopathies. MR Angiography brain showed bilateral MCA stenosis but surprisingly infarction involved beyond the vascular territory of MCA supporting the CIASDH phenomenon. Furthermore there were risk factors for the same like flair vessels hyperintensity, lack of skull fracture.

INFERENCE

CIASDH may occur after meningoencephalitis with associated sepsis induced coagulopathy and infarction can also occur in the deeper structure of brain. No previous published case reports have ever reported CIASDH after Meningoencephalitis- (Prior risk factors-post trauma/spontaneous) & infarction in the area of basal ganglia and posterior fossa which was unique to our case.

Poster Paper

A STUDY ON SERUM ELECTROLYTE IN FEBRILE SEIZURE IN A TERTIARY CARE HOSPITAL

Dr Sampurna Ray

Background:

Febrile seizure is the most common childhood seizures occurring in children younger than 60 months of age. Low serum sodium at the time of presentation has been included under one of the minor criterias' in predicting the risk of recurrence of febrile seizure. Hence, this study has been conducted with an aim to measure the serum electrolyte level in patients of febrile seizure irrespective of the number of episodes.

Method:

This single centre based descriptive, cross-sectional study was conducted on 76 children of age group between 6months to 5 years who presented to R.G. Kar Medical College and Hospital with febrile seizure. The cases were selected on the basis of inclusion and exclusion criterias'. Data was analysed using STATA Version 16 software.

Results:

Out of 76 study subjects, 44.74% were females and 55.26% were males. There existed statistically significant association between sex of study subjects and serum calcium level at presentation (mEq/L) ($p=0.012$); between type of seizure (Simple/Complex) with serum magnesium level at presentation (mEq/L) ($p=0.006$); between episodes of febrile seizure and family history of febrile seizure ($p < 0.05$). There was no statistically significant association between sex of study subjects with serum sodium level,serum potassium level and serum magnesium level at presentation (mEq/L), type of seizure (Simple/Complex) with serum sodium level, serum potassium level and serum calcium level at presentation (mEq/L).

Conclusion:

It is important to measure the serum electrolytes (sodium, potassium, calcium, magnesium) in patients presenting with febrile seizure and a proper history taking is also necessary as the family history of febrile seizure increases the chance of recurrence.

Keywords: Febrile seizure, electrolytes, study subjects, simple, complex.

Poster Paper

Growth Faltering In Early Infancy And Its Association With Morbidity And Mortality: A Hospital-based, Longitudinal Study In Kolkata, West Bengal- Original Research Article

Shaw Dr. Nisha[1], De Dr. Soumyen[2], Mukhopadhyay Dr. Dipta kanti[3]
1. 3rd yr PGT, 2.Associate professor and HOD,Dept of paediatrics, CMSDH,
3.Professor and HOD, College Of Medicine And Sagore Dutta Hospital
1.3rd year PGT, Dept of paediatrics, CMSDH

Introduction:

Under-five mortality rate in India has been steadily decreasing but still the contribution of malnutrition to child deaths is quite high. Despite decades of nutritional interventions, Out of 1.04 million fewer than five children mortality in India the year 2017, almost 706,000 were malnourished till date.

Aims:

To estimate the proportion of infants aged 1-6 months with growth faltering and their severity, to examine the association of grades of anthropometric failure, feeding practices, background characteristics and severity of morbidity of infants aged 1-6 months with mortality.

Materials and method:

The present study was a hospital-based, observational, descriptive study. This Study was conducted from 18 months at Department of Paediatric Medicine of College of Medicine and SagoreDutta Hospital, Kolkata-700058 in West Bengal. Total 83 patients were included in this study.

Result:

It was observed in present study that 4 in every 10 infant aged less than 6 months admitted in hospital were underweight including 1/10th severe underweight. In our study, 3 in every 10 infant had stunting including 1/10th severe stunting.It was observed that 5 in every 10 infant aged less than 6 months admitted with ARI in hospital were underweight including 2/10th severe underweight. We found that 6 in every 10 infant admitted with diarrhoea had stunting.

Conclusion:

Present study showed that growth faltering in early infancy was associated with morbidity and mortality.

Keywords: Growth faltering, Mortality rate, Morbidity.

Acknowledgement

Alkem
Apex
Aristo
Alembic
Bharat Biotech
Cipla
Emcee
Fourrts
FeNo
Glaxo Pharma
Glowderma
Indoco
Medmanor
Meyer
Nourishment
Novo
Lupin
P & G
Reddy's Lab
Sanofi Pasteur and Aventis
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