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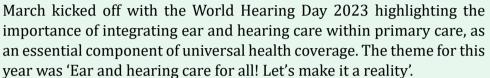
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Editor's Note

Dear friends,

Greetings! This, the March issue of Child India is to deal with the specific treatment of IEMs that is detailed in the Metabolic Disorders Chapter of IAP Drug Formulary. The same can be accessed in the IAP DF mobile app.





This year March 9th, 2023, World Kidney Day 2023 theme was "Kidney Health for All - Preparing for the unexpected, supporting the vulnerable", a call to patients, governments, world leaders, and the concerned stakeholders to accelerate awareness about the challenges faced by patients suffering with chronic kidney disease.

The 16th World Sleep Day was observed on March 17, 2023 with the theme 'Sleep Is Essential for Health'. Sleep is not yet commonly considered an essential behavior for good health. World Sleep Day is an opportunity to promote sleep health which is a multidimensional pattern of sleep-wakefulness, adapted to individual, social, and environmental demands, that promotes physical and mental well-being.

This year, March 20th 2023, the World Oral Health Day 2023 theme was 'Be Proud of Your Mouth', a continuation of the 2021 and 2022 themes. The theme focused on conveying to the public the importance of dental health at all stages and how to preserve oral health.

World Down Syndrome Day, March 21st 2023 was celebrated widely by our fellow IAP members with the theme was "With Us Not for Us". The theme emphasises providing people with Down Syndrome their right to take their own decisions and involving them in various organisations for all policy, decision-making, to being a part of the work team for their well-being.

World Tuberculosis Day is observed on 24th March March to raise awareness about tuberculosis (TB) and global efforts to eliminate the disease. This year's theme is "The Clock is Ticking," to highlight the urgent need for accelerated action to end TB.

Our President 2023 Dr Upendra Kinjawadekar, HSG Dr Vineet Saxena, OB, EB along with all our friends in IAP are continuously working towards care of children in our country, The IAP Action Plans for 2023 will contribute tremendously towards achieving these goals.

Jai IAP!

Dr Jeeson C Unni Editor-in-Chief



President's Address

Dear All,

Greetings from CIAP!

Baby with inborn error of metabolism is fortunate to have a protective cover of placenta during the antenatal period, which apart from providing essential nutrients and flushing out harmful metabolites doesn't allow accumulation of the toxic byproducts and thereby protects the body from their harmful effects.



However, after birth this disruption in biochemical pathways manifests at various stages depending on the degree of deficiency. Whether the IEM is of intoxication type/energy deficiency type/complex molecular disorder, during the management each one requires some basic principles to be followed by the pediatrician. In this issue of Child India, the management of some of the common IEMs is discussed. High degree of suspicion, collecting and appropriately storing the critical samples are surely the first steps. The initial management without a specific diagnosis is most challenging when the pediatrician should be aware of stopping protein intake/external source of protein, reversing the catabolism in body by providing adequate nutrition, ensuring adequate fluid and electrolyte and then carrying out detoxification measures.

We pediatricians have a huge responsibility to have appropriate knowledge about IEMs. Even if there is no treatment accurate diagnosis is still essential to counsel a family and enable prenatal diagnosis and provide reproductive options.

Thank you,

Dr Upendra Kinjawadekar

National President 2023 Indian Academy of Pediatrics



Secretary's Message

Dear Colleagues,

Greetings,

"Talent wins games, but teamwork and intelligence win championships."

I am pleased to report that in the month of March, we have achieved remarkable milestones in our various projects and initiatives. We have successfully conducted several workshops, campaigns, and events to promote child health and development across the country. We have also strengthened our collaboration with other organizations and stakeholders to advance our common goals and vision.



On 4th March 2023, various branches observed World Obesity Day as per the theme decided by the CIAP. Also on 21st March, World Down Syndrome Day was commemorated by the respective branches. I appreciate and congratulate all Office bearers, Executive Board members, and Office bearers of branches for their active participation in organizing the days/activities in their respective branches.

From this year we have started using online application form for fellowship in Indian Academy of Pediatrics (FIAP). The last date was 31 March 2023. This has strengthened our paperless office efforts in line with our "green" initiative.

State Branch Office Bearers Meeting of East Zone was held on 31st March 2023 via video Conferencing. Representatives from Bihar, Jharkhand, Odisha, West Bengal, and Sikkim attended the meeting. The meeting discussed various issues and challenges faced by the branches and suggested ways to overcome them. The meeting also reviewed the progress of various programs and activities undertaken by the branches and appreciated their efforts.

Furthermore, Sankalp: Sampoorna Swasthya (SSS) An initiative under the Indian Academy of Pediatrics under the leadership of President 2023, Dr Upendra Kinjawadekar commenced with its first pilot workshops in Gandhinagar, on 22nd February and subsequently conducted the workshop at the schools in Navi Mumbai, Pune and Mohali. The Program received an overwhelming response from each school. The program aims to educate and empower school children on various aspects of health and wellness, such as nutrition, hygiene, mental health, physical activity, substance abuse, etc. The program also trains teachers and parents to support the children in their journey towards holistic health.

Regarding the ECD, A total of 131 workshops of ECD have been completed to date and 16 workshops of ECD in March 2023. This month total of 12 Basic NRP and 8 Advanced NRP provider courses have been successfully conducted. The ECD program focuses on enhancing the early childhood development of children from birth to six years through screening, assessment, intervention, and referral.

On behalf of IAP, I urge you to organize various activities in the best interest of the health and welfare of the country's children.

Long Live IAP, Jai IAP

In service of Academy.

Dr Vineet Saxena

Hon. Secretary General 2022 & 23











Sankalp: Sampoorna Swasthya







Directorate of Education, Goa signed a Memorandum of Understanding (MoU) Sankalp:Sampoorna Swasthya, a drive towards comprehensive preventive healthcare for School going Children with Indian Academy of Pediatrics (IAP)in the presence of Chief Minister Dr. Pramod Sawant at Panaji. Secretary (Education), Shri Sarpreet Singh Gill, IAS, President of Indian Academy of Pediatrics,Dr. Upendra Kinjawadekar, Director, Directorate of Education, Shri. Shailesh Zingade, Director, (SCERT), Shri. Nagaraj Honnekeri & others were present.



As it was shared with all of you at Gandhinagar the first role out of SSS in Maharashtra was done at Fr Agnel school. 360 students from class 3 and 360 students from class 8 along with 15 teachers, Principal, Vice Principal attended the program.

Hon Education minister of Maharashtra Shri Deepak Kesarkar joined on zoom, addressed the gathering and assured his full cooperation for conducting the program across the state!







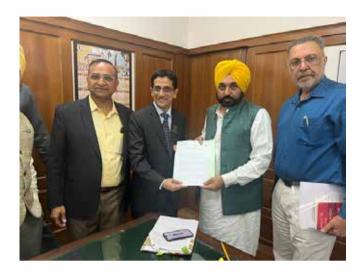


While the entire country was celebrating various festivals like Gudi Padwa and Ugadi....22nd March was very auspicious for Indian Academy of Pediatrics too! After Gujarat and Maharashtra Our flagship program Sankalp: Sampoorna Swasthya was rolled out in the state of Punjab.

Kendriya vidyalaya Zirakpur near Chandigarh was the place. 60 students each from class 4 and class 8 attended the interactive workshop. Dr Rekha Harish, Dr Deepak Pande, Dr Anil Sud and Dr Upendra Kinjawadekar guided the students. Principal, teachers, staff members of the school witnessed the process as they will continue to be our trainers for the rest of the classes.

More than 35 Pediatricians from Punjab, Haryana and Himachal Pradesh including Dr Harinder Singh, Dr Ashwini Sood, Dr Tandon, Dr Harpreet Singh attended the ToT again on a working day. Thanks to President SAP Dr Jatinder Kumar Sharma, Secretary Dr Sunil Mehta, Treasurer Dr Prabhjeet Kaur and the entire team from Mohali branch alongwith Punjab State President Dr Tarlochan Randhawa Secretary Dr Nidhi Malhotra, CIAP EB members Dr Shiv Gupta, Dr Manmeet Kaur for helping to arrange the school program at a short notice and special thanks to Dr Ravi Bansal for going an extra mile to get an appointment with Chief Minister Shri Bhagwant Mann and Health Minister Dr Balbir Singh. Both the ministers were extremely receptive and have assured full cooperation from the Government in implementing Sankalp: Sampoorna Swasthya across the State of Punjab. IAP Punjab will soon take it up further on a mission mode and spread the message of positive health to the school children.











Under the auspices of INDIAN ACADEMY OF PEDIATRICS,
Sahabzada Academy of Pediatrics Mohali, conducted... workshop and TOT
Sankalp Sampoorna Swasthya
- MOU Signed by Health minister S.Dr Balbir Singh
-Represtation to Honourable chief minister S.Bhagwant Maan ji.
Workshop conducted at Kendriya vidyalaya ZIRAKPUR.
TOT... conducted at Advamed Hospital ZIRAKPUR.

The day was graced by Central IAP President Dr Upendera Kinjwadekar, Dr Rekha Harish, Dr Deepak Pandey. Punjab state team Dr Tarlochan Randawa, Dr Ravi Bansal, Dr Shiv Gupta, Dr Harinder Singh, Dr Harpreet Singh, Dr Nidhi Malhotra, Dr Anil Sud, Dr Lalit Tandon, Dr Baljinder Banga Team from Himachal Pradesh lead by EB, Dr Navendu Choudhry, Chandigarh members, Dr Neeraj Kumar, Dr Gaurav Gupta, Dr, Gunjan and Dr Vikram bedi all Graced the occasion, Panchkula was represented by Dr Rajiv Arya.

We thanks everyone from the heart to make it a success. Let's spread this knowledge to help our children to be better citizen.







Our IAP President, Dr. Upendra Kinjawadekar envisioned and curated an excellent program for our school children, a complete health program- the Sankalp Sampoorna Swastha (SSS) Mission as his flagship programme for his Presidential year. This Workshop was conducted on a mega scale for the first time in Maharashtra on 18th March 2023 for School Children of Fr. Agnel School ,Vashi, Navi Mumbai with

8th Std - 360 students; 3rd Std - 360 students

Dr. Upendra Kinjawadekar, Dr. Rekha Harish, Dr. Deepak Pande, Dr. Sandeep Kelkar and Dr. Paula Goel successfully conducted this workshop for the school children and was hugely appreciated by the School Principal and the teachers clearly mentioning that this workshop is need of the hour.

The Education Minister, Mr.Deepak Kesarkar joined on a Zoom call and also addressed the Children. Many Paediatricians from MMR region were also present to witness this workshop.

After the success of this workshop, the SSS Pilot ToT was conducted in the Central IAP office today for Paediatricians in MMR region. This ToT witnessed the presence of Past Presidents, Dr. Yewale and Dr.Bakul Parekh and CIAP OB Dr.Purna Kurkure,Dr.Alok Bhandari, Hon Sec Gen Dr. Vineet Saxena and Vice Presidents Dr.Yogesh Parekh Dr. Jesan Unni, Dr. Piyali Bhattacharya,Dr.Biswajeet Misra alonag with CIAP EB from Maharshtra Dr. Jeetendra Gavhane, Dr. Renu Boralkar,Dr Girish Charde .Also Dr Amol Pawar MahaIAP Secretary graced occasion........

The ToT was interactive and hugely appreciated by all Paediatricians. The Deputy Director of Education, Dr. Sandeep Sangve was present and pledged to give his cooperation to ensure this program reaches every school in Maharashtra.



















SSS ToT at IAP House Mumbai on March 19th









Mid term CME was organised on April 2nd at Gurugram.

President Dr Upindera delivered Guru Dronacharya oration.

CME was also graced by HSG Vineet sir, President elect Dr Basavraja, North zone Vice President

Dr Rajeev seth and Joint secretary liaison Dr Alok Bhandari.



Meeting with Dr Vinod Paul, Member (Health) NITI AAYOG

Dr Updendra led the discussion of key child public health concerns, our IAP current program & how to establish a robust IAP& Government of india partnership

Three specific issues were discussed in depth:

- 1. Early Childhood Development
- 2. Breast feeding & Malnutrition
- 3. National School Health Program & SSS (Sankalp Sampoorna, Swastha)





In Delhi for the first of its kind collaboration with ECHO for prevention and comprehensive management of Hemoglobinopathies.

IAP is committed to ZERO Thalassemia !Hon Union minister of Tribal affairs Arjun Munda appreciated IAPs role in capacity building and skill enhancement of primary health centres of three states in MP Maharashtra and WB.

Our three honorable members Dr Kaustuv Nayak, Dr Kalpana Datta and Dr Kripa Sindhu along with many others are part of this TOT.

Then attended SSS program in a school in Hindupur, Karnataka

Specific Management of Metabolic Disorders

Phenylketonuria [Hyperphenylalanemia]

 $\begin{array}{ll} \text{Persistent hyperphenylalaninemia} & >\!\! 240 \\ \mu mol/L & \end{array}$

Screening of neonates for PKU must be conducted soon after birth so that diagnosis and treatment can begin with a minimum of delay-certainly by 20 days of age.

Identify terahydrobiopterin deficiency related cases.

Lifelong phenylalanine restricted dietary therapy is recommended in most cases. According to some authors, the maximum permissible level may be relaxed after the age of 10 years.

Aim:

- 1. The aim is to keep Phenylalanine concentrations between 120 and 360 μ mol/L.
- 2. Biochemical monitoring (ideally, early morning, when concentrations are likely to be at their peak) should continue on a weekly basis up to at least 4 years of age. After 4 years of age, monitoring can be done every 2 weeks.
- 3. Phenylalanine intake should be adjusted to produce therapeutic blood Phenylalanine levels. Other aminoacids should be given as per the recommended daily allowances.
- 4. The overall nutrient intake, body growth, feeding pattern, and general health of patients with PKU should be reviewed every 2 to 3 months in infancy, every 3 to 4 months up to

- school age, and every 6 months thereafter.
- 5. Avoid producing iatrogenic essential aminoacid deficiency state including Phenylalanine deficiency.

In subjects with mild PKU, treatment should be withdrawn only if intake of natural protein reaches optimum requirements for their age while blood Phenylalanine concentrations remain below $400~\mu mol/L$.

Diet:

Calculate the minimum Phenylalanine requirement, tyrosine, total protein and caloric requirement and then chart a dietary program. The diet should contain a protein substitute, which is Phenylalanine-free (or at least very low in Phenylalanine) and otherwise nutritionally complete, with a composition sufficient to provide 100 to 120 mg/kg/ day of tyrosine and a protein intake of at least 3g/kg/day in children younger than 2 years of age.

This is not possible without special commercially available formulas. [e.g. Phenex-1] In children 2 years of age and older, the intake of amino acids should be maintained at a level of 2g/kg/day. The protein substitute should be given as evenly as possible over a 24-hour period.

Age at Dietary Relaxation and Discontinuation

1. An upper limit of 480 μ mol/L may be acceptable in children of school age. It becomes increasingly difficult to maintain



strict control of Phenylalanine blood levels in older children, but every effort should be made to hold Phenylalanine concentrations no higher than $700 \, \mu mol/L$.

- 2. Adolescent and young adult patients should be made aware of the evidence that, even at that level of Phenylalanine concentration, the performance of decision-making tasks may improve if Phenylalanine levels are reduced.
- 3. It is currently recommended that treatment be for life.

Maternal Hyperphenylalanemia

Those who conceive when Phenylalanine concentrations are 900 μ mol/L or more should be offered termination of pregnancy because of the high risk of infant malformation.

- a. Hyperphenylalanine poses some risk to brain growth and intellectual development even at levels below 900, and offers of detailed fetal ultrasound assessment and possible termination should be extended to patients with concentrations of 700 μ mol/L or more.
- b. Because of positive amino acid gradients across the placenta, the fetus is exposed to higher concentrations of Phenylalanine than the mother is. Monitoring should be undertaken twice weekly, both in the period before conception and during pregnancy, aiming at values of 60 to 250 μ mol/L. Effective contraception should be practiced until such control has been achieved.

Tyrosinemia type I (Hepatorenal tyrosinemia)

- 1. Diet low in Tyrosine, phenylalanine and methionine may result in some clinical improvement in some.
- 2. Mangement of Hepatocellular failure and coagulopathy
- 3. NTBC: 2- (2-nitro-4-trifluoromethylbenzoyl) 1,3 cy- clohexanedione 2.[NITISINONE] [Inhibits phydroxyphenylpyruvate

dioxy¬genase - thus blocks the formation of highly toxic fumarylacetoacetate]. Dose: 1 mg/kg per day as single dose. [In acute liver failure 2 mg/kg/day]. Nitisinone can only be given orally or through nasogastric tube. Should be started as fast to prevent further liver damage. Potential side effects to be noted

4. Liver transplantation: children with Hepatocellular failure and not responding to nitisinone.

Transient Tyrosinemia of Newborn

Usually spontaneously resolves by 1 month of life

Restrict protein to 2-3 gm/kg/day

Vitamin C 200-400 mg/day

Hawkinsinuria

Often spontaneously resolve by 1 year of age.

Diet low in phenylalanine and tyrosine.

Large doses of vitamin C-up to 1000 mg/day.

No therapy needed after 1 year of age.

Alkaptonuria

- 1. Vitamin C (Ascorbic acid) 1g/day is recommended for older children and adults
- 2. Nitisinone (ORFADIN) used in experimental treatment. Saftey of prolonged use is a concern
- 3. Reduction of phenylalanine and tyrosine will reduces the homogentesic acid excreation

Hyper Homocystinemia Classic

Hyper¬homocystinemia due to cystathionine synthase deficiency

- $1. \quad Pyridoxine: 200mg/day \\$
- 2. Betaine (Trimethylglycine)1 [in pyridoxine unresponsive patients] 6 9 g/ 24 hour in adultsin two divided dose (200 250 mg/kg/ 24 hours)

Child India

- 3. Vitamin B-12: hydroxycobalamine at 1 mg IM /month
- 4. Folic acid 1-5 mg/day
- 5. Diet low in methionine and cystein supplemented
- 6. Monitor serum homocysteine levels: aim to keep levels to <15 mg/dl
- 7. Oral contraceptives should be avoided 8. Surgery: special precautions

Hartnup Disease

- 1. Nicotinic acid 50-300 mg/d
- 2. High Protein diet Trimethyaminuria Dietary restriction of choline source: Eggs, fish, liver, nuts and grains often relieves the bad body odor.

Pyridoxine Dependency seizures

Doses required for a satisfactory response vary: 10-100 mg/kg/day may be required.

Gamma Hydroxybutyric academia

Vigabatrin is being tried with variable partial success. Sodum valproate is strictly contraindicated.

Lysinuric Protein Intolerance [LPI]

- 1. Dietary protein restriction forms the main stay of treatment for LPI. Protein need to be restricted in children to 1 to 1.5 gm/kg/day and in adults to 0.5-0.7 gm/kg/day is recommended.
- 2. Anti-hyperammonemia measures may be needed during crisis.
- 3. Citrulline supplementation -1-4 mmol/kg/d may be useful in some, as citrulline supplies urea cycle intermediates at the site of urea synthesis, and thus prevents hyperammonemia.
- 4. Epsilon-N-Acetyl lysine, a neutral analogue of lysine, which is readily absorbed, has also

been tried.

- 5. Life threatening acute or chronic pulmonary insufficiency has been reported to respond to high dose steroids. A recent report states success with intravenous immunoglobulin.
- 6. Glomerulonephritis and renal failure are managed symptomatically.

Maple Syrup Urine Disease (MSUD)

Following treatment protocol for MSUD was designed to

- 1. Inhibit endogenous protein catabolism,
- 2. Sustain protein synthesis,
- 3. Prevent deficiencies of essential amino acids, and
- 4. Maintain normal serum osmolarity.

This protocol emphasizes the enhancement of protein anabolism and dietary correction of imbalances in plasma amino acids rather than removal of leucine by dialysis or hemofiltration.

Therapeutic Variables and Goals for the Asymptomatic Neonate With MSUD

Metabolic variables - Calories: 100-120 kcal/kg/day;

Leucine/kcal ratio: 0.5-0.8 mg/ kcal/day;

Lipid: 40%-50% of calories:

Protein as essential and nonessential amino acids: 2-3 g/kg/day;

Leucine: 60-90 mg/kg/day;

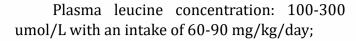
Isoleucine and valine: 40-50 mg/kg/day each;

Glutamine and alanine: 250 mg/kg/day each.

Control of brain edema: NaCl in formula: 4-6 mEq/kg/day.

Goals of therapy

Child India



Plasma iso- leucine and valine concentrations 200-400 umol/L, avoid deficiencies;

Serum sodium: 140-145 mEq/L;

Weight gain: 20-30 g/day and linear growth along appropriate percentiles;

Soft fontanelle, normal head growth and head circumference:

Clear urine

DNPH test daily.

Therapeutic Variables and Goals for the Sick Neonate with MSUD

Goals of therapy

Rate of decrease plasma leucine concentration: greater than 750 umol/L-24 hr;

Plasma isoleucine and valine levels: above 400–600 umol/L, prevent deficiencies;

Restore plasma neutral amino acid concentration ratios to normal:

Serum sodium: 140–145 mEq/L;

Serum osmolality: 290-300 mosm/L;

Urine output: 2-4 ml/ kg/hr, urine osmolarity - 300-400 mosm/L, specific gravity -1.010:

Weight gain: approximately 60 g/day;

Soft fontanelle, stable head circumference; Stable vital signs;

Minimize painful or invasive procedures

Metabolic variables -

Total caloric intake: 120-140 kcal/kg/day;

Lipid: 40%-50% of calories;

Protein as essential and nonessential amino

acids: 3-4 g/kg/day;

Isoleucine and valine: 80–120 mg/kg/day;

Tyrosine, histidine, and threonine supplement as needed to normalize plasma amino acid concentration ratios;

Glutamine and alanine: 250 mg/ kg/day of each.

Control of brain edema - NaCl in formula: 6 mEq/kg/ day-monitor and replace losses of sodium in urine;

Furosemide: 0.5–1 mg/kg q6h, to prevent water retention, monitor serum sodium and potassium concentrations and serum osmolarity; Urine specific gravity should remain below 1.010;

3% saline: 5–10 mEq/kg/day to replace urinary sodium losses; keep serum sodium concentration greater than 140 mEq/L;

Mannitol: 0.5 gm/kg intravenously only as needed for life threatening increases in intracranial pressure.

Co-factor therapy: Thiamine responsive MSUD have been reported. Doses up to 200 mg/day may be needed. Typically response to thiamine takes 2-3 weeks after starting therapy.

Primary carnitine deficiency

Carnitine 50-100 mg/kg/day is effective correcting cardiomyopathy, muscular weakness and any impairment on fasting ketogenesis

Galactosemia

- 1. Galactose free diet.
- 2. Aggressively treat hypoglycemia during acute crisis.
- 3. Supportive treatment for liver disease if present

Fructosemia



Eliminate fructose from diet totally. Fructose is a commonly used additive in many dietary and drug preparations

Glycogen Stoarge Diseases -Type 1

- 1. Dietry therapy: The fundamental principle of diet management for these patients is maintenance of a steady-state balance between circulating glucose and existing glycogen stores. The chief aim is to avoid excessive carbohydrates and calories, while supplying adequate calories and protein for growth
- 2. Young infants require continuous nasogastric (NG) tube feedings to sustain blood sugars. Older children usually can be switched to raw cornstarch feedings, which sustain blood glucose for 4-6 hours. Overnight NG feedings should be administered by a pump equipped with an alarm in case of flow interruption. In children older than 2-3 years, [When pancreatic amylase reaches sufficient activity] overnight feeding usually is replaced by raw cornstarch at bedtime and very early morning hours. Due to the triglyceridemia seen in this disorder, avoid high lipid intake.
- 3. Conditions that reduce PO intake require IV glucose to maintain blood sugar and to avoid complications of severe hypoglycemia. Patients receiving proper treatment should have a reasonable life span. Teach parents of infants how to insert an NG feeding tube. Teach family members how to test blood glucose levels. Teach family members and older children how to recognize signs of impending hypoglycemia. Provide intensive nutritional education to patients so they can assist in their own dietary control as early as possible
- 4. Pay scrupulous attention to the dental and oral health of patients with GSD Ib to reduce incidence of infection. Any intercurrent infection that causes decreased intake requires IV glucose support until resolution.
- 5. Activity: Avoid all contact sports because of the

- propensity for bleeding. Encourage the patient to engage in all other physical activities up to individual limits.
- 6. GSD Ia has no specific medication requirement beyond prophylactic iron supplement and prompt treatment of in-tercurrent infections.
- 7. GD Ib As neutropneia is common, in addition to prophylactic PO iron and prompt treatment of intercurrent infections, weekly administration of granulocyte colonystimulating factor (GCSF) is critical. GCSF is now standard therapy to prevent or reduce incidences of serious infection.
- 8. Colony stimulating factor that activates and stimulates production, maturation, migration, and cytotoxicity of neutrophils 5 mcg/kg SC qwk. Contraindication is documented hypersensitivity.

Do not use 12-24 h before or 24 h after administering cytotoxic chemotherapy because it will increase sensitivity of rapidly dividing myeloid cells to cytotoxic chemotherapy;

do not admix with sodium chloride;

caution in gout and psoriasis;

adverse effects include fever, bone pain, and flu-like symptoms.

Glycogen Stoarge Diseases - III

Provide frequent daytime feedings to infants and continuous nasogastric tube (NGT) feedings at night to en- sure they maintain satisfactory blood glucose levels.

Once a child has reached age 2-3 years, nocturnal NGT feed- ings can usually be replaced by feedings containing raw cornstarch (ie, a slow-release form of glucose) dispersed in room-temperature water or a diet drink. This suspension maintains blood glucose levels at satisfactory levels for 3-6 hours.

Never substitute any other type of starch (eg. rice, potato) for cornstarch because only



cornstarch achieves the desired results.

Do not use hot water to achieve a more homogeneous suspension; aqueous cornstarch suspensions prepared with hot water may maintain blood glucose levels at satisfactory levels for only 1-2 hours.

Significant hypoglycemia sometimes develops in patients receiving adequate dietary control. Providing the family with a glucometer and the instructions on how to use the device may be best.

Treatment of hypoglycemic episodes depends upon the patient's mental status.

For a patient who is awake and alert, a sufficient dose should be 15 g of simple carbohydrate (ie, 4 oz of most fruit juices, 3 tsp table sugar, 15 g glucose either as tablets or gel by mouth).

If the patient's symptoms do not improve promptly, or if the blood glucose level does not rise above 39 mmol/L (ie, 70 mg/dL) within 15 minutes, repeat the carbohydrate dosage.

Failure to respond adequately to a second dose is most unusual; indeed, such a failure mandates a search for other causes of hypoglycemia (eg, overwhelming infection, exogenous insulin administration, adrenal insufficiency).

Waiting 15 minutes after the initial treatment before retesting or administering a second dose of carbohydrate is important because over-treatment of low blood sugars can lead to hypoglycemia, probably because of hyperinsulinemia.

When a patient's mental status is depressed to the point that it causes concern that the patient may aspirate orally administered carbohydrate, the appropriate form of treatment depends upon the setting.

Home treatment - S.C Glucagon administration may be tried for patients at

home, but remember that patients with GSD III who have not eaten recently may not respond to glucagon because their glycogen supplies may be depleted of glucose moieties that can be cleaved in the absence of debrancher activity.

All caregivers should have this hormone available and should know how to administer it. <20 kg: 0.5 mg/dose IV/IM/SC or 20-30 mcg/kg; dose may be repeated every few hours; >20 kg: 1 mg/dose IV/IM/SC; dose may be repeated every few hours.

Immediately contact local emergency medical services if the patient does not respond promptly to subcutaneous administration because intravenous glucose administration is then necessary.

Hospital treatment - If a hospitalized patient does not respond to oral administration of 30 g of glucose, administer glucagon only if venous access is a problem; remember that glucagon may provide little benefit to a nutritionally depleted patient with GSD III. The preferred inpatient treatment is prompt administration of intravenous glucose, which always proves beneficial. Moreover, intravenous glucose does not provoke the nausea and vomiting that may follow glucagon administration. The treatment for acute hypoglycemia is an intravenous bolus of 2.5 mL/kg of 10% dextrose in sterile water. Follow the bolus with an intravenous infusion of glucose at a rate that matches normal endogenous hepatic glucose production. This rate in infants is approximately 8-10 mg/kg/min; the rate in older children is approximately 5-7 mg/kg/min. These rates are only guidelines; actual rates vary from patient to patient. Always adjust the dose to maintain plasma glucose levels above 2.5 mmol/L (45 mg/dL). A higher maintenance level mav be chosen.

Concurrent infections or other illnesses that interfere with the patient's oral dietary intake may necessitate intravenous glucose support until the condition resolves. The response to parenteral dextrose administration is virtually



immediate.

Diet: Meticulous dietary management is the mainstay therapy for all forms of GSD III. Management requires regular involvement by a nutritionist or dietitian who specializes in metabolic diseases. The goal is to ensure adequate blood glucose levels throughout the day and night (especially at night) and optimal glycogen stores. For infants, frequent feedings of breast milk or formula provide adequate amounts of glucose and glucose precursors during the day, even though both forms of milk contain almost 50% of their energy value as fat, which provides little gluconeogenic substrate. For example, 1000 calories of fat provides less than 0.08 moles (14 g) of carbohydrate precursors, whereas the same number of calories of lactose provides more than 1.4 moles (>250 g) of carbohydrate. Maintain euglycemia in infants at night by continuous NGT feedings. The feedings may consist of formula or breast milk, elemental enteral formula, or solutions of either glucose or glucose polymers (eg, Polycose, Moducal). Set the infusion rate to provide approximately 8-10 mg/ kg/min of glucose in an infant and approximately 5-7 mg/ kg/min of glucose in an older child.

The pump delivering the nocturnal feedings must be equipped with an effective alarm; hypoglycemia and even deaths have occurred from pump malfunction or NGT dislodgement.

As an infant begins to ingest solid food, formula or breast milk can be supplemented with various foods. The goal is to achieve a diet that contains approximately 55-65% of its energy value as carbohydrate, 20-25% as fat, and 15-20% as protein. Because the entire pathway of gluconeogenesis is intact in patients with GSD III, the diet may include all precursors of glucose (ie, proteins, galactose, fructose, lactate, pyruvate, glycerol). Unlike patients with GSD I, no restrictions are necessary for sucrose, lactose, galactose, and fructose intake because these carbohydrates are not obligatory sources of lactic acid in patients with GSD III. Fatty acids cannot

be converted to glucose, so the best method is to restrict dietary fat content to 20-25% of energy intake, a limitation that has the added benefit of being heart healthy. When a child is about age 2 years, continuous nocturnal NGT feedings can be replaced with suspensions of cornstarch in water or in a diet drink. Although the duodenal concentration of pancreatic amylase reaches levels approaching that in an adult by age 6-8 months, the wise course is to delay replacing nocturnal continuous NGT infusions with cornstarch suspensions until the child is aged 2-3 years because younger children do not usually accept the raw cornstarch suspension, probably because of its somewhat unpalatable texture. The initial dose of cornstarch in 2-yearold children is approximately 1.6 g/kg of body weight every 4 hours. Prepare the cornstarch as a 1:2 ratio (weight-to-volume) sus- pension of cornstarch in room-temperature water or diet drink. As the child ages, the interval between nocturnal cornstarch ingestions can usually be extended to every 6 hours at a dose of 1.75-2.5 g/kg body weight. Be cautious about the amount of carbohydrate administered because overtreatment may elicit symptomatic hypoglycemia, prob- ably because of induced hyperinsulinism.

The myopathies of GSD IIIa and IIId possibly result from the breakdown of muscle protein to provide amino acids as substrates for gluconeogenesis. The recommended treatment to overcome this problem is a high-protein diet (ie, 25% of energy intake). Such a diet reportedly has improved and even reversed the myopathy in patients with GSD III. However, benefits from this approach appear unlikely because all gluconeogenesis, amino acid synthesis, and amino acid catabolism reactions remain intact in patients with GSD III. Most investigators now believe no satisfactory treatment exists for the progressive myopathy or cardiomyopathy of GSD IIIa and IIId.

Acute Intermittent Porphyria

1. Check for any potential precipitants, most



notably drugs. Withdraw precipitant.

- 2. Fluid balance Careful management of fluid balance, avoiding large volumes of hypotonic dextrose, is required to minimise the risk of severe hyponatraemia, which may provoke convulsions. Hyponatraemia should be corrected slowly; patients with acute attacks seem particularly prone to cerebral oedema and osmotic demyelination. Restriction of water intake to around 500 mL per day may be sufficient alone but, if symptoms necessitate saline infusion, the rate of correction should not exceed 8 mmol/L in any 24 hour period.
- 3. Supportive Treatment Start appropriate supportive treatments using drugs that are safe in acute porphyria. Recommended drugs and procedures are listed below. Use drugs for symptomatic therapy -

Pain - Morphine (oral, sublingual, intravenous or subcutaneous) - Pethidine, Diamorphine;

Vomiting - Prochlorperazine, Promazine;

Sedation - Chlorpromazine;

Analgesic - Promazine;

Convulsions - Correct any hyponatraemia, IV diazepam, Clonazepam, Magnesium sulphate;

Hypertension/tachycardia - Propranolol (even low doses may provoke severe hypotension and bradycardia.), Atenolol;

Muscle weakness/paralysis - Monitor progress, Early physiotherapy;

Constipation - Bulk forming laxatives, Senna, Prostigmin (neostigmine bromide).

Severe adrenergic crisis during acute attacks with dangerous hypertension, encephalopathy, seizures and ischaemic changes on CT brain scanning Intravenous infusion of magnesium sulphate for adrenergic symptoms; human hemin must be administered to abort the attack. Artificial ventilation is necessary and may

have to be continued for several months until the expected eventual recovery occurs

4. Specific Treatment - started as soon as the diagnosis is established unless the attack is mild and clearly resolving.

Two treatments are available:

- A. Intravenous heme and
- B. Carbohydrate loading.

A. IV Heme- 3-4 mg/kg body weight up to 250 mg given on each of four consecutive days. Con- centrated heme arginate solution should be mixed with 100 mL physiological saline in a glass container just prior to infusion into a large peripheral vein or through a central venous line over 15-20 mins. Repetitive use of heme can lead to vein toxicity in the form of disappearance of the superficial venous system and the consequent need for a central catheter. After infusion, the vein should be washed with saline for 10-15 min. Diluting the human hemin in 100 ml of human albumin (4-20% depending on country availability) instead of saline solution delays or suppresses these problems. Heme should be given as soon after the onset of the attack as practicable. In a mild attack, it may be acceptable to allow 24 hours for spontaneous settling of the attack. Otherwise, it should be given promptly, if possible within 24 hours of admission, to any patient with severe symptoms (severe pain, vomiting), or who shows complications such as seizures, hyponatremia, or incipient neuropathy, and also to any patient with a history of a previous attack complicated by neuropathy. If delay is unavoidable, carbohydrate loading may be carried out. Measurement of urinary ALA or PBG excretion is useful to document the metabolic response to human hemin. Most patients improve within 5 days but, if necessary, the course may be repeated after a day or two but the effectiveness of prolonged treatment has not been evaluated.

B. Carbohydrate loading - Two litres of normal saline with 10-20% glucose given in divided doses of 500 ml over 24 hours through a



central venous catheter. Heme preparations has replaced Carbohydrate loading as the treatment of choice for an acute attack of porphyria.

Treatment of repeated attacks - Less than 10% of patients have frequently repeated acute attacks. Advice on their management should be sought from a specialist center. Special measures include gonadorelin analogues for repeated premenstrual attacks and long-term treatment with human hemin.

Porphyrias – others

- 1. ALAD deficiency porphyria, variegata porphyria and hereditary Coproporphyria may present with neurovisceral symptoms similar to AIP and are managed on the same lines.
- 2. For photosensitivity as in Erythropoietic prototporphyria, Variegata porphyria, hereditary Coproporphyria, Porphyria cutanea tarda, hepatoerythropoietic porphyria, congenital erythropoietic porphyria, following are recommended: Avoidance of sun light, Protective clothing, Topical sun screens and Oral carotene-dose 120-180 mg/d
- 3. For Porphyria cutanea tarda, two other treatment options are Phlebotomy-caution avoid iatrogenic anemia and chloroquine.

Wilson disease

Life long copper chelation therapy needed unless liver transplantation is performed. Four drugs licensed for use –

- 1. d-Penicillamine: 0.5 0.75 gm / day in two divided doses in children < 10 years, 1 gm/day in two divided in adults. Dose is to be taken 30 minutes to 1 hour before or after meals.
- 2. Triethylene te-tramine dihydrochloride 0.5 2 gm/24 hour in 3 divided doses.
- 3. Zinc acetate Slow in onset of action, Not suitable for initiation phase of chelation, More suited for maintenance phase, 25 mg three

- times a day in children, 50 mg three times a day in children adults.
- 4. Ammonium tetra-thiomolybdate 2.9 mg/kg/d in 6 divided doses

Hepatic presentation: no trials comparing 3 drugs Trientine may be preferable-less side effects.

Fulminant hepatic failure-Liver transplantation to be considered.

Neurological presentation: Penicillamine - may worsen initially. Ammonium tetrathiomolybdate preferred by some authors.

Diet - avoid high copper content foods- Shell fish, organ meats, nuts, chocolates, mushrooms Water ideal 0.1 ppm of copper; distilled water may be preferable

Periodic monitoring is mandatory: Indicators of adequate reduction of copper include:

- a. Free plasma copper < 25 microgm/dl
- b. 24 hr urine copper <500 microgm
- c. Liver enzymes normal
- d. Monitor urine every 6 months and blood every 12 months in the maintenance phase
- e. In patients with zinc, monitor 24 hr urine zinc; should be > 2 mg/d to be therapeutically effective Screening of siblings to identify in pre symptomatic phase is mandatory.

Gaucher disease

- Enzyme Replacement Therapy (ERT) is the first line of treatment. There are definitive criteria to start ERT
- 2. Imiglucerase*: Enzyme replacement therapy.
- 3. Adult onset (Type I)The dosage of ERT prescribed would depend on the severity of the disease and would be at the discretion of the supervising consultant. However, it would

Child India

not normally exceed 60 units per kg body weight every 2 weeks.

- 4. Gaucher disease with neurological manifestations (Type II and Type III): ERT with high dose can be tried, However the response will be very poor
- 5. Substrate Reduction Therapy (MIGLUSTAT) where ERT was not possible: 100 mg orally once daily
- 6. If no definitive treatment is possible monitoring of complications and management eg; splenectomy for hypersplenism

Pompes Disaese (GSD Type II)

- 1. Recombinant human acid alpha glucosidase (MYOZYME) 20mg/kg intravenous infusion every 2 weeks
- 2. Supportive treatment and management of complications

Hurler syndrome (MPS Type i)

- 1. Imiglucerase (ALDURAZYME) 0.58 mg/kg intravenous administration once in a week
- 2. Bone marrow (stem cel)l transplantation
- 3. Supportive and symptomatic therapy

Hunter Syndrome (MPS type II)

- 1. Relief of Recurrent respiratory complications
- 2. Management of Heart Complications
- 3. Treatment of Skeletal problems and Contractures Physiotherapy and corrective surgery
- 4. Management of Neurological and behavioral problems
- 5. Addressing sleep issues
- 6. Recombinant I2S (idursulfatase: ELAPARASE) : weekly intravenous infusion over 3 hrs at a dose of 0.5 mg/kg diluted in an appropriate volume of saline

Morqiuo syndrome (MPS type IV)

- ERT:Elosulfase alfa (VIMIZIM) weekly IV infusion 2 mg/kg
- 2. Neurosurgical and orthopedic intervention appropriately

MPS type VI

- 1. ERT: Galsulfase (NAGLYZYME): 1 mg/kg weely IV infusion in children more than 5 years. (In children less than 5 years safety & efficacy not established)
- 2. M anagement of other complications like valvular heart diseases and contractures

Fabry Disease

- 1. Daily prophylactic dose of neuropathic pain agents (gabapentin, phenytoin)
- 2. For Gastrointestinal symptoms : H2 blockers can be tried
- 3. Laser treatment for angiokeratoma
- 4. ERT: Two preparations available

Agalsidase β (FABRYZYME) is intravenously administered at a dose of 1mg/kg every 2 weeks Agalsidase α (REPLAGAL) is intravenously administered at a dose of 0.2mg.kg every 2 weeks

Pediatric Neurotransmitter Deficiency Disorders

Dopa Responsive Dystonia [Segawa's Disease]

Life long therapy needed L-dopa - Starting dose: 25 microgm/kg/day in 2-3 divided doses. Increase slowly every 2-3 days to 1 mg/kg/day. May be hiked up to 2-3 mg/kg/day. Most respond well to doses less than 300 mg/day

Trihexiphenydyl hydrochloride - Can also be used; but not as effective as L-dopa



Vitamin Cofactor therapy

Vitamin	Indication	Dose(mg)
Thiamine	Leigh's disease, Maple syrup urine disease, Thiamine respon- sive megaloblastic anemia	100-300
Nicotinic acid or nicotinamide	Hartnup disease	50 – 300
Pyridoxine	Pyridoxine Hyper homocystin- emia, Pyridoxine dependency Seizures	200 – 500
	Aromatic Amino acid Decarbox- ylase deficiency	40-80
Vitamin B12	Hyper homocystinemia Methyl- malonic acidemia, Cobalamine pathway Defects	1-2
Folic acid	Homocystinuria	1 – 10 mg
Riboflavin	Glutaric acidemia type I, Glutaric acidemia type II, Pyruvate kinase deficiency, Respiratory chain defects, Fatty acid oxidation defects	Variable 100 – 300
Biotin	Propionic acidemia, Bio- tinidase deficiency Holocarbox- ylase deficiency	10 5 - 25 10, up to 80 mg/ day
Folinic acid	Folinic acid responsive seizures	7.5 mg



PEDICON 2024 – ANNOUNCEMENT



Obesity Module with Fitness and Nutrition CME 5th March 2023

Pune IAP successfully launched its own Obesity module on the eve of world obesity day. To make this possible there was great contribution from Dr Shailaja Mane, Dr Phatale, Dr Radhika and Richa Shukla. Topics covered in Modules were

- Screening of children for obesity
- Myths & facts of obesity
- Hazards of childhood obesity
- Promoting physical activity in children and adolescents
- Nutritional Management in Childhood Obesity

Dr Nikhil Burute's journey towards fitness was inspiring. He talked on body composition concepts and Calories Macros and Exercise Balance. Mr Bala and Mr Somavanshi from Fittr gave the fitness Consistency and Discipline Mantra mantra (basics of fitness and exercise). Most importantly they motivated everyone present to take their initial steps towards fitness.

Watch this space for announcement of Obesity Module ToT in the coming few days.











World Kidney Day

9th March 2023 @ Jehangir Hospital

The World Kidney Day 9th March 2023 celebrations were organized by IAP Pune in association with Department of Pediatrics, Jehangir Hospital, Pune

Talk on How to avoid kidney diseases and prevention of Kidney diseases in children was given by Dr Shila Dudhgaonkar.





World Kidney Day

9th March 2023 @ Bharati Hospital

The World Kidney Day 9th March 2023 celebrations were organized by IAP Pune in association with Department of Pediatrics, Bharati Hospital and Research Centre, Pune

The activity was organized under the guidance of Dr Madhura Fadnis Kharadkar, pediatric nephrologist and Assistant Professor in dept of Pediatrics, Bharati Hospital, and Pune. There was a great response from the pediatric renal patients and their parents who had attended in large numbers for the programme.

The programme started with a drawing competition arranged for the children. A speech was given by Dr Madhura emphasizing on spreading awareness about pediatric renal disorders and how timely intervention can prevent progression of the existing renal disease. This was followed by an exciting activity by the dietician Mrs. Trupti who had organized games for parents and children about which dietary foods are to be consumed and which foods are to be avoided.

A question and answer session was conducted by Dr Abhilasha Handu, Pediatric Surgeon and Dr Madhura to solve the queries of the patients. Also a poster competition was organized for the nursing college students of Bharati Vidyapeeth University. There was an overwhelming response from the students with great showcase of their talent. Three posters were declared as winners and everybody received a token of appreciation. The programme ended with snacks and refreshments for the children and parents.











Foundation Course in Pediatric Cardiology

12th March 2023

IAP Pune in association with Ruby hall clinic successfully arranged a Foundation course in Paediatric cardiology CME on 12th March 2023 at Ruby hall clinic, Pune

It was attended by 180 paediatricians

Dr Pankaj Sugaonkar (course co-ordinator) has done wonderful job, he has covered all topics from Basic to advanced

Cherry on the cake was ECG lecture, which thoroughly enjoyed by all delegates !!

Dr Sandeep Kadam, Dr Tushar Parikh and Dr Sanjay Mankar did their best by moderating sessions on Neontal CHD and Kawasaki!!

This CME was attended by paediatric residents in large number













Women's Day Celebration

12th March 2023

IAP PUNE celebrated women's day for the first time from its conception. Thanks to the wonderful initiative by our president Dr Shilpa Dudhgaonkar.

For the very first time, Women's Day was celebrated this year on 12th of March by IAP Pune. It was a fun filled event attended by more than 50 enthusiastic and dynamic lady paediatricians. The event was planned by our cultural committee, Dr Bharati Khairnar and Dr Swapnali Dhoka and spear headed by our most enthusiastic Dr Bayna who anchored the event.

It was full of fun, with games, skits and dance performances, done by our very own multi talented doctors. The event also saw various talents like singing and dancing performed with utmost style.

The programme ended on a high note with each one from the youngest to the eldest walk the ramp with oomph...totally uninhibitted!

This was followed by a wonderful dinner full of tasty delicasies much to the liking of one and all.

All in all it was a wonderful event where each one thoroughly enjoyed and bonded over....an event to reminise forever.





























AWESOME

19th March 2023

Indian Academy of Pediatrics Pune organised first of it's kind AWESOME in Developmental Pediatrics.

As we are all aware of the legendary Dr. Amdekar sir, Dr. Chokhani along with Dr. Samir Dalwai conducted this CME on 19th March 2023. Almost more than 150 pediatrician attended this CME and was well appreciated by all.

There was a good interaction during the session with lot of take home practical tips for everyone to be implemented during their opd practices.













Sankalp: Sampoorna Swasthya

20th March 2023

Team SSS CIAP & IAP PUNE had conducted a Pilot Workshop and TOT of Sankalp Sampoorna Swastha (SSS) which is a flagship program of CIAP President: Dr. Upendra Kinjawadekar*

This Workshop was conducted on 20th March 2023 for School Children of Global International Talent School, Pune with total 130 students and teachers.

Dr. Upendra Kinjawadekar, Dr. Rekha Harish, Dr. Deepak Pande, Dr. Shailaja Mane successfully conducted this workshop. It was very well appreciated by the students, School Principal and the teachers.

More than 38 Paediatricians from Pune & PCMC had observed this workshop as a part of TOT.

SSS Pilot ToT was conducted in the School. This ToT witnessed the presence of many stalwarts: Dr.Shilpa Dudhgaonkar; President- IAP Pune. Dr. Sandesh Runwal, Secretary IAP Pune graced the occasion. Dr. Pramod Jog, Past Presidents, Dr. Pramod Kulkarni, CIAP OB member.

The ToT was interactive and appreciated by all the Paediatricians. All agreed that SSS should reach every school.









World Down Syndrome Day

21st March 2023

On the occasion of World Down Syndrome Day, IAP Pune along with KEM hospital Pune had organised fancy dress day and also various talks by experts on cardio respiratory fitness, dental hygiene and recent updates in Down's syndrome. The function was organised at TDH Child Developmental Centre KEM, Pune. It Is One of the pioneering centres in the field of developmental paediatrics for last 40 years. Welcome speech was given by Dr Sudha Chaudhary. Dr Datar told about recent advances in genetic understanding of Down's syndrome. Vote of thanks was done by Developmental Paediatrician Dr Sharmila Patil.

Dr Shilpa Dudhgaonkar IAP Pune president graced the occasion by her supportive and encouraging presence.

Free Eye checkup and thyroid screening was performed for all Down's syndrome kids. More than 25 kids joined the event with their parents. Gifts and snacks were served to all these wonderful kids by IAP Pune.









IAP Pune

International Adolescent Health Week Celebration

24th March 2023

On the occasion of the International Adolescent Week, Indian Academy of Pediatrics, Pune had organised a informative yet interactive session at Jehangir hospital, Pune on 24th March 2023.

With the theme for event being- 'With and For Adolescents: Building a healthy and more inclusive future', Dr. Shilpa Yadav, President of IAP Pune initiated the program in the presence of CEO,COO, Medical Director, Head of department Pediatrics of Jehangir hospital. Adolescents and their parents attended the event from all over the city.

The event consisted of the informative talks based on the current issues being dealt with adolescents which are less talked otherwise. Dr. Swati Bhave, Head of Adolescent clinic, Jehangir hospital, guided about the Parenting tips with her immense experience over all these years in the adolescent clinic. Dr. Shilpa Yadav, President IAP Pune boldly talked about how to protect your teens when our on a date which an eye opening session for the adolescent parents. Following sessions were taken by Paediatricians from Jehangir hospital including Dr. Gargi Deshpande-addiction in adolescent, Dr. Aboli Ramdasi- Exam pressure in adolescent, Dr. Ashwini Shirsat- Impact of Acne & Fair skin on adolescents, Dr. Swapnali Mirajkar- Teenage pregnancy, Dr. Jinal Jain- peer pressure.

These informative talks were followed by a interactive session of Role playing involving adolescents and parents who attended the program with emphasis given of teaching adolescents 'How to say NO'.

The event was well appreciated by all the attendees, Honoraries of Jehangir hospital.





IAP Pune













IAP Hingoli

IAP MONTHLY ACTIVITY MARCH 2023

World Kidney Day:

We IAP Hingoli celebrated World Kidney Day by taking camp at DEIC Civil Hospital Hingoli. There were 40 patients of various Renal disorders were examined and treated by Dr Pankaj Bhansali sir, Pediatric Nephrologist, Aurangabad. We IAP Hingoli Organized CME on topic 'An Approach to Antinatal Hyderonephrosis'. The Speaker of CME was Dr Pankaj Bhansali sir.









IAP Hingoli

WORLD DOWNS SYNDROME DAY 21st March 2023

We IAP Hingoli celebrated
World Downs Syndrome Day at
Prayas Foundation Hingoli
under the theme of 'With us
not for us'. We distributed
sweets to Downs Syndrome
patients and given valuable
guidance to there parents
about how to take care of
Downs Syndrome patients.





The Rare Disease Day Activity at JJ HOSPITAL

The Rare Disease Day is celebrated globally on the last day of February each year to create awareness on the rare disorders affecting more then 300 million people worldwide. The theme for this year is "Share Your Colours" Cancers and Genetic disorders comprise the major diseases in this category in the Pediatric population.

On this occasion, Dr Bela Verma, HOD Pediatrics Dept, Sir JJ group of hospitals, Mumbai in collaboration with IAP Mumbai organized a talk by Dr Ami Shah, Pediatric Clinical Genetist . Dr Ami gave an excellent overview on the Lysosomal Diseases diagnosis and management.

The talk was attended by the Pediatric Resident doctors, Lecturers and Professors of the department with a very enthusiastic interaction





World Hearing Day Celebrations

Newborn hearing screening is an important building block to ensure a happy and healthy future for any child."Let's catch them early..."No pediatric health worker is unaware of the serious ill effects of hearing deficiency on the speech and neuro development of a child associated with complex behavioural as well as psychosocial issues.

Keeping this in mind, IAP Mumbai on the eve of the World Hearing Day has taken the initiative to emphasize the importance of Universal Hearing Screening in newborns of all categories by organizing "Multiple CME's" in various geographical zones across Mumbai in collaboration with the organization Cochlear beginning this March.

We kickstart this initiative on the World Hearing Day, by organizing a Free Hearing Screening Camp of all the in patient newborns in the Postnatal Department of Sir JJ group of Hospitals, Mumbai







World Down Syndrome Day Celebration

"Stay out of my way, I have got my sassy pants on today!!" World Down Syndrome Day, was celebrated by team IAP Mumbai in a sassy way, to acknowledge the twinkling eyes and the infectious smile of these kids!!

It was attended by more than 17 kids and adults with Downs Syndrome along with their parents.

Handpainting, Dance, goodie bags, gifts, food packets and loads of fun along with some education and enrichment were on the show today!! Success stories of the DS kids were shared.

The event was coordinated with Arushi-The Learning Centre and Care -SNDT WomensUniversity andHopestone, an NGO for special need kids.

Dr Nehal Shah -welcomed all with an introduction to the event.

Dr Ami Shah, geneticist and Dr Jagruti Sanghvi answered the queries of the parents on Sawaal Aapke Jawaab Hamare

Dr Sikha Agarwal and Dr Neha Nabar other EB members, IAP Mumbai also helped in the event by engaging the kids in hand printing with acrylic colours on canvas sheets.

VJ Dance Company contributed by making the parents and kids shake their legs on Bollywood songs.

The event was organised by Dr Jagruti Sanghvi on behalf of Team IAP Mumbai.





IAP NRP FGM program on 12th March, 2023 in Fortis Hospital Mulund

IAP Mumbai conducted the IAP NRP FGM program on 12th March, 2023 in Fortis Hospital Mulund, Mumbai. The IAP NRP FGM, The Newborn Resuscitation Program: First Golden Minute Project, is a structured program which aims to train about 200,000 health professionals in Basic/ Advance New born Care and Resuscitation with ultimate aim to have one NRP trained person available at every delivery.

31 IAP/ NNF members, 4 Emergency dept staff, 4 Anesthetists and 4 Nurses registered have attended the program and got 100% passing. They all interacted very enthusiastically in all practicals. Dr Anjali Otiv was the lead faculty instructor. Dr Sameer Sadawarte was the Course Coordinator as well as faculty. Other faculties included Dr Geeta Bhatt, Dr Mamta Rajadhyaksha, Dr Neha Nabar, Dr Vinay Mishra, Dr Neelesh Anand. 2 MMC points were credited to the participants and the faculty.

We thank the Fortis Hospital management team with Facility Director Dr S Narayani Madam, Head Medical Services Dr Manisha Pathak Madam and Admin Mr Mohit Wankhede Sir for giving permission to conduct the program in the Auditorium Hall of Fortis Hospital. Special thanks to Ms. Tito, Nursing head NICU and Mr Dattaram for their valuable contribution to the success of this program.









Talk on "Lifestyle choices and Stress Management

On the occasion of the International Adolescent Health Week, IAP Mumbai Member -Dr Paula Goel conducted a talk on "Lifestyle choices and Stress Management" for the students of Kohinoor Catering College, Shivaji Park, Dadar, Mumbai on the 21st March, 2023.

The total number of participants was 70. The session was very interactive and well appreciated by all. 4 teachers also attended the session with the students.

Case studies were discussed and students were eager to exercise its practical applications in daily life.



Interactive Seminar at the Veer Bhagat Singh International School, Malad

On occasion of the International Adolescent Health Week Celebrations, IAP Mumbai organized an interactive Seminar at the Veer Bhagat Singh International School, Malad, on Friday, 24th March 2023.

Our EB member, Dr Tanushri Mukherjee & Dr Varsha Bhosle discussed various issues related to PUBERTY And Adolescent Health using very interesting Audio Visuals.

The session was conducted in a classroom of 50 students of the 89th grade, in age group of 13 15 years.

There was an enthusiastic and active participation from all the students



Awareness Programme for Adolescent in School

Date: 25/03/2023

Venue Mumbai public School Mahim East Mumbai

Topic: Healthly life style

Target Audience :Class 6th, 7th students Total 117

Adolescents Speaker: Dr Anita Patil One hour session







Dr. Santosh Kadam- President; Dr. Amruta Baviskar- Secretary; Dr. HrishikesAh Dingankar-Treasurer

World Obesity Day Celebrations

Thane Academy of Paediatrics celebrated the 'World Obesity Day 'on 4th March 2023 under the theme "Changing Perspectives:Let's talk about obesity "

Dr.Parul Shukla delivered a awareness talk to parents and teenagers about good nutrition and healthy lifestyle



Dr.Amruta Baviskar gave a talk in RJ Thakur school to the primary school and Secondary school students about obesity.

The problem children face, healthy eating habits and practical healthy eating choices. Also a discussion was done about body shaming and its impact on children's lives.







World Obesity Day Celebrations

A drawing competition was held on occasion of World Obesity Day @ R J Thakur school for 5th to 8th standard students about healthy and unhealthy foods and 1266 children participated in the competition, winners were given prizes



Monthly clinical meet by Thane academy of pediatrics

Monthly clinical meeting was held@ Jupiter hospital15/3/2033

AGENDA

1.Febrile encephalopathy- Dr Praveen Gokhale
2.Progressive tales on regressing symptoms!!!:Neuro Regression- Dr Smita Patil
3.The need for long term protection in Hepatitis A- Dr Sudhir Sane
4.A QUICK PEEK IN NICU:What's interesting about our neonates- Dr Geeta Bhat
5.Importance of holistic approach in development of child with Cerebral Palsy
-Dr.Sneha



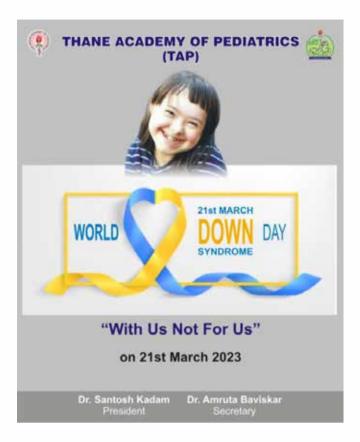


World Down Syndrome Day

On occasion of *World Down Syndrome Day* Thane academy of pediatrics celebrated in a unique way with *"Jidd Shala"*, A talk on nutrition and bad effects of unhealthy food and its impact on overall health was well explained by *Dr.Pooja Thakur* also good nutritional options for daily meal were explained.



Dr. Amruta Baviskar* explained the kids about good touch & Bad touch and what to do in such situation. Parents & caregivers had a good interaction and also discussed the problems faced by them were satisfied with the solutions and information given.



*Dr.Gauri Kulkarni explained about the hygienic habits & also created awareness about how to deal with sexual abuse among parents. Dr.Sudesha Bondre was answering the queries put up by the parents



"Sankalp: Sampoorna Swasthya (SSS)" 19th March 2023

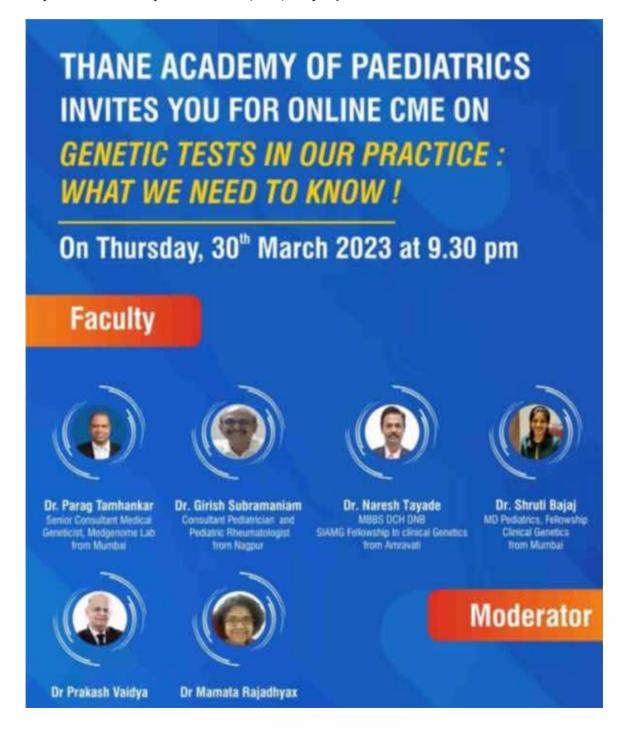
Thane Academy of Paediatrics actively participated in the wonderful initiative by Dr.Upendra Kinjawadekar President CIAP , a drive towards comprehensive preventive healthcare for school children





Genetic tests in our practice: 30th March 2023

Thane Academy of Pediatrics conducted an online CME on 30th March 2023, on Genetic tests in our practice: What we need to know, total 83 pediatrician participated with very informative discussion and practical take home message from the speakers ,Zoom Meetinghttps://us06web.zoom.us/j/790 6924415?pwd=VG1VOURqMGtsM0RkdnJCL1JhekphQT09







World Tuberculous day 24th March 2023

World Tuberculous day was celebrated on 24th March 2023. Dr. Amruta Baviskar is the part of the training modules designed by Thane municipal corporation







IAP Agra

IAP AGRA Celebrated World Down Syndrome Day with Down Syndrome Children & parents on 21st March. Webinar was arranged for Pediatrician









IAP Agra

IAP AGRA organised Autism Awareness Rally & parents awareness program at Child Development centre. 25-30 Pediatricians also celebrated Autism Awareness Day on 02/04/2023 at their clinics, Hospitals. Training of Pediatricians was done via Webinar

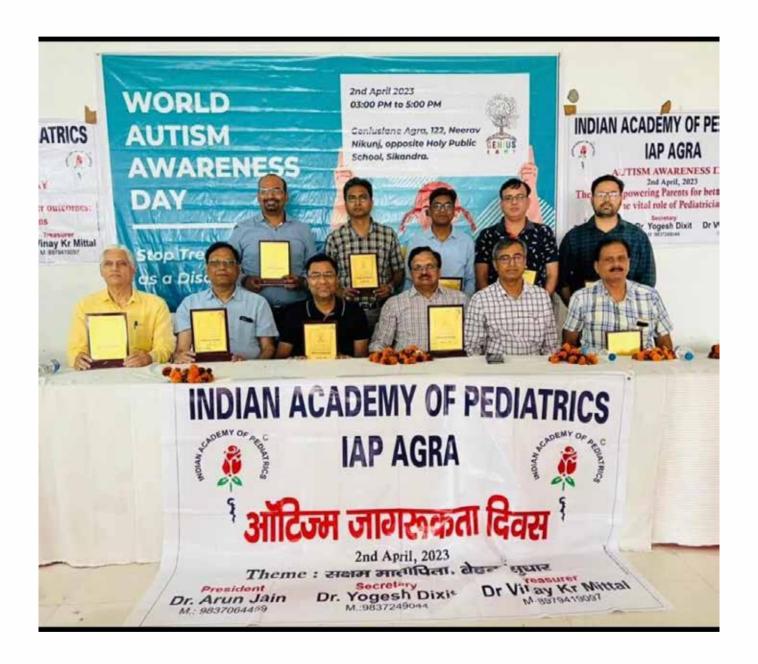






IAP Agra

Autism Awareness Programme





IAP Navi Mumbai





IAP Navi Mumbai















Mauritius boy with heart disease gets new lease of life

G. Mohiuddin Jeddy

Navi MumBal: This Mauritius boy was just 10-day-old when he boy was just 10-day-old when he india with critical congenital heart disease and acute renal failure.

Davisen Rungien, a preterm. Davisen how on this way to recovery following an emergency life saving procedure, coarctoplasty, which was undertaken with a novel approach. The infant, after the saving proach. The infant, after the day of the procedure, to according to the procedure, to according to the procedure of the p

reached here, the doctors at the hospitals placed an absorbable tion of the baby's aorta. After the successful procedure, the baby was able to breathe without the help of a mechanical ventilate at the process of the

THE 10-DAY-OLD BABY HAD HEART DISEASE, ACUTE RENAL FAILURE

stem. The use of an absorbable stems was a nevel approach. The baby was born prema-turely through normal delivery in a hospital in Mauritius. How-ever, shortly after the birth, the osed and facing difficulty in breathing. The baby was shifted to the neonstal RCU where it was discovered that he was suffering from critical congenital heart

disease, acute renal failure and dysmorphic features including bilateral lew-set curs, hypertroparties and the set of the set and bilateral curson of the set and bilateral clubfoot.

After admission at Apollo Hospitals, the baby developed severe respiratory districts and mechanical ventilation. Due to the critical cardiogenic shock with a renal shutdown, emergency cardiac management was minated with emergency correlation of the set of t

Davishen has been a follow up with a cardi Mauritius and Apollo Navi Mumbai after two Girija Rungien, D. mother, said, "There treatment available in I mother, National Magnetines in Magnetines treatment avoidable in Magnetines we have been also be



IAP Navi Mumbai





















MAHAIAP WOMENS COMMITTEE





International Women's Day 2023 (from MAHAIAP WC 2023) International Women's Day 2023! (fr www.youtube.com







MAHAIAP WOMENS COMMITTEE







Present's

Seminar for Parents of Grade 9th & 10th Students

Topic: "Positive Upbringing in modern era" | Speaker: Dr. Manjusha Ashok Sherkar

Date: 25th March, Sat, 2023, Time: 10.00 am, Venue: St. Ann's ICSE School, Beed



President MAHAIAP



Secretary MAHAIAP



Dr. Amol Pawar Dr. Sonali Shirbhate Chairman MAHAIAP WC



Dr. Neha Sing Co-Chairman MAHAIAP WC



Dr. Manjusha Sherkar Convener MAHAIAP WC



Sr. Johney Principal St. Ann's School



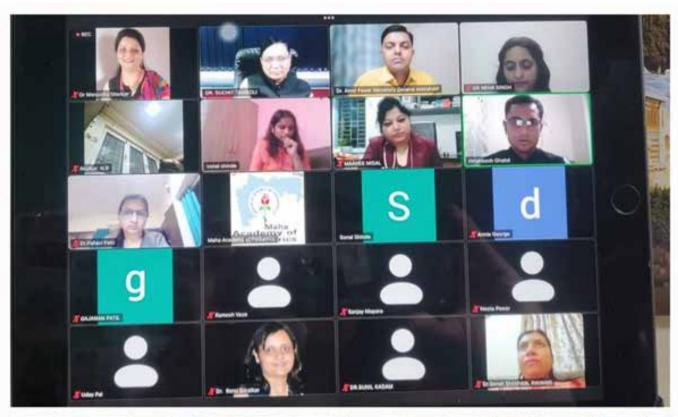
Dr. Lalit Une President AAP



Dr. Suhas Rote Secretary AAP



IAP Amravati









IAP Amravati







IAP Jalandhar

1. Academic session on "Paediatric hematology": On March 2, 2023 Dr Sanjeev Sharma, Hemato-oncologist from Venkateshwar hospital New Delhi delivered a talk on "Refractory anemia & ITP". Session was chaired by Dr SL Chawla and Dr Ashok Markanda. 35 paediatricians from Jalandhar attended the lecture



2. World Obesity day:

Jalandhar Academy of Pediatrics in association with IMA Jalandhar successfully conducted a cycle rally to raise awareness about the gobal issue of Childhood Obesity. More than 50 doctors as well as members of Jalandhar cycling association participated in the event to raise health awareness on world obesity day for general public. Rally was flagged off by Dr Rohit Chopra President Jalandhar Academy of Pediatrics. As many people have been losing their lives to out-of-hospital-cardiac arrest, a BLS sensitisation program was also held for the attendees.





IAP Jalandhar

3. A basic NRP Course was organised by the department of Pediatrics PIMS, Jalandhar on March 7, 2023



4. World Down Syndrome day: On March 21, 2023 Down Syndrome day was celebrated. Keeping up with the theme "With us, not for us", we organised a fashion show and dance competition for adolescents with Down Syndrome at Chaanan foundation for Down syndrome children Jalandhar. President JAP Dr Rohit Chopra, Secretary Dr Anuradha Bansal, patron Dr Ravi Paul alongwith the team of EB members attended the event. Best three participants were judged by Dr Ravi Paul and awarded medals. All children were gifted T shirts as a token of appreciation.





















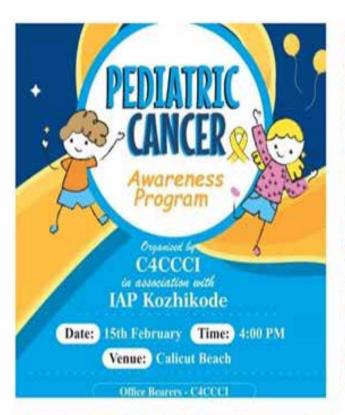


















PIC.COLLAGE

