Child India

July 2023

Monthly e-Newsletter of Indian Academy of Pediatrics

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CONTENT

Editor's Note

Dear friends,

Greetings from the July issue of Child India.

July 1st was celebrated as Doctor's Day and our beneficiaries, the children we care for and their families who understand the true worth and value of the profession, were effusive in their appreciation and thankfulness for our services. Elders of the medical fraternity were honoured on the day.

National BLS and CPR Day is celebrated on July 21st.

"ORS DAY & ORS WEEK" is being celebrated from July 25th to 31st (Slogan 2023 - 'Oral rehydration. No dehydration') and ORS day on July 29th (Theme 2023 – O Only R Rational S Solution for Diarrhoea). Latest NFHS survey shows that only 51% children receive ORS during diarrhoeal illnesses in India despite ample evidence that this low-cost effective intervention prevents 93% of diarrhoea related deaths. Numerous programs need to be conducted by the IAP members all over India to reinforce the importance of ORS in the management of acute gastroenteritis in children. Please send in your ORS Week/Day celebration reports to IAP CO.

World Hepatitis Day is commemorated each year on 28 July. The theme for World Hepatitis Day 2023 is "One life, one liver," focusing on creating awareness about viral hepatitis. Each year, the day centers around a specific theme to improve understanding of the global hepatitis situation and promote positive action. IAP urges all to take action and raise awareness of hepatitis because every child has only one life and one liver and viral hepatitis remains a hidden killer, causing numerous fatalities each year.

The 'Consensus Statement of the Neurodevelopmental Pediatrics Chapter of Indian Academy of Pediatrics (IAP) on the Management of Children With Down Syndrome' was published in Indian Pediatrics (https://www.indianpediatrics.net/epub022023/CPG-00500.pdf). This issue of Child India focuses on some aspects of these guidelines so that all pediatricians are made aware of its existence and are up-to-date regarding its contents to ensure that these highly trainable children lead an independent life.

Wishing you all happy reading,

Jai IAP!

Dr Jeeson C Unni
Editor-in-Chief

President's Address

My dear fellow IAPans,

Down syndrome (DS) is a condition so there is no cure, but, careful management of health challenges can have a big impact over the quality of life of child.

The first three years are crucial in maximizing a child's potential. And kids with Trisomy 21 are no exception.

Parents of these children many would be experiencing concerns regarding the development of their child as well as behavioral differences. It is the goal of IAP to provide parents with information, techniques and resources that can best help the child develop into independent individuals. Children with Down Syndrome have a few common health challenges that have been well identified and reported.

Awareness of some of these common health problems followed by continuous monitoring of these challenges will help reduce the adverse effects on your child's health. Recurrent infections (Skin, bladder and respiratory), Thyroid function, Screening for ASD, Hearing difficulties, Problems with vision, Oro-motor issues, Low muscle tone, Sleep disturbances, Issues with the digestive system, Foot arch challenges are some of the important challenges that these children face. In this issue of Child India, we have tried to address them. Early intervention is the key for overcoming the various challenges that the children with DS face.

The purpose of early intervention is to lessen the effects of the disability or delay. Services are designed to identify and meet a child's needs in five developmental areas, including:

1. physical development,
2. cognitive development,
3. communication,
4. social or emotional development,
5. and adaptive development

Wherever possible, we pediatricians should offer comprehensive services for children and families, and the extensive experience of our highly qualified professionals which can make a difference to the child and the family, today…and in the future.

Dr Upendra Kinjawadekar
National President 2023
Indian Academy of Pediatrics

Secretary's Message

Dear Colleagues,

Greetings,

"Inspiration does exist, but it must find you working."

I am pleased to report that in the month of July, 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 21st July, 2023, various branches commemorated the "National BLS & CPR Day" and from 25th July - 31st July "ORS day and ORS Week" was celebrated as per the theme - " O - Only R - Rational S - Solution for Diarrhea" decided by the CIAP. 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.

We have conducted several meetings in the month of July via video conferencing. In which on 3rd July, 2023 the next day, the IAP Office Bearer Meeting took place to deliberate on various matters. Saksham ToT was conducted to discuss the new program. On 4th July, 2023, the IAP Action Plan East Zone meeting followed up and discussed the further modules to be conducted. The IAP SOP Committee met on 10th July, 2023. The Good Practices Guidelines Meeting on 13th July, 2023 addressed some of the matters. On 14th July, 2023, the Obesity Guideline meeting discussed the guidelines on the Obesity Day. The IAP ACVIP meeting took place on 29th July, 2023. The IAP Website Committee met on 30th July, 2023 to discuss the IAP website and Elite area. The dIAP Academic Committee met on 31st July, 2023 to discuss various matters of the dIAP platform.

Along with this, Indian Academy of Paediatrics conducted workshops on the following modules under the Presidential Action Plan 2023. 3 of "Risk Stratification Assessment Clinical Monitoring Early Stimulation in high-risk neonate"(RACE); 8 of Infectious Case Conundrum (ICC); 8 of Understanding Lab Test Rationale (ID ULTRA); 5 of Comprehensive nutrition Module (CNM); 1 of Hematology - from care to cure; 3 of Hit the bull's eye-Clinical Clues; 1 of Life Beyond Pediatrics (LBP); 2 of Rheumatology training module (RHYTHM); 2 of Genetics and rare disease-simplified.

Regarding the ECD, A total of 158 workshops of ECD have been completed to date and no workshops of ECD was conducteed in July 2023. 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

Yours sincerely,

Dr Vineet Saxena
Hon. Secretary General 2022 & 23

President's Engagements

Inaugurated the ID Vaccicon in Indore on 15th July.
Dr KK Arora, Dr Walvekar, Dr Hemant Dwivedi organised this spectacular academic event.

President's Engagements

Had the pleasure of attending first ever Rajkot IAP conference on 9-7-23. Dr Samir Thakrar, Dr Chetan Dave, Dr Nayan kalawadia, Dr Yagnesh Popat and the team deserve huge compliments for the same.

President's Engagements

Mr Shankar Lalwani, Member of Parliament, assuring full cooperation from the Government for the implementation of Sankalp Sampoorna Swasthya in Madhya Pradesh.
Dr Hemant Jain and team IAP Indore took extraordinary efforts in conducting the program.

President's Engagements

Karnataka launch of Sankalp Sampoorna Swasthya in Bangalore at Bethany school. Around 75 students from class 8 attended the workshop. Dr Jagdish Chinnappa and Dr Kesavulu guided the students. BPS President Dr SM Prasad, Secretary Dr Chidananda, Treasurer Dr Harilal Naik, President Elect Dr Somshekar and team took lot's of efforts for the smooth conduct of the event. Our President Elect Dr GV Basavaraja, EB members Dr Sumitha Nayak, AHA Chairperson Elect Dr Geeta Patil, Dr Preeti Galgali, Dr Shubha Badami, Dr Gyan Murthy, Dr Priya Shivali 's presence was definitely a super value addition.

Sincere thanks to the principal and teachers of the school for their active participation.

President's Engagements

Inauguration of the website of Satlaj Academy of Pediatrics. President Dr Tarlochan Singh, Secretary Dr Nidhi Malhotra and team have put in a lot of efforts for the same.

President's Engagements

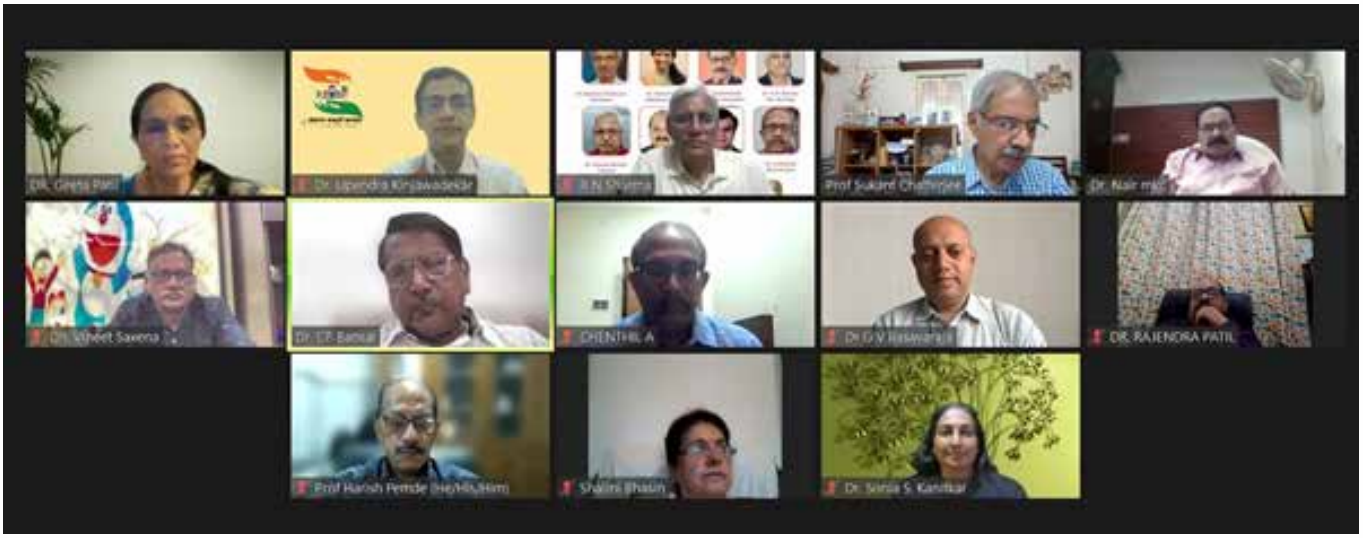
SSS launch at Aurangabad Cambridge school. Dr Renu Boralkar Dr Lalit Une, Dr Suhas Rode, Dr Prashant Chavhan and Dr Manjusha Sherkar took great efforts in arranging the program.

President's Engagements

SSS at Sevasadan School, Nagpur on 28-7-23.

Dr Uday Bodhankar, Dr Girish Charde, Dr Sanjay Pakhmode, Dr Yogesh Tembhekar and team AOP Nagpur were instrumental in arranging the workshop.

President's Engagements



Honoured to be there for the online inauguration of certificate program for AHA RKSK module.

Dr Sukanta Chatterjee, Dr RN Sharma and the team successfully completed the module.

Children taking oath for good Life style at Mahatma Gandhi School in Nagpur

President's Engagements

SSS launched at Nashik Navrachana School on 26-7-23.

Dr RD Patil, Dr Aniruddha Bhandarkar, Dr Sachin Patil and team IAP Nashik have committed to take it across maximum schools in the district.

Down syndrome: Few medical issues

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The problems related to eye, oral cavity and teeth, GIT, renal, and pubertal issues in children with Down syndrome (DS) are discussed in this section.

OPHTHALMIC PROBLEMS:

Ocular disorders have got a high prevalence among people with DS. Refractive errors, strabismus, reduced accommodation, cataract, glaucoma, nystagmus, keratoconus, Brushfield spots and blepharitis are the various ophthalmological problems seen in people with DS.

Refractive errors and strabismus occur at an early age. Around 54% of children with DS require glasses in preschool. Nystagmus is seen in 18% of people. Blepharitis has been reported to occur in upto 30% of children with DS. Nasolacrimal duct obstruction also occurs commonly. Treatment of these problems is essential as untreated disorders can cause vision problems which is a preventable secondary handicap.

Hypermetropia, which often reduce spontaneously in other children is likely to persist beyond infancy in children with DS. Distance and near functioning visual acuity and accommodative ability should be checked at every review and prescription for near correction should be considered for all children of school going age. If hypermetropia is not present at the age of 4 years, it is not likely to occur later, but myopia may develop at any age.

Children and adults with DS usually respond to standard vision testing procedures at appropriate developmental age but a distraction free environment and extra time may be necessary.

Recommendations: 1) All newborns with DS should have an eye examination at 4-6 weeks to exclude congenital glaucoma, cataract and other eye abnormalities. Visual behaviour needs to be monitored by a pediatrician before their first formal ophthalmological review. 2) Between 18 months and 2 years all children should have an ophthalmological review. Around 1/3 of children will have visual defects by this age. A further ophthalmological examination should be done at 4 years, by which time around 50% are likely to have refractive errors. After the age of 4 years vision and refractive error should be checked at least every 2 years throughout life by professionals. Any child/adult with pain, and/or changing vision, or visual disturbances/red eye should be referred for urgent specialist opinion. 3) In adulthood, screening should be done every two years to look for keratoconus and cataract.

ORAL HEALTH ISSUES:

Dental care is important for everyone, but people with DS can have several differences which require special attention. It may be related to the soft tissue or the hard tissues or both.

Related to Soft tissues –

Tongue: Tongue is large relative to the size of the oral cavity, which is small and there is marked fissuring of the dorsum of the tongue which may cause food impaction and subsequent halitosis. The tongue is often protruded because of poor muscular control. The angle of mouth is pulled down with elevated upper lip and lower lip is thick, dry, fissured and everted. Persistent mouth opening in these individuals may lead to mouth breathing, drooling, chapped lower lip and angular cheilitis.

Midfacial complex and Palate: The craniofacial complex development is retarded and the facial profile is concave. Maxilla is deficient in development, but mandible is of normal size. Deficient development in vertical height of the maxilla results in over closure of the mandible and thus projects the lower arch forward in relation to upper. They have shelf like palate.

Malocclusion: Improper meeting of upper and lower teeth is common in these individuals. The following factors contribute to this: mouth breathing, improper chewing, bruxism, tooth agenesis, midline deviation in upper arch, anterior open bite, spacing of teeth, dysfunction of temporomandibular joint, delayed eruption and/or exfoliation of both deciduous and permanent dentition, characteristic tongue thrust, hypotonic ligamentary apparatus of temporomandibular joint, developmental disturbances of the mandible and maxilla.

Malalignment: They show a higher frequency of malalignment in both primary and permanent dentition. Most frequently involved teeth are: central and lateral incisors and canines. Anterior and posterior crowding is also seen. Crowding is more commonly seen in maxilla due to underdevelopment.

Related to Hard tissues –

Microdontia: Individuals with DS present with true generalised microdontia in permanent dentition, but in primary dentition this is less documented. Hypodontia: Dental agenesis is very common and it ranges from 30 - 53% in various studies done. Agenesis occurs more frequently in the mandible than in maxilla and most often on the left side. Abnormal crown and root morphology: Enamel hypoplasia and hypocalcification affecting both primary and permanent dentition are common. Severity of tooth wear is significantly greater in children with DS when compared to other children. Eruption of primary dentition: Primary dentition is delayed. The first eruption is usually at the age of 12 to 14 months but can be delayed up to 24 months and taking up to 4 to 5 years of age to complete. Eruption of permanent teeth is also delayed. Six-year-old molars and lower incisors could erupt as late as the age of 8 to 9 years.

Common oral problems:

1. **Dental caries:** There is low prevalence of dental caries in both primary and permanent dentitions of individuals with DS and this low prevalence have been related to delayed eruption, reduced time of exposure to carcinogenic environment, congenitally missing teeth, higher salivary pH and bicarbonate levels, microdontia, shallow fissures of the teeth. Different salivary environment of electrolytes and pH is manifested in children with DS, leading to lower reported caries rate.

2. **Periodontal disease:** The prevalence of periodontal disease reported ranges from 60 to 90%. They usually present with poor oral hygiene, manifested as marginal gingival hyperplasia, acute and subacute necrotising gingivitis, advanced chronic periodontitis, loss of attachment in the form of gingival recession and increased pocket depth, alveolar tissue loss, suppuration or even abscesses.

Recommendations:

1) First dental visit should be within 6 months of the first tooth eruption or by 1 year of age; and thereafter yearly till 5 years of age.

Parents and caregivers should be educated on the need to help with tooth brushing until they have acquired skills. 2) Brush twice daily with a soft toothbrush and fluoride toothpaste. 3) Floss daily: Even if there is gum bleed, brushing and flossing should not be stopped as these help to keep the gums clean and minimize inflammation. 4) Limit the amount and frequency of sugar and refined foods. 5) Orthodontics (braces) - may improve some of the issues associated with the malalignment, but it can interfere with speech and it may be difficult for them to tolerate also. So, it is ideal to delay the orthodontic treatment till the child is older.

GASTROINTESTINAL PROBLEMS IN DOWN SYNDROME:

Children and adults with DS exhibit GI symptoms from time to time such as vomiting, diarrhoea, constipation, abdominal pain and discomfort that resolve with minimal or no intervention. Structural and functional disorders of gastrointestinal tract are commonly seen in DS.

Around 10% of children born with DS will have one of these problems.

Embryological and structural:

a) Oesophageal atresia/Tracheoesophageal fistula in 1% of children. b) Duodenal/Jejunal atresia or stenosis: 247 in 10,000 live births with DS. c) Annular pancreas. d) Anorectal anomaly. e) Hirschsprung disease. Hence, all babies should be checked at birth for patent anus and passage of meconium.

Motility and coordination problems encountered are:

a) Feeding difficulty - due to poor oromotor function. b) Gastroesophageal reflux - due to poor oro muscular tone and co-ordination, laxity of gastroesophageal junction and lower diaphragmatic and abdominal muscle tone. c) Constipation - due to low tone in the abdominal muscles and reduced exercise. d) Toddler diarrhoea. e) Gall stones - due to dysmotility in the bile duct.

Autoimmune:

Coeliac disease - It is one cause for malabsorption and is seen in 5% of people with Down syndrome as per Western literature. Due to its strong association with Down syndrome, AAP recommends screening in symptomatic children with Down syndrome. If screening is positive, it should be confirmed by biopsy and Gluten free diet should be advised.

Recommendations:

1. Complete physical examination of the infant including inspection of the perineum to check for anal patency. Also enquire about passage of meconium in newborn infant.

2. Record weight and height in Down syndrome growth charts – this can screen malabsorption to some extent, and consider testing for coeliac disease if symptomatic.

RENAL PROBLEMS IN DOWN SYNDROME

A variety of urological abnormalities and glomerulopathies have been reported in Down syndrome. Children with Down syndrome have a higher prevalence of CAKUT (Congenital Anomalies of Kidney and Urinary tract). With increased survival, many these patients present with chronic renal failure. Around 4.5% of people with Down syndrome may suffer from chronic kidney disease. Glomerular disease usually appears between the 2nd and 3rd decades of life. IgA nephropathy and Focal segmental glomerular sclerosis are the most frequent pathologies.

Immune dysfunction associated with Down syndrome may predispose children to Post infectious glomerulonephritis (PIGN). Urodynamic involvement is seen in 30% of children and 8.7% of adults. Children with DS take longer to develop sphincter control (4-5

years) and there may be incontinence to a greater extent (12-16%). Hypercalciuria, cystinuria and uricosuria are also seen in children with Down syndrome.

Testicular tumours: The lifetime risk of testicular germ cell tumours in the general population is approximately 0.3% - 0.7%. In Individuals with DS the risk is 6-50 times higher, hence regular follow up is recommended.

Recommendations:

1)Routine screening for renal and urological problems is not recommended in DS. However, if anomaly scan showed any abnormality postnatal follow up need to be done to rule out any renal anomaly. 2) A thorough physical examination to identify anomalies such as undescended testes, hypospadias and epispadias. 3) Children with DS presenting with urinary tract infections, at any age should be investigated with a renal ultrasound scan. 4) Regular testicular examination. 5) Establish continence training

PUBERTY, SEXUALITY AND MANAGEMENT OF MENSTRUAL CYCLES:

Various studies have shown that adults with DS have hypergonadotropic hypogonadism (higher levels of FSH and/or LH). This is due to Sertoli and Leydig cell dysfunction. Despite the gonadal dysfunction, puberty is expected to occur on time and progress at a typical rate as other children. The stages of puberty are same as in other children. This emphasizes the need to counsel the caregivers to prepare children for upcoming pubertal changes.

In the past, sexuality was not considered an issue for young people with DS because of the inaccurate belief that mental retardation was equivalent to permanent childhood. In fact, all people with DS do have intimacy needs and sexual feelings. It is important to recognize these for planning education, housing and other programs.

Management of menstrual cycles: Most girls will be able to cope independently with their periods but they initially may need some support. Simple measures to treat dysmenorrhea should be taught to the caregivers. They may also experience premenstrual symptoms, but may not be able to express these symptoms. Hence parents/caregivers should be aware of mood changes and measures to be taken if needed.

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Management of children with Down syndrome

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Down syndrome (DS) is a genetic disorder caused by the presence of all or part of a third copy of chromosome 21. The diagnosis of DS is easily made clinically but the management is multidisciplinary and lifelong. Regular and repeated counselling of parents is of utmost importance to ensure a sustained management programme. Awareness and educational programs for the public at large are important to create an inclusive society by which these children are able to lead an independent life.

Cardiac, endocrine and hearing problems have to be evaluated at birth and regularly followed up. Other systems involved are those of the musculo-skeletal system, GI tract, urinary system, haemopoietic system; in addition to ophthalmologic, dermatologic, oral and dental issues. Early developmental interventions which include physical, occupational, speech and cognitive behaviour therapies are the main stay of management in addition to management of systemic problems.

Hearing and dermatological problems along with interventional programmes and counselling shall be detailed in this section.

HEARING ISSUES:

It is estimated that over 50% of people with DS have hearing impairment, which can range from mild to profound. Patterns of hearing loss change throughout life. Otitis media with effusion causing conductive hearing loss is prevalent in childhood whereas sensorineural hearing loss occurs as age increases. Early hearing loss has a significant impact on speech and language development of children with DS, resulting in disproportionately severe speech delay. Hence early detection and proper management can prevent significant handicap.

Orofacial and craniofacial development associated with DS contribute to inner, middle and outer ear problems. Large adenoids, small nasopharynx, impaired swallowing, narrow and more horizontal Eustachian tube, all contribute to reduced aeration of middle ear and thus predispose to otitis media. The outer ear canal is very narrow which hinders the normal self-cleaning mechanisms to operate efficiently. People with DS produce copious amount of mucous, which becomes infected due to immunodeficiency. Otitis media with effusion follows Eustachian tube dysfunction that does not resolve completely due to the anatomic characteristics.

Conductive hearing loss results from middle ear infections and from otitis media with effusion. Adults have conductive deafness due to impacted wax, perforations or middle ear infections and scarring. Children with DS have a higher incidence of congenital permanent inner

hearing loss than the general population. From teenage onwards they develop degenerative cochlear changes, and majority will have significant hearing loss by 40 years of age.

Recommendations: 1) Neonatal screening is recommended followed by a full audiological assessment between 6 and 10 months; and intervention initiated if needed. An audiological review should be carried out at around 18 months which should be repeated at least yearly until age 5 and thereafter 2 yearly for life. Because of an increased incidence of sensorineural and conductive hearing loss, the frequency range tested should include 8000 Hz whenever feasible, as failure at this level may be an early warning of impending high frequency sensorineural deafness. 2) Regular dewaxing is advised for wax accumulation. 3) For otitis media with effusion - grommet insertion is advisable with adenoidectomy in case of recurrent issues.

DERMATOLOGICAL MANIFESTATIONS:

Certain dermatological problems are seen in an increased frequency in DS. Trisomy of chromosome 21 and the resulting immune system dysregulation might be the reason for increased incidence of certain dermatoses.

Various conditions that are seen are:

Folliculitis and Hidradenitis suppurativa: Trisomy of chromosome 21 and its subsequent effects on the immune system and pilosebaceous apocrine unit predisposes to folliculitis and hidradenitis suppurativa. These individuals have increased amount of Amyloid precursor protein (encoding gene located on chromosome 21) which predisposes to follicular occlusion. Hidradenitis suppurativa causes pustules, nodules, and abscesses in the arm pits and groins. The response to treatment is often poor.

Alopecia areata: It affects 6–10% of those with DS compared to the 2% prevalence in the general population. Alopecia totalis or alopecia universalis affects up to 2.5% of those with DS. Alopecia areata is associated with autoimmune conditions such as vitiligo, hypothyroidism, and trachyonychia. Trisomy 21 increases the chance of having the alopecia areata variant gene. Screening of associated conditions is also necessary (Thyroid peroxidase antibody and S.ferritin). S.ferritin is done as low iron reserves may affect hair regrowth.

Xerosis (dry skin): It occurs in 10% of individuals with DS. The skin becomes increasingly dry, rough, and inelastic, and there is patchy lichenification with increasing age. Several conditions related to xerosis like keratosis pilaris and palmoplantar hyperkeratosis are also seen. The prevalence of palmoplantar keratoderma is up to 75% for children over 5 years with DS.

Eczema or atopic dermatitis: The patches of eczema are red, scaly, and itchy. They generally involve the cheeks, behind the ears, knees, and elbow flexures. Dry skin predisposes individuals to irritant contact dermatitis and allergic contact dermatitis.

Seborrhoeic dermatitis: It occurs in about a third of individuals with DS, and is often associated with Malassezia folliculitis. Seborrheic dermatitis in DS tends to present at a younger age and follows a more severe, chronic course. It presents as an erythematous rash with yellow-brown scales involving the scalp, midfacial 'T' region, behind the ears, upper chest, and back.

Acanthosis nigricans: It is a marker of insulin resistance and is associated with obesity. In addition to commonly affected sites like flexures of the neck, the axilla, and groin, it may also affect the flexor aspect of elbow, knee, dorsal interphalangeal and metacarpal joints.

Infections and infestations: Folliculitis due to Malassezia, furunculosis and impetigo due to staphylococcal infections are common. Infestations are also common in DS especially crusted scabies.

Accelerated aging is considered a part of the DS phenotype. The signs of premature ageing reported in DS include greying or thinning of the hair, skin atrophy, early development of rhytids (wrinkles), and lentigines. Decreased DNA repair enzymes and altered free-radical metabolism may be the mechanisms involved.

Recommendations: A thorough cutaneous examination, with particular attention to the scalp, axilla, groin, and feet; as these are locations of more common skin conditions.

INTERVENTIONAL, EDUCATIONAL AND VOCATIONAL PROGRAMMES:

Physical therapy with speech stimulation is to be started by 3 months of age. Developmental therapy, occupational therapy, behaviour therapy and cognitive therapy should be initiated at the appropriate time. Psychological evaluation and support should be given as the child grows older. Management of ADHD and autistic disorders to be managed when suspected, as these are seen more in children with DS. Psychiatric support especially during adolescent age is not to be ignored as they can have issues related to sexuality, anxiety and depression as in any other adolescent. Support of the family including siblings should not be neglected especially in the initial years of life.

Inclusive education is recommended with special education facility at early school age as needed. 'Anganvadis' and nursery schools are helpful. They should be enrolled in first standard of normal schools by 7-8 years of age, based on their intellectual status. Many of the children have pursued vocational courses and some of them have become graduates. These children are highly trainable and based on their aptitude vocational training should be started by about 15 to 17 years. A suitable independent vocation should be encouraged and is preferred to group vocational activities.

Recommendations: 1) Early interventional programmes should not be delayed. 2) ADHD and autistic behaviour to be picked up early and managed. 3) Psychiatric support for the adolescent DS and their parents should not be ignored. 4) Inclusive education in a normal school should be advocated.

COUNSELLING:

Communication with the family should start as soon as the diagnosis is suspected, preferably at birth itself. Confirmation can be made by FISH, which takes a shorter time; but karyotyping is essential to find out the type of DS and for genetic counselling. All the necessary age-appropriate tests and multi-disciplinary consultations should be completed in the shortest possible time and final counselling undertaken. Ample time should be made available to detail the child's status and to answer all the doubts raised. Both parents should ideally be present and a support person, preferably the parent/s of the mother is desirable in the Indian context.

Start the counselling on a positive note providing accurate information in a balanced manner. Refer to DS as a condition and not as a disease; give importance to the person and not the condition when counselling. The associated conditions should be detailed and stress on the need for regular follow up. The absence of any disease affecting other systems can be highlighted in a positive manner, especially those systems where a high incidence is noted compared to babies who do not have DS. The possibility of other systemic involvement subsequently (eg. thyroid diseases) should also be mentioned

and the need for regular checkup should be emphasized.

The need for early interventional programmes like developmental therapy, physical therapy, occupational therapy, speech stimulation/therapy, cognitive behaviour therapy should be highlighted. Interventions should be regular and continued till they are asked to stop. It should be stressed that the mainstay of treatment is the continued therapies as advised, and that there is no medicine that can modify the chromosomal status. Medicines prescribed for the systemic illnesses, if any, should be continued with regular follow up. The basis of management should be a bio-psycho-social strategy, together known as Heath Care Counselling.

Connect them to a Down syndrome support group in the locality which will be of immense help in the months and years to follow. A designated person from the support group can act as a lay counsellor to support the family right from the beginning which will complement the efforts of the doctor.

Recommendations: 1) Counselling should be initiated as soon as the diagnosis is suspected and after confirmation and full workup. 2) A bio-psycho-social strategy should be the basis of management and the need to continue interventional programmes should be stressed. 3) Connect them to a local DS Support group.

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Endocrine Issues in Children with Down Syndrome

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Introduction

Endocrine issues are much more common in children with Down syndrome (DS) compared to general population. Linear growth faltering, thyroid dysfunction, pubertal delay, infertility, obesity and lifestyle disorders, diabetes and bone mineral abnormalities are some among them. Since many of these problems are asymptomatic initially, early diagnosis and effective treatment could not be carried out unless there is an effective screening and follow up protocol.

Thyroid disorders

Thyroid disorders are the most common endocrine abnormality seen in DS. Many are transient, hence the importance of early screening. The risk increases as the age advances with an increase by 10% annually. Both hypo- and hyperfunctioning of the gland is reported, but hypothyroidism is much more common. Both congenital and acquired hypothyroidism are common in these children.

Congenital hypothyroidism (CH)

Altered thyroid function in the neonatal period is observed in 1% of cases of DS, an incidence much higher than in general population (1 in 2,000-3,000). They may be asymptomatic in the newborn period, underscoring the importance of universal newborn screening. American Academy of Pediatrics (AAP) recommends that apart from newborn screening, children with DS should have additional screening at 6 months, 1 year and every year thereafter. Some even recommend repeat screening as early as at 3 months of age. TSH and T4 cut offs used are the same as that for normal children. Incidence of transient hypothyroidism is also common in DS. Treatment guidelines are the same as that of other children with CH.

Subclinical hypothyroidism (SCH)

Subclinical hypothyroidism is characterized by normal free or total thyroxine (FT4/T4) and elevated thyroid. stimulating hormone (TSH) levels. Incidence of SCH is higher in children with DS (25-30%); majority are transient and asymptomatic. About 50% have positive antithyroid antibodies and of which 50% progress to overt hypothyroidism. Treatment is often a matter of debate. In general, SCH with persistent elevation of TSH above 10 mU/L especially if associated with goiter or presence of antithyroid antibodies require treatment with thyroxine with proper follow up.

Acquired hypothyroidism

Prevalence of acquire hypothyroidism also is high in these children. Autoimmune thyroiditis (Hashimoto thyroiditis) is the most common cause and its risk increases as the age advances. Detection of anti-thyroid antibodies (anti-thyroperoxidase (TPO), and anti-thyroglobulin (TG) antibodies) is higher in DS. Presence of antithyroid antibodies correlate with severity of hypothyroidism. Association with other autoimmune diseases are high in this group of children.

Hyperthyroidism

Incidence is less compared to incidence of hypothyroidism but definitely higher than in general population. Most of these cases are detected in older children and in adolescents. Some cases may revert finally to hypothyroidism (hyperthyroid phase of autoimmune thyroiditis – Hashitoxicosis). More frequent association with other autoimmune disorders are reported. Graves disease is characterized by severe course, exophthalmos, elevated thyroid stimulating immunoglobulin (TSI) and increased uptake in radionuclide scan. These children require treatment with carbimazole or methimazole. Non-pharmacological therapy like radioiodine or surgery is rarely needed.

Linear growth retardation

Neonates with DS have low birth weight, length and head circumference. They have reduced linear growth velocity and adolescent growth spurt. Severe growth deceleration is noticed in infancy and during adolescence. It shows the necessity of disease specific growth charts for children with DS. As of now we have only CDC Down Syndrome growth charts.

Short stature in DS is multifactorial. There is no overt deficiency of GH or GH releasing hormone as per most studies. Researches are pointing towards a possible hypothalamic or pituitary dysfunction. Defects in GHRH-GH-IGF1 axis is suggested as a cause for short stature by many authors. Other comorbidities like congenital heart disease, celiac disease, feeding difficulties and obstructive sleep apnea also contribute to short stature. As of now, growth hormone therapy is not recommended in DS.

Obesity and metabolic syndrome

Children with DS have low birth weight and weight increment is suboptimal in initial years. But subsequently they catch up and may gradually develop overweight or obesity later in childhood or during puberty. Around one-fourth of DS are overweight during adolescence. Various factors contribute for developing obesity including sedentary habits, decreased resting energy expenditure, unhealthy eating habits and associated hypothyroidism. Obesity leads to comorbidities like dyslipidemia, obstructive sleep apnea, type 2 diabetes, fatty liver and cardiovascular problems (metabolic syndrome). These children have decreased lean body mass and increased fat mas as per DXA studies. Regular growth monitoring and early intervention are the key preventive aspects. In obese children, HbA1C, liver function tests, fasting lipid profile and fasting glucose are performed every year. These children and their families require proper counseling regarding lifestyle, diet and physical activities.

Diabetes mellitus

Incidence of type 1 diabetes is higher (2%) compared to general population. An earlier onset and association with other autoimmune diseases (autoimmune thyroiditis and celiac disease) are reported. Higher incidence of early onset type 2 diabetes also is noted especially in those with other features of metabolic syndrome.

Other autoimmune disorders

Incidence of celiac disease is much more common (6-10 times). European Society for Pediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) recommend screening of all children with DS for celiac disease after 3 years of age, and earlier if symptoms are apparent.

Puberty and fertility

Position of testes should be carefully evaluated in a child with DS since there is a high incidence of cryptorchidism (6.5%) and a higher chance of developing testicular malignancy in cryptorchid testes. Children with DS have relatively higher levels of FSH and LH compared to normal children of same age, suggestive of mild hypergonadotropic hypogonadism in them which may be due to hypofunction of Sertoli and Leydig cells in boys and ovarian dysfunction in girls. Mild delay in puberty is common, but most of them will attain puberty. Pubertal growth spurt is delayed. At this time, these children, especially girls should get counselling regarding pubertal changes and menstrual hygiene. Majority of men with DS have lower fertility, but females are often fertile. Miscarriages are common and there is 50% chance of their offspring having DS or other congenital anomalies.

Abnormal bone health

Decreased bone mineral density due to defective accrual of calcium and vitamin D, lack of proper sun exposure, sedentary habits, poor muscle mass and malabsorption are common in these children resulting in defective bone strength and increased bone fragility. Ensuring proper calcium intake from milk, dairy products and egg, vitamin D supplementation, regular weight bearing exercises and proper sun exposure will improve bone health in these children.

Conclusion

Endocrine problems are very common in children with DS but many are subclinical, leading to delayed diagnosis and management. Hence screening of these comorbidities should be carried out, starting immediately after birth or at the time of first clinical suspicion. Hypothyroidism heads the list and proper diagnosis is essential since CH further impairs the brain function. Proper growth monitoring with measurements of height, weight, BMI and head circumference should be done at regular intervals and followed up with the help of growth charts. Prevention of obesity and metabolic syndrome is a prime objective. Adequate intake of calcium, vitamin D, regular exercise and sun exposure is a must for good bone health. Pubertal growth spurt may only be slightly delayed but fertility chance is a concern. There is a need for screening for both type 1 and type 2 diabetes as well as other autoimmune disorders like celiac disease. Comprehensive healthcare plan should be practiced from the onset of clinical diagnosis for a better outcome.

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Congenital Heart Disease in Downs Syndrome

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Introduction:

Down syndrome (DS) is one of the commonest syndromic associations of congenital heart disease (CHD) and CHDs are identifiable in 50-60% children in them. Literature from the west reports atrioventricular septal defect (AVSD) as the commonest CHD associated with DS; this is followed by ventricular septal defect (VSD), atrial septal defect (ASD), tetralogy of Fallot (TOF) and isolated patent ductus arteriosus (PDA). (1) However, a cross sectional study that was conducted in 418 consecutive patients with Down syndrome Amrita Institute in Kerala revealed VSD as the commonest lesion, followed by AVSD and (2). Pulmonary outflow tact obstruction lesions like TOF and critical pulmonary stenosis are found more commonly in Asian children (3). Transposition of great arteries, coarctation of aorta, and left sided obstructive lesions are seldom associated with Down syndrome. This brief article will focus on the specific challenges associated with congenital heart disease in DS.

General Physiological Derangements of the cardio-respiratory system in Downs and its implications for CHD management

The following specific challenges have a significant impact on management of CHD in DS patients:

1. Upper airway obstruction: This contributes to labile pulmonary vascular resistance because of wide variations in ventilation. Therefore it is wise to assess patients. with CHD and DS on multiple occasions before making a decision. Additionally these children are very sensitive to sedation with worsening of upper airway obstruction. With progressive age and increasing obesity, upper airway obstruction may be associated with sleep apnea and CO2 retention and this may adversely impact CHD management

2. Pulmonary Hypertension: There is a higher likelihood and earlier onset with faster progression of pulmonary hypertension in DS. For this reason every effort must be made to avoid delays in operation to correct the heart defects. The lungs of children with Down syndrome 58-83% fewer alveoli in relation to the acini. This contributes to a low respiratory reserves

3. Associated anomalies: Associated congenital lesions such as duodenal atresia and other challenges such as gastro-esophageal reflux and generalised hypotonia can also potentially impact management of DS and CHD

Screening for CHD in Downs - Prenatal and postnatal

Prenatal screening includes nuchal translucency and fetal echocardiography. Nuchal translucency is most accurate in the first trimester at ~ 11 weeks, and its accuracy decreases thereafter. At this time it is impossible to image the fetal heart. Later in second trimester fetal echocardiography (< 16 weeks) allows detection of lesions such as AV septal defect, TOF and large VSD. It is imperative to comprehensively counsel parents after the identification of heart defect and DS.

Postnatally, the high prevalence of Congenital Heart Disease (CHD) in DS (40-50%.) together with poor sensitivity and specificity of clinical examination in DS justifies routine echocardiographic screening in babies born with DS. This should be undertaken at the earliest opportunity to plan management of the CHD proactively.

Management of individual lesions: Specific Considerations

Most cardiac lesions in DS are correctable through timely heart surgery or catheter closure (for PDA) and their management including indications for surgery should be on the same lines as for non DS patients (table) Early diagnosis and timely correction is especially critical in L-R shunts such as large ventricular septal defects (VSD), patent ductus arteriosus (PDA) and atrio-ventricular septal defects (AVSD) because of the rapid progression to pulmonary vascular obstructive disease. A few complex cardiac conditions such as unbalanced AVSD, Tetralogy of Fallot with hypoplastic pulmonary arteries can only be palliated or managed medically.

The presence of DS does not significantly increase surgical risk provided problems resulting from common associations (upper airway obstruction) are looked into. It is important to perform a comprehensive preoperative assessment in DS and this should include assessment of the airway, thyroid function, screening for other common associated congenital malformations.

Outcomes after CHD correction: Early and late

In general the immediate outcomes after surgical correction of heart defects in DS are no different from the others. However it is very important to pay attention to a careful preoperative assessment especially with regards to pulmonary hypertension. In the immediate post operative period, sudden death is known to occur in patients prone to PAH crisis. Additionally, there is also a relatively higher attrition late after surgery because of development of pulmonary hypertension. For this reason, careful long term follow up is mandatory.

Special Challenges in Low-resource Environments

In most parts of India and other low and Middle income countries, late presentation of CHD with L-R shunts in DS is common and requires very careful assessment for assessment of operability through clinical examination, measurement of oxygen saturation, chest x-ray, echocardiography and, in selected cases, cardiac catheterisation. It is imperative to follow patients carefully after surgery for persistence of PAH and residual issues that include mitral and tricuspid valve regurgitation in AVSD; pulmonary regurgitation in TOF.

It must be recognised that much of the society including health care providers in in many low- and middle-income regions still continue to approach children with DS affected with congenital heart disease with deep sense of futility and fatalism and often chose to not correct the heart defects. We have demonstrated through our initial experience that it was possible to

Table: Recommendations on Individual Congenital Heart Defects in Downs Syndrome

Cardiac Lesion	Special Considerations	Recommendation
Ventricular Septal Defect (VSD)	VSD is the commonest lesions in DS. Large unrestrictive defects present with typical symptoms; pulmonary vascular disease may develop early if unoperated upon.	Early corrective surgery ideally between the age of 3-6 months; earlier if clinical condition merits or later if patient presents late and is still operable. Small VSDs can be followed up.
Atrial septal Defects	Small secundum ASDs are common and found in association with other lesions; small defects (< 8 mm) often close spontaneously	Ostium primum defects are discussed below under AVSD Isolated secundum defects that are large (> 10 mm) should be manged electively like patients without DS
Atrio-ventricular Septal Defect (AVSD)	AVSD is almost as common as VSD. Can be partial (primum ASD alone or with restrictive VSD). Complete forms progress to becoming inoperable pulmonary vascular obstructive disease if not operated upon.	Early corrective surgery for complete AVSD after comprehensive assessment; ideally between the age of 3-6 months. Partial AVSD may be operated on an elective basis. Complex forms of AVSD such as unbalanced defects are rare and may be palliated.
Patent Ductus Arteriosus (PDA)	Large PDAs can be missed unless carefully looked for during echocardiography.	Closure is recommended ~ 3 months age. Catheter closure with device is often feasible
Tetralogy of Fallot	Common in DS; Presentation dictated by severity of right ventricular outflow (RVOT) obstruction	Corrective surgery recommended ~6 months age. Selected centers may offer correction early but in the event early correction is not feasible, palliation through BT shunt, PDA stenting, balloon pulmonary valvotomy or stenting of the RVOT may be undertaken
Combination of lesions	Common examples include TOF with AVSD (Tet-canal); VSD with PDA	Treatment strategies need to be individualized depending on the specifics of the anatomy and capability of the centre
Complex situations	Examples include TOF with small or disconnected pulmonary arteries; Unbalanced AV canal, Complex anatomic variants of AV canal	These can be difficult to treat and it may only be possible to offer palliation. In general, single ventricle palliation through the Fontan operation is not considered for DS patients because of concerns of high pulmonary vascular resistance

correct their heart defects with Down syndrome with excellent outcomes that were equivalent to those without Down syndrome as long as we paid careful attention to their special needs and specific challenges. (2) It is vitally important to take the extra effort to correct their heart defects. This sustained effort will contribute to dispelling prevailing myths thereby opening up the potential of each and every child with DS.

Counselling parents of children with Downs and CHD

It is important to provide correct information to parents about implications of not correcting CHD the likely outcomes after correction of CHD. After corrective surgery it is imperative to counsel families about the continued need for comprehensive attention to the child's overall development and other systems in a specialized facility. It is important that the family understands that correcting the heart defect is only one of many issues that need careful and sustained attention.

Conclusion

CHD affects nearly 50% of children born with DDS. However, DS in itself does not pose a significant incremental risk for surgical or interventional correction of CHD as compared to children without DS. Cardiac management can be successfully carried out in these children with due attention to complicating co-morbid conditions such as increased propensity to developing PAH, upper airway anomalies, gastroesophageal reflux etc.. Comprehensive and holistic care with adequate parental education can minimize complications and optimize outcomes.

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PG student	6000	9000	10000	12000	16000
Accompanying	11000	18700	27500	37400	45000
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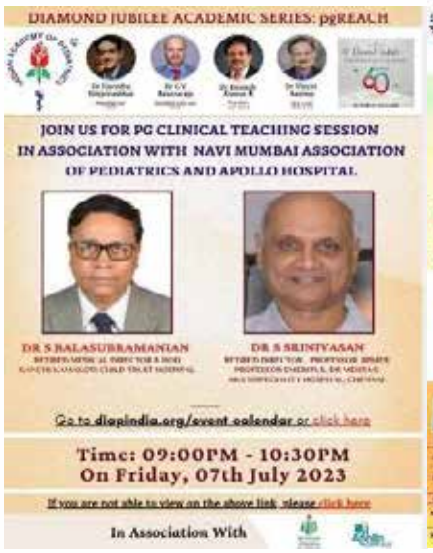

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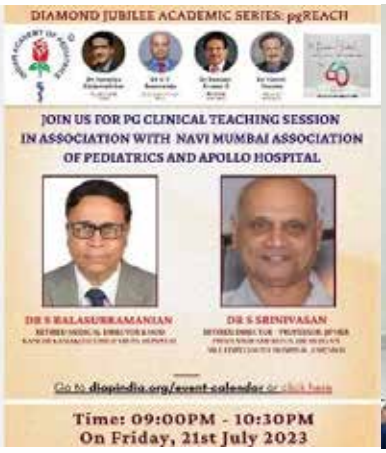

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IAP CPR JULY 21, 2023

"Each One Can Save a Life"

1) On July 8, 2023, a **BLS workshop for Health Care Providers was held at PIMS Jalandhar**. Course director Dr HS Bains, course co-ordinator Dr ANURADHA Bansal, intructors Dr Paras Khullar and Dr Pushwinder Kaur trained 30 doctors including senior physicians in the skills of BLS

IAP Jalandhar

2) On July 20, 2023 **Dr Rohit Chopra President Jalandhar Academy of Pediatrics and Dr Anuradha Bansal , Secretary Jalandhar Academy of Pediatrics** sensitised the masses about the need for everyone to learn the skills of CPR through **Hulchul TV**

https://drive.google.com/file/d/1-tM89ljp4Gt_b-e8hg6Uy_6MWFFp2LB5/view?usp=sharing

3) On July 21, 2023 **Dr Rohit Chopra President Jalandhar Academy of Pediatrics and Dr Anuradha Bansal , Secretary Jalandhar Academy of Pediatrics** sensitised the masses about the need for everyone to learn the skills of CPR through **print media** , that is, **Dainik Savera & Dainik Bhaskar newspapers**

IAP Jalandhar

वर्ल्ड 'सीपीआर डे' पर डा. रोहित चोपड़ा व डा. अनुराधा बांसल ने साझे किए विचार

● सी.पी.आर. का डेमो देकर कहा : जनता के बीच जागरूकता फैलाने का है लक्ष्य

सवेरा न्यूज/संतोष शर्मा

जालंधर, 20 जुलाई : जालंधर एकैडमिक ऑफ पीडियाट्रिक्स (जाप) के प्रैजीडैंट डा. रोहित चोपड़ा व फिम्स मैडीकल कालेज की एसोसिएट प्रोफैसर डा. अनुराधा बांसल ने वर्ल्ड 'सी.पी.आर. डे' पर आयोजित व्यक्तव्य में संयुक्त रूप से विचार साझे करते हुए बताया कि

सी.पी.आर. यानि कार्डियोपल्मोनरी रिसिसटेशन यह एक इमरजैंसी मैडीकल तकनीक है जिसके जरिए किसी व्यक्ति की सांस या दिल के रुक जाने पर व्यक्ति की जान बचाई जा सकती है। जब किसी व्यक्ति का दिल धड़कना बंद कर देता है, तो उसे कार्डिएक अरैस्ट होता है।

जाप प्रैजीडैंट डा. रोहित चोपड़ा व डा. अनुराधा बांसल सी.पी.आर. की विस्तारपूर्वक जानकारी का डेमो देते हुए।

मानव जीवन अनमोल है और हर दौरान, जीवन बचाने में असामर्थ्य एक दुर्भाग्यपूर्ण स्थिति है। लेकिन यदि हम बेसिक लाइफ सपोर्ट (सी.पी.आर.) को सीखना चाहते हैं, तो हम संभवतः किसी जीवन को बचा भी सकते हैं। इसलिए अनुराधा बांसल ने डैमो देते हुए विस्तार से बताया कि मानवता के इतिहास में, चिकित्सा विज्ञान में वृद्धि के कारण अब हमें बहुत से जीवन बचाने के तरीके उपलब्ध हैं। जीवन को बचाने के लिए किसी को हृदय रोग का सामना करना पड़े और उन्हें तत्काल मदद न मिले तो उनकी मृत्यु हो सकती है। इसी तरह, यदि किसी व्यक्ति को अचानक दिल का दौरा पड़ जाए और उन्हें सी.पी.आर. सी.पी.आर. की जानकारी आवश्य सीखनी चाहिए, हर व्यक्ति को सी.पी.आर. का सीखना जरूरी है, क्योंकि यह ज्ञान सही समय पर किसी जीवन को बचाने का कार्य करता है। किसी भी अनपेक्षित घटना के दौरान हम अकेले रहते हैं या फिर किसी और के साथ होते हैं, लेकिन इसकी जागरूकता व कुशल अभ्यास ही महत्वपूर्ण ज्ञान होता है जो कि किसी व्यक्ति की जान बचा सकता है।

समाज में रहते हुए किसी समय या कोई भी सार्वजनिक स्थल पर इसकी आवश्यकता पड़ सकती है, कई वीडियो व खबरों में प्रसिद्ध कलाकारों शख्सियतों को एकदम गिरते या अचनचेत होने के बाद सी.पी.आर. का न मिलना उनकी मौत का कारण बन गया, क्योंकि उनके आस पड़ोस कोई प्रशिक्षित व्यक्ति मौजूद नहीं था जो उनको सही समय पर सी.पी.आर दे

दैनिक भास्कर

जालंधर भास्कर (6)

सीपीआर डे आज • प्रशिक्षण लें क्योंकि घर से लेकर दफ्तर-कॉलेज तक में पड़ सकती है जरूरत

सांस रुकने व दौरा पड़ने पर सीपीआर से जान बचाना संभव

डॉ. आनंद शांडिल्य के जन्मदिन को सीपीआर डे के रूप में मनाया जाता है

भास्कर न्यूज | जालंधर

आज सीपीआर डे है, जिसे मेडिकल विज्ञान में कार्डियो-पल्मोनरी रिसर्सिटेशन कहा जाता है। ये इमरजेंसी में फर्स्ट एड देने का ऐसा तरीका है, जिससे किसी को दिल का दौरा पड़ने या फिर सांस रुक जाने पर बचाया जा सकता है। हर साल 21 जुलाई को बच्चों के डॉक्टर सीपीआर डे मनाते हैं।

सीपीआर का डेमो देते हुए डॉक्टर।

सीपीआर के बारे में लोगों को जागरूक करने के लिए इस दिन ट्रेनिंग सेशन होते हैं। इस बारे में जालंधर एकेडमिक

अनुराधा बांसल ने सीपीआर के बारे में जानकारी दी है। उन्होंने कहा कि ये इमरजेंसी मेडिकल तकनीक है। इसके जरिये किसी व्यक्ति की सांस या धड़कन रुक जाने पर जान बचाई जा सकती है। जब किसी व्यक्ति का दिल धड़कना बंद कर देता है, तो उसे कार्डिएक अरेस्ट होता है तो ये तकनीक काम आती है। इसे सीखकर हर कोई अपने प्रियजनों को सुरक्षित रख सकता है। दरअसल अक्सर दिल का दौरा पड़ने की घटनाएं होती हैं। यह हमारी देखभाल, खानपान और जीवनशैली

सीपीआर क्या है?

अगर मरीज को कार्डियक अरेस्ट आया है तो वहीं उसी स्थान पर बिना देर किए मरीज की छाती को बार-बार पंप किया जाता है। हथेलियों से उसकी छाती को तेज-तेज दबाया जाता है ताकि दिल पंप कर सके।

दिल में जो भी ब्लड है, वो दिमाग और बाकी शरीर में पहुंच पाए। इससे उस समय पर रोगी के मुंह में अपने मुंह से सांस यानी ऑक्सीजन दी जाती है। हाथ से छाती को दबाकर मरीज को बचाने की कोशिश को हैंड्स ओनली भी कहा जाता है।

गौरतलब है कि जालंधर में इस तरीके के बारे में लोगों को बहुत ही कम जानकारी है। इसे सीखना चाहिए। 10 में से 9 लोगों की जान इस तरीके से बच जाती है। अक्सर दिल का दौरा पड़ता है तो लोग डॉक्टर

4) On July 21, 2023 **Dr Rohit Chopra President Jalandhar Academy of Pediatrics sensitised the staff of Trinity hospita**l regarding the essential skills of CPR . He urged them to participate in IAP certified BLS workshops to polish their skills

5) On July 21, 2023 **Dr Paras Khullar consultant Pediarician and senior BLS instructor sensitised the staff of Trinity hospita**l regarding the essential skills of CPR

IAP Jalandhar

6) On July 21, 2023 **Dr Neeraj Mahajan consultant Pediatrician sensitised the staff of Nipun Nanda hospital** regarding the essential skills of BLS

7) Going with the theme **"Kids save lives" Dr Anuradha Bansal Secretary Jalandhar Academy of Pediatrics sensitised 170 students of Manav Sehyog School , class 6-8, regarding the importance of CPR from July 24 to July 28, 2023**. Students were shown videos as well as given hands on training on Adult CPR & choking. Session was well received by the children.

IAP Jalandhar






IAP Agra

CPR DAY CELEBRATION

IAP Kerala

ORS week IAP Malappuram

ALS/BLS Training IAP Kasaragode

IAP Kerala

ORS week IAP Kannur

IAP Kerala

ORS week IAP Vadakara

IAP Kerala

ORS week State level Inauguration IAP Trivandrum

IAP Kerala

Meet the stalwarts -IAP & AHA Kerala

IAP Kerala

R DIET Programme IAP Kerala

IAP Pune

Pediatric Allergy
9th July 2023

Indian Academy of Paediatrics Pune organised a CME on Pediatric Allergy on 9th July 2023 at Hotel Pride, Pune

Stalwarts like Dr Vijay Warad, Dr Aparna Birajdar, Dr Sanjay Bafna, Dr Vikram Patra and Dr Vrushali Warad deliberated on important topics like

- **Clinical presentations in paediatric allergy**
- **Role of allergy in paediatric asthma**
- **Allergic march- eczema to asthma**
- **Panel Discussion on advances in allergy**
- **Allergy tests in paediatrics**
- **Invitro diagnosis of Allergy**

Panel Discussion were well moderated by Dr Sushruta Deshmukh and Dr Vijay Warad.

All the sessions were excellent. We received fantastic feedbacks from delegates.

It was attended by 120 delegates from Pune and periphery area.




IAP Pune

Culinary Workshop
18th July 2023

IAP Pune conducted its very first fun culinary program on18th July 2023 at Savitribai Phule Pune University under the theme hon your culinary skills. The program was attended by 25 enthusiastic pediatricians, males and females. The Masterchef for the program was one of our very own Dr Amruta Walimbe, who is an enthusiastic cook. She taught us various healthy and nutritious food items beginning from welcome drinks, starters, various forms of easy to cook quick rice recipes and delicious Indo Western fusion cuisines. We worked in teams with a lot of fun and frolic. A lot of fun games were played in between to keep the spirit high. We all savoured these delicasies with enthusiasm. All in all it was a fun filled event with lots of bonding and team building. This was the first ever of its kind and one which will set an example for the future years.






IAP Pune

Sampoorna Swayam Swasthya

@Bishop's School, Kalyaninagar, Pune

The first Sankalp Sampoorna Swasthya Program in Pune district was conducted by IAP Pune at The Bishops Co Ed school Kalyaninagar, Pune. Dr Shilpa Dudhgaonkar, President of IAP Pune along with Dr Rohini Nagarkar conducted the session.

Excellent session with active participation from students and teachers. Our main interest was educating the teachers so that, it is self-sustaining and will take over on auto mode

Role play was a complete hit with Students, we had exceeded our time limit and when asked if we should conclude the students said in a chorus NO …….. And we realised we had achieved our aim.

The session was attended by almost 1000 plus students.

IAP Pune

BLS CPR Day Celebration

@ Jehangir Hospital, Pune

IAP Pune held the national BLS and CPR awareness day in sunshine ward, Jehangir Hospital Pune on 21st July 2023. The program was well attended by relatives of patients, nursing staff, residents and security staff.






IAP Pune

ORS Day Celebration

@Surya Hospital

IAP Pune in association with Surya mother and child super specialty hospital celebrated ORS day on 29th July 2023.

on ORS day nurses and resident doctors were involved in an activity. A lecture was taken by Dr Amita Kaul ; on oral rehydration solution, RESOMAL, how to assess hydration status of a child. The lecture was followed by a quiz. 3 teams participated. Each team had a DNB student, with an RMO and a nurse. There were 5 rounds. Last round was counselling session for mothers and preparing simple ORS. Team C comprising of Dr Neha Chandak, Dr Digvijay and Sister Swati were the winners. It was a good teaching exercise with a lot of fun.

IAP Pune

Ultra Module

30th July 2023

Indian Academy of Paediatrics Pune organised a Module on ID ULTRA- (understanding lab test rationale)" on 30th July 2023 at Dr D Y Patil Medical College, Pune

Faculties were Dr Pramod Kulkarni, Dr Jayant Joshi, Dr Vasant Khalatkar, Dr Jayant Upadhye and Dr Abhay Jain. Topics discussed were

- **Blood Culture**
- **Serology**
- **Tissue Culture**
- **Urine Culture**
- **Molecular Diagnostics**
- **CNS investigations**
- **GIT investigations**
- **AMR**

It was attended by 60 delegates from Pune and periphery area. There was an enthusiastic response from a learned interactive audience!