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EDITOR'S NOTE

Greetings to all our fellow Paediatricians!!

Let us take this opportunity to wish each one of you a happy, healthy & productive new year 2020!

It gives us immense pleasure to present before you the 9th issue of IAP GOA E-bulletin. We hope you will peruse through the articles, case presentations, Quiz, paper publications & enjoy them as much as we enjoyed putting them together.

We have for you an interesting article on Urticaria & Angioedema by Dr Dhanesh Volvoikar, a paper publication by Dr Kavita Sreekumar, a fact check on ANA by Dr Chetna Khemani ,an article on ROP by Dr. Rhuta Shevade, a case study on Idiopathic Pulmonary Hypertension by Dr Rohit Borkar, Dr Rishva Keny and Dr Shilpa Joglekar and an interesting case of hyperlipidemia in an infant by Dr Pooja Kunde. A big thankyou to all who contributed to this e- bulletin and took time out from their busy schedule to pen these gems for us.

The last day of 2019 saw the emergence of the Corona virus outbreak starting in the Wuhan district of China & till JANUARY 25TH 2020 it is estimated that 1300 people have been infected & 41 people have died. In this bulletin we bring you an update on another zoonotic disease, the EBOLA VIRUS.

In conclusion let us end by requesting you to give us your valuable feedback, do stay safe & God bless.

Dr Prity Shetye

Preventing excessive postnatal weight loss in healthy newborns: Will continuous temperature monitoring help?

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3. Conflict of interest: Dr. Kavita Sreekumar has received research grant from BEMPU Health Private Limited.

Abstract:

Objective: To study if continuous temperature monitoring helps to prevent excessive postnatal weight loss in healthy newborns during hospital stay.

Design: Prospective randomised controlled trial

Setting: Postnatal ward of a tertiary level hospital in south-west India, between July 2018 and October 2018.

Participants: 515 healthy newborns born in the hospital during the study.

Intervention: Mothers were given the BEMPU device within 24 hours of delivery and taught to recognize alarms and take measures to treat hypothermia when the device alarmed till the baby was discharged from the hospital. All healthy newborns born in the hospital were included in the study and random allocation was done to either the intervention or control group. Babies who were sick and admitted in NICU and babies with congenital anomalies were excluded.

IEC approval was obtained prior to the study.

Outcome measures: postnatal weight loss.

Results: 515 babies were included in the analysis. For vaginal deliveries; 163 babies were in the intervention group and 168 were in the control group. The mean lowest weight was higher and the mean weight loss was lower for the intervention group. For caesarean deliveries, 91 babies were in the intervention and 93 were in the control groups. The mean lowest weight was higher and the mean weight loss was lower for the intervention group for caesarean deliveries as well.

Conclusions: Continuous monitoring of the temperature helps to prevent excessive postnatal weight loss in healthy babies born by spontaneous vaginal deliveries.

Introduction:

It is well known that some degree of early neonatal weight loss is normal. On the first 2-3 days of life, neonates that are exclusively breastfed lose on average between 5% and 7% of their birth weight. The maximum physiological limits of weight loss for newborns that are exclusively breastfed are controversial. A weight loss of 10% may be considered normal or acceptable, although there have been references of about 7% values [1].

There are some well-documented factors that are correlated with increased weight loss after birth. These factors include higher weight at birth, female sex, advanced maternal age and education, caesarean delivery, and jaundice [2]. For a small

percentage of infants, excessive weight loss may indicate a problem including poor breastfeeding management, undiagnosed metabolic disorders, neurological disorders, or other infant morbidities that cause poor feeding [3]. A serious consequence of persistent feeding problems and excessive weight loss can be hypernatremic dehydration, complications of which may include renal and liver failure, disseminated intravascular coagulation, intracranial haemorrhage, seizure and death [4].

Neonatal hypothermia is widely recognized as an important contributing factor to neonatal morbidity, especially in low and middle income countries. Neonates are particularly prone to hypothermia as their temperature regulation mechanism is immature. Consequences may be disastrous leading to apnoea, hypoglycaemia and poor weight gain [5]. Prolonged, unrecognized cold stress may divert calories to produce heat, impairing growth [6].

Hypothermia is a common occurrence in postnatal wards and step-down nurseries of resource-restricted health care systems [7]. In community-based studies in Nepal and India, hypothermia prevalence ranged from 11% to 92% [8]. The risk of hypothermia and related morbidities is the highest in the first week of life [9]. The term infant may experience temperature instability for several reasons. The infant may become cold with prolonged exposure to the environment during diaper changes, weighing, physical exams, or resuscitative measures [10]. The World Health Organization (WHO) has included thermal care and prevention of neonatal hypothermia as a component of essential care for the newborn [11].

Normal temperature in neonates should be maintained between 36.5° C and 37.5° C [12]. In low-resource settings, the facilities for thermal monitoring and thermal protection of neonates are limited. The BEMPU Bracelet is an accurate device that can be used in low-resource settings to detect and alert for neonatal hypothermia with significant sensitivity and specificity [7]. The BEMPU Bracelet is a silicone band with a thermistor metal cup to detect a neonate's temperature. The device blinks with a blue light when the neonate is not hypothermic (≥36.5°C) and an orange light when the neonate is hypothermic (<36.5°C). The BEMPU Bracelet remains active during the entire neonatal period (4weeks) with continuous monitoring ability [13].

Moreover BEMPU device has its advantages over conventional temperature monitoring methods. BEMPU Bracelet works on its own in detecting low temperatures continuously. While conventional methods like hand touch or thermometers cannot be used continuously. The conventional methods also require at least a minimal technical training for efficient detection of low temperature. Use of BEMPU bracelet, on the other hand, does not require any prior technical knowledge or training. The device was developed keeping in mind the rural population on India, where literacy rate is very low. The device uses a very basic audio visual method to alarm the parents, about babies' temperature [13].

There is lack of literature about the association between hypothermia and excessive neonatal weight loss. We conducted this study to assess whether continuous monitoring of temperature to detect hypothermia and taking adequate

measures to treat it would prevent excessive weight loss among healthy babies who were cared for in the postnatal wards.

Methods:

This was a prospective randomised controlled trial conducted in the postnatal ward of a tertiary level hospital in south-west India. The study was conducted over a period of 4 months from July 2018 to October 2018. IEC approval was obtained prior to the study. The study was not registered under CTRI All healthy (the babies admitted in the postnatal wards by the mother's side) newborns born in the hospital were included in the study after parental consent. This was intended to occur in a 1:1 ratio but after allocation some babies were excluded (Figure 1). As this study was time-limited, all eligible babies born during the study period whose parents provided consent were enrolled. Simple Randomization process was followed using odd-even procedure. Every live birth during the period of the study, 752 births, was evaluated for eligibility then alternately allocated to the intervention or control group by the principal investigator of the study. 528 babies were included in the study in total.

Inclusion Criteria

- Babies admitted in the postnatal ward
- New-borns without congenital anomalies
- Babies haemo-dynamically stable
- Babies accepting breast feeds well

- Parents willing to give written informed consent

Exclusion Criteria

- Infants readmitted to NICU for serious illness.
- New-born is not clinically stable
- Baby is discharged with a condition known to impact its ability to gain weight, such as down's syndrome, metabolic or genetic disorder

No changes to methodology occurred after trial commencement, but babies who were sick and admitted in the NICU and those with congenital anomalies were excluded. Neonates who were enrolled in the intervention group were given the BEMPU bracelet within 24 hours of delivery. Mothers were taught to recognize alarms and take measures to treat cold stress when the device alarmed. The device was used on the baby until discharge.

The investigator was trained by the Bempu staff to use the device. The same investigator trained all the mothers whose babies were allocated to the intervention group. The number of times the bracelet alarmed during the day and subsequent measures taken by the mother were recorded. Simple treatment measures such as Kangaroo Mother Care, covering the baby with woollen clothes, and changing soiled clothes were advised to the mother. She was also advised to inform the nurse if the bracelet did not return to blue light.

In the control group, babies received routine neonatal care as per the hospital protocol including: initiation of breastfeeding within one hour of birth for vaginal

deliveries or as soon as the mother was conscious for a Caesarean, assistance by lactation counsellors and provision of breastfeeding counselling, and daily weight checking.

A Performa with maternal and neonatal details including the birth weight, gestation, parity, mode of delivery was filled. The baby's weight was checked every day using a standardized digital weighing machine (Essae BS 256) until the baby was discharged. The difference between birth weight and the lowest weight of the baby in the hospital was calculated. Weight loss was quantified as a percentage of the birth weight. Weight loss more than or equal to 10% was considered excessive. Any other morbidities in the babies of both groups, such as hyperbilirubinemia or sepsis, were also recorded. Statistical analysis was done by calculating the association of weight change and the two groups using Chi square test. A P value of <0.05 was considered significant. SPSS version 24 was used for analysis. No changes to outcomes occurred after the trial commenced. Funding for the study was provided by BEMPU Health.

Results:

During the period of study, there were 752 live births in the institute. 528 babies were included in the study and 515 babies were analysed. The babies who were excluded from analysis either left against medical advice or were shifted to the neonatal intensive care unit (Fig 1).Using a type 1 error of 0.05, the power of the study was calculated as 96%. 254 babies received the intervention and 261 babies were controls. 24.8% babies had excessive weight loss among the intervention

group compared to 37.5% in the control group. The Chi square value was 9.73 (p-value 0.001). The Odds ratio calculated was 1.823 (95% CI: 1.240 to 2.663). Out of the vaginal deliveries (n=331), 163 babies received the intervention and 168 were controls. Among the caesarean deliveries (n=184), 91 babies received the device and 93 were controls. The mean age of mother, parity, sex ratio of babies, mean gestation, mean birth weight of all groups was similar as shown in Table 1.

In the vaginal delivery group, the mean lowest weight in the intervention babies was 2.542kg compared to 2.443 kg in the control group. The mean weight loss was 7.2% and 8.5% in the intervention and non intervention babies respectively. Among the intervention group, 132 babies (81%) did not have excessive weight loss and 31 babies (19%) had a weight loss of more than or equal to 10%. Whereas among the control group, 112 babies (66.7%) did not have excessive weight loss and 56 babies (33.3%) had a weight loss of more than or equal to 10%. The Pearsons Chi square values were 8.750 with a p value of 0.003. The Odds ratio was 2.129(95% CI:1.284 -3.531). We also calculated the relative risk which was 0.5706 with a 95% CI of 0.3893 to 0.8362. The absolute risk reduction was 14.9% and the number needed to treat was 6.986.

In the caesarean section group, the mean lowest weight in the intervention babies was 2.591 kg compared to 2.577 kg in the control group. The mean weight loss was 7.6% and 8.6% in the intervention and non intervention babies respectively. 71 babies (78%) did not have excessive weight loss and 20 babies (22%) had a weight loss of more than or equal to 10% in the intervention group and among the

babies who did not receive the intervention, 66 babies (74.5%) did not have excessive weight loss and 27 babies (25.5%) had excessive weight loss. The Pearsons Chi square values were 1.203 (p-value 0.273). The Odds ratio was 1.452(95% CI: 0.744-2.833). The relative risk was 0.7570 with 95%CI being 0.4588 to 1.2492, which was not significant.

There were 39 low birth weight babies born by vaginal deliveries in the intervention group and 51 in the non intervention group. In the sub group analysis of the low birth weight babies born by vaginal deliveries, only 6 babies (15.4%) among the intervention group had excessive weight loss compared to 18 babies (35.3%) in the non intervention group. The Pearsons Chi square value was 4.480 (p-value 0.034). The odds ratio was 3.000(95% CI: 1.058-8.508). Since being low birth weight increases the risk of hypothermia, we did an analysis of the normal weight babies who were born by vaginal deliveries. When compared, the Pearsons Chi square value was 5.270 (p-value of 0.021) for the normal weight babies. The Odds ratio was 1.910(95% CI: 1.100-3.330). Results are summarised in Table 2. No adverse events or unintended effects of using the device occurred. However, a few mothers found the device strap to be too tight and noticed it pinching the skin of the baby.

Discussion:

Neonatal hypothermia has been recognized as a contributing cause of mortality and morbidity among both low birth weight and normal-birth-weight babies, even in warm tropical environments [14]. Hypothermia management is increasingly

gaining attention and significance as a critical intervention for newborn survival [5], and the World Health Organization (WHO) has adopted thermal control among the essential components of newborn care [11].

Even though our study was not done with the objective of assessing the incidence of hypothermia, for babies who were in the intervention group and received the Bempu bracelet, the mothers reported that the device alarmed at least once every day. This shows that cold stress is common among babies who are apparently healthy and are kept by their mother's side.

In our study, the incidence of excessive weight loss was 31%, which was similar to the incidence of 25% found in a study by Mezzacappa et al [15]. Even after extensive research we did not find any study which showed the association between excessive weight loss and hypothermia in term healthy babies. Our study fills in that gap and also opens up avenues for more research in this aspect.

Babies whose temperature was continuously monitored using the Bempu device had significantly lower incidence of excessive weight loss compared to those who were not given the device. In the subgroup analysis, this difference was significant for the vaginal delivery group. Even though we found that the caesarean section babies had lower incidence of excessive weight loss among the intervention group, the difference was not significant. Caesarean sections are among the significant causes for excessive postnatal weight loss, especially sections without labour [16]. The number of babies in the Caesarean section group in our study was lower than

vaginal delivery group so a bigger sample size may help to more thoroughly evaluate the effects of the temperature device in a better way in this subgroup.

One might argue that there are many other factors playing a role in excessive weight loss, the main one being poor breastfeeding. But our study was a randomised study and the lactational management was the same for both groups. In our setup, we evaluate every postnatal mother for feeding issues in the first 72 hours and do intensive lactational counselling and support for the mothers if a problem is detected. We had a small subset of low birth weight babies who also showed benefits of continuous temperature monitoring, but we need additional studies with bigger sample size to confirm these findings.

Our study therefore shows that cold stress may be an important factor in causing excessive postnatal weight loss in apparently healthy babies who are cared for by their mother's side. In spite of all measures taken to prevent hypothermia, it is still a common problem in the postnatal wards and seemingly healthy term babies are not routinely monitored for cold stress in many settings. A continuous temperature monitoring device may help the mother identify cold stress and take simple but effective measures to treat it and hence prevent excessive weight loss and related morbidities. The strengths of our study were a good sample size and a high power of the study. However, we need to evaluate the caesarean section babies and low birth weight babies with larger sample size to assess the use of temperature monitoring to prevent weight loss as both are independent risk factors for hypothermia and excessive weight loss. Another limitation is not having used a

more objective method like breastfeeding assessment scores to show that the effectiveness of breastfeeding is the same in both groups.

Conclusion:

Continuous temperature monitoring helps prevent excessive postnatal weight loss in healthy newborns born by spontaneous vaginal deliveries.

WHAT IS ALREADY KNOWN?

Hypothermia and excessive postnatal weight loss are important causes of morbidity in newborns.

WHAT THIS STUDY ADDS?

Hypothermia is one of the reasons for excessive postnatal weight loss.

Continuous monitoring of temperature will help prevent excessive weight loss in otherwise healthy newborns.

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Idiopathic Pulmonary Hypertension in a seven-year-old child presenting with chest pain

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Introduction

Pulmonary Arterial hypertension is a life-threatening disease characterised by progressive pulmonary vasculopathy with ensuing heart failure if left untreated. It occurs at any age, the mean age in paediatric population being 7 to 10 years. The disease can be caused by a range of conditions as stated below.

1. Pulmonary arterial hypertension (PAH)
    - Idiopathic (IPAH)
    - Familial (FPAH)
2. Conditions associated with (APAH):
    - Connective tissue disorder
    - Congenital systemic-to-pulmonary shunts
    - Portal hypertension
    - HIV infection
    - Drugs and toxins
    - Pulmonary venoocclusive disease (PVOD)
    - Pulmonary capillary hemangiomatosis (PCH)
    - Persistent pulmonary hypertension of the newborn
    - Other (thyroid disorders, inborn errors of metabolism)
3. Pulmonary hypertension with left-heart disease
4. Pulmonary hypertension associated with lung diseases and/or hypoxemia
5. Pulmonary hypertension due to chronic thrombotic and/or embolic disease (CTEPH)

The following is a case report on idiopathic pulmonary hypertension in a seven-year-old child.

Case

A seven-year-old male child, born to parents off non-consanguineous marriage who was previously asymptomatic presented to OPD with symptoms of nonspecific chest pain and easy fatiguability on routine walking for a period of seven days.

The pain was localised to the pre-cordial region with no radiation to other sites. This was accompanied with a history of increased tiredness, both complaints

appeared on walking short distances and would be relieved after the patient took rest. There was associated history of noticing periorbital puffiness and abdominal distension, for a period of 4 days. There was no history of any diurnal variation of the above complains and there was no associated edema of the hands or the feet. There was no antecedent history of breathlessness, palpitations, trauma to the chest or decreased urinary output or noticing cyanosis.

On examination child was noted to have tachycardia (130 beats/min) with significant tachypnoea (44 breaths/min). There was periorbital puffiness with minimal abdominal distension with no fluid thrill. Child was noted to have bilateral cold extremities with hypoplastic nail plates. JVP was normal with no evidence of cyanosis or clubbing.

On systemic examination there was a hyperdynamic apical impulse with a palpable thrill in the left 4^{th} intercostal space parasternally. The heart sounds were heard normally with a grade 4 ejection systolic murmur, which was high pitched and heard best over the pulmonary area, radiating to the mitral area. Per abdominal examination revealed hepatomegaly, palpable 2cms below the costal margin soft and non-tender with regular margins. There was no other organomegaly. There was no evidence of any reduced air entry or added breath sounds.

On evaluation child did not have any abnormalities in hematologic and biochemistry values. There was no evidence of anaemia (Hb level = 13.7) with a normal peripheral smear. Blood gas analysis showed Respiratory Alkalosis with compensated acidosis (pH = 7.509, pCO_2 = 13.1, pO_2=162, HCO_3^- = 10.8, SPO_2 = 99%)

ECG showed sinus tachycardia (rate of 116/min) with right axis deviation, normal QRS complex and tall peaked T waves. In view of the clinical presentation and ECG findings, echocardiogram was done which showed grossly dilated right chambers of the heart with grade 1 tricuspid regurgitation and pulmonary arterial hypertension (PASP=55 mmHg). The interatrial and interventricular septae were intact.

Child had no findings or history pointing towards any respiratory or metabolic etiology or any connective tissue disorder that could lead to pulmonary hypertension. There was no history of any chronic drug intake. Normal Thyroid function tests were recorded.

CT pulmonary angiography was done with limited abdominal CT to rule out evidence of pulmonary thromboembolism and portal hypertension. Angiography showed dilated main, right & left pulmonary arteries measuring 2.3 cm, 1.7cm and

1.6 cm respectively. There were ground glass changes in both lungs suggestive of pulmonary edema. There was no evidence of any pulmonary thromboembolism and the limited abdominal CT did not show any abnormalities. Pulmonary function tests were advised to the parents but haven't been done as yet.

Because of no evidence of any other etiology diagnosis was kept as Idiopathic Pulmonary Arterial Hypertension and the child was started on oral furosemide @ dose of 2 mg/kg/day with oral sildenafil. Child was discharged and kept on OPD follow ups. There was significant improvement in the symptoms with reduction in chest pain and improved exercise tolerance.

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URTICARIA AND ANGIOEDEMA

- Dr Dhanesh Volvoikar

Urticaria is a vascular reaction of the skin marked by the transient appearance of smooth, slightly elevated patches that are often associated with severe pruritus. In simple words it is a rash that itches and lesions last for few hours and never more than 24 hrs. Although new fresh lesions can appear and course of this condition can last for few days to months.

Angioedema is a condition when deep skin tissues are also affected which may take over 24 hours to clear, usually there is no itching and can affect the lips and tongue. Some patients have one or the other condition, others have both.

The most common form of urticaria is called spontaneous urticaria. In this type no cause is usually identified.

Urticaria is usually divided into 'acute' and 'chronic' forms. In 'acute' urticaria, the episode lasts up to six weeks. It is usually a self limited illness requiring little treatment other than antihistamines.

Chronic urticaria, by definition, lasts for more than six weeks, requires specialized consultation and full work up from qualified allergist for proper scientific management of this debilitating disease.

Urticaria is caused by the release of histamine from cells in the skin called mast cells.

Often a specific cause cannot be found. Sometimes an infection such as a cold can be a trigger. Other triggers include physical contact with an allergen such as an animal, sun exposure or a specific food or medicine. For young babies, in whom it is rare, cow's milk allergy is the commonest trigger. Bee and wasp stings can trigger urticaria, as can eating shellfish, nuts, apples and peaches etc.

Almost any medicine can cause urticaria, but painkillers (especially aspirin and medicines like ibuprofen), antibiotics (especially penicillins), blood products and vaccinations are most likely to be responsible.

Angioedema, in particular, can be caused by a type of drug (ACE inhibitors) used to treat high blood pressure.

In some patients with chronic urticaria, the release of histamine from skin mast cells is triggered by factors circulating in the blood, such as antibodies directed against their own mast cells - a process known as autoimmunity which requires some specific tests for diagnosis like Serum Anti Nuclear Antibody or Autologous Serum Skin Test. Urticaria rash quite frequently occurs due to Autoimmune thyroiditis. In this condition thyroid antibodies can be positive.

Chronic Urticaria is often thought to be due to allergy, but in fact very rarely specific allergen is found to be a definite causative agent for urticaria symptoms.

Symptoms of urticaria and angioedema:

The main symptom of urticaria is itch. Angioedema is usually not itchy but may be painful. Although urticaria can be distressing, because of the itching and its appearance, it has no direct effect on general health. Rarely, the swelling of

angioedema may affect the tongue or throat, causing difficulty with breathing or swallowing. This can be alarming but is rarely life-threatening.

Although urticaria rash may persist for many weeks or months, individual lesions typically disappear within a day, and often last only a few hours. New wheals may then appear in other areas. In spontaneous urticaria, wheals can occur anywhere on the body, at any time.

The deeper swellings of angioedema occur most frequently on the eyelids, lips and sometimes in the mouth, but they may occur anywhere. They are not usually itchy, and tend to last a few days. The skin may feel tight and painful.

How is chronic urticaria diagnosed?

Usually its appearance, or a description is enough for you to make the diagnosis. In the vast majority of people no cause can be found even after knowing detailed history. There is no single test that is available which can reliably identify the definite cause of urticaria.

Occasionally, if a trigger is suspected, a specific blood test, to detect antibodies in the bloodstream, or a skin prick test may be performed by qualified & experienced Allergist. In a small percentage of people, foods, food colouring agents and preservatives appear to worsen urticaria, and it might be helpful to identify these by keeping a food diary. These substances can be left out of the diet to see if the condition improves, and later reintroduced to confirm whether they are the cause of the urticaria. However, as urticaria is such a fluctuating disease, this is not always accurate and will not always show you definitely what is causing the problem.

Treatment of Urticaria :

The treatments outlined below suppress the symptoms of the condition rather than cure it. In about half of the people affected by chronic ordinary urticaria, the rash lasts for 6-12 months, and then gradually disappears. It can however last considerably longer. In any one individual the course of urticaria is unpredictable.

Antihistamine tablets block the effect of histamine, and reduce itching and the rash in most people, but may not relieve urticaria completely. If urticaria occurs frequently, it can be helpful to take antihistamines regularly every day. There are many different types including non-sedating and sedating antihistamines, as well as short acting and long acting types. The antihistamine tablets has to be taken for as long as the urticaria persists. Even the non-sedating types can make some people sleepy, and as with all medications there can be side effects; the balance of risk and benefit needs to be considered when taking these and all treatments.

2nd Generation Non sedating H1 antihistamines like levocetrizine or fexofenedine dose can be increased to 2 folds if not controlled with normal dosage. They are generally safe and are well studied even for long term use in children up to 18 months at a stretch but at every 3 months needs to be given break to see if patient is gone in spontaneous remission. Please note if long term antihistamines are required all possible treatable causes are ruled out by all investigation as per standard guidelines.

A new biological monoclonal antibody omalizumab has recently been approved for the most severely affected antihistaminic resistant chronic spontaneous urticaria patients.

It is important to avoid anything that may worsen urticaria, such as heat, tight clothes, and alcohol. Triggers vary between individuals.

Avoidance of specific foods, colouring agents and preservatives may be helpful where these have proved to be a problem. Stress is being found as a major trigger factor for cronic urticaria in recent times even in children. Exam stress with no relaxing activity in between is being noticed specially in adolescent children studying hard for competitive exams. Lifestyle changes are advisable in these patients and quite frequently relief is found.

Other types of urticaria:

In some patients, clear trigger factors for urticaria can be identified; these are called inducible urticarias. There are several types of inducible urticaria.

Physical urticarias - Urticaria may be triggered by heat, cold, friction, pressure on the skin and even by water. The wheals usually occur within minutes, and last for less than one hour (except delayed pressure urticaria). Physical urticarias usually occur in healthy young adults, and are not uncommon. Some patients suffer from more than one type of urticaria; they include the following types:

Dermographism (“skin writing”). In this type, itchy wheals occur after friction such as rubbing or stroking the skin. Itch may be aggravated by heat. Wheals and red marks often appear as lines at the sites of scratching, and generally last for less than an hour.

Cold urticaria. This is triggered by exposure to cold, including rain, wind and cold water, causing itchy wheals chilled areas. Swimming in cold water may cause severe whealing and fainting, and should be avoided. Patients should report their cold urticaria to medical personnel before operations so that, if wheals appear during the procedure, cold urticaria can be considered.

Solar urticaria. This is rare. Redness, itching and wheals occur on the skin immediately after exposure to sunlight, and last for less than one hour after avoidance of exposure.

Aquagenic urticaria. This is extremely rare. Small wheals occur on the skin at the site of contact with water, usually on the upper part of the body.

Delayed pressure urticaria. Urticaria develops where pressure has been applied to the skin, for example from tight clothes or from gripping tools. Usually the swelling develops several hours later. It can be painful and last longer than a day. People with pressure urticaria nearly always have ordinary urticaria as well.

Cholinergic urticaria - This occurs under conditions that cause sweating, such as exertion, heat, emotional stress and eating spicy food. Within minutes, small itchy bumps with variable redness appear, usually on the upper part of the body but they may be widespread. The wheals last for less than an hour, but in severe cases may join together to form larger swellings. Antihistamines usually help, and are sometimes best taken before a triggering event (e.g. exercise).

Contact urticaria : Various chemicals, foods, plants, animals, and animal products, can cause wheals within minutes at the site of contact. These do not last long. Some of the commoner causes are eggs, nuts (e.g. peanuts), citrus fruits, rubber (latex) and contact with cats and dogs. Although often the reactions are mild, occasionally they can be severe, for example after contact with rubber and peanuts in very sensitive individuals.

Many spontaneous urticarias are improved by avoiding their trigger, and by taking regular antihistamines. Delayed pressure urticaria can be more difficult to treat. Sometimes a short course of oral steroids will help if the symptoms of delayed pressure urticaria are very severe.

Angioedema without wheals - Angioedema occurring without urticaria can be due to medicines (e.g. aspirin, ACE inhibitors) or food allergies. When angioedema occurs without wheals, a hereditary form of angioedema should be considered.

Hereditary angioedema : Although histamine induced angioedema is much common one should be aware of a very rare form of bradykinin induced angioedema which tends to run in families. Patients have intermittent swelling of the face, mouth, throat, and sometimes of the gut, leading to colic. The condition is due to an inherited deficiency of a blood protein C1 INH and can be identified by a blood test. When suspected Serum C3, C4 should be done and if you find low level further diagnostic test C1 INH both function and level should be ordered. It is usually resistant to antihistamines, steroid and adrenaline which works in histamine induced Angioedema. One needs to replace deficient protein C1 INH concentrate. But since it is not easily available, fresh frozen plasma has to be given. This should be kept in mind specially when patient does not respond to antihistamine, steroid and adrenaline since a severe attack of hereditary angioedema can be life threatening if left untreated.

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Case report of a one month old child presenting with bleeding from umbilicus and ears with milky blood

Dr Pooja Kunde

Department of Paediatrics

Goa medical college

One month old child was admitted with the complaints of bleeding from the umbilicus and ear for two days.

The child was born of a third degree consanguinous marriage by spontaneous vaginal delivery at term with a birth weight of 3.4 kg. Antenatal as well as the Postnatal period was uneventful and the baby was on exclusive breast feeds since birth.

On examination, the child was found to have an umbilical granuloma causing bleeding from the umbilicus and otitis externa causing bleeding from the ear.

However on routine blood sampling it was noted that the child had highly viscous blood which was milky white in colour.

On general examination the child was found to have early xanthomatous changes on the thighs.

On abdominal examination the child was found to have a palpable liver present 3cm below the costal margin which was soft in consistency with smooth surface and rounded borders.

ECG and 2D Echo were normal

Abdominal ultrasound revealed normal liver , spleen , adrenals. However both the kidneys revealed multiple well defined hypoechoic lesions suggestive of angiomyolipomas.

Ophthalmological evaluation revealed Lipoma retinalis.

CT brain was within normal limits.

Lipid profile revealed :

Triglycerides of 7462 mg/dl

Cholesterol of 1224 mg/dl

Serum was positive for chylomicrons

Blood culture sent was sterile

Serum electrophoresis :

Beta lipoprotein 73.9% (normal 38.6-69.4%)

Pre beta lipoprotein 25.3% (normal 4.4 – 23.1%)

Alpha lipoprotein 0.8% (normal 22.3-53.3%)

Chylomicrons present

Lipoprotein a band absent

Parents had a normal lipid profile.

There was no family history of sudden deaths or hyperlipidemia.

The child was kept on intravenous fluids and later started on medium chain fatty acid formula feeds along with breast feeds.

Blood sampling which was repeated after 20 days revealed red color blood.

Reports of the test could not be followed up as the patient lost to follow up.

Discussion

Hyperlipidemia is a prevalent risk factor in children, concomitant with worldwide epidemic of obesity. In India, several cases have been reported in very young children aged between 20 and 60 days. Some presented with features of sepsis with systemic complications and acute renal failure with complete recovery. The diagnosis is clinical and genetic testing is not available. Lipid disorder can occur either as primary event or secondary to an underlying disease. The primary dyslipidemia are associated with overproductions/or impaired removal of lipoprotein. The latter defect can be induced by an abnormality in either the lipoprotein itself or in the lipoprotein receptor.

Hypertriglyceridemia is defined as having plasma triglyceride above the 95th percentile for age and sex . It is a rare disorder in childhood. According to the National Cholesterol Education Program (NCEP), normal triglyceride level is < 150 mg/dl (<1.7 mmol/l). Primary hypertriglyceridemia is the result of various genetic defects leading to disordered triglyceride metabolism. Secondary causes are acquired and may include a high-fat diet, obesity, diabetes, hypothyroidism, and certain medications (e.g. estrogen and tamoxifen).

Familial chylomicronemia syndrome is a disorder due to familial lipoprotein lipase or apo C deficiency or presence of inhibition to lipoprotein lipase. It is very rare syndrome with prevalence of 1 in million for homozygotes and 1 in 500 for heterozygote .FCS is characterized by severe hypertriglyceridemia with episodes of abdominal pain, recurrent acute pancreatitis, eruptive cutaneous xanthomata, hepatosplenomegaly, and lipemia retinalis. However, evidence suggests that presentation during infancy can be heterogeneous and may include other signs such as pallor, anemia, jaundice, irritability, and diarrhea. These manifestations are variable in the time and severity of presentation. Diagnosis is based on lipemic appearance of serum caking of chylomicrons on serum on refrigeration, serum triglycerides in excess of 1000 mg/dl. .Early diagnosis is important to prevent complications such as acute and chronic pancreatitis and pancreatic necrosis. Diagnosis is based on lipemic appearance of serum, caking of chylomicrons on serum on refrigeration, serum triglycerides in excess of 1000 mg/dl.

Recently, the American Heart Association provides general recommendations for pharmacological management of high-risk lipid abnormalities in children and adolescents.

They defined high-risk lipid abnormalities as primary and secondary conditions associated with extreme lipid abnormalities or conditions underlying high risk of cardiovascular disease whereby the presence and severity of lipid abnormalities may further exacerbate that risk.The drugs studied and recommended for treating hypertriglyceridemia are fibric acid derivatives (e.g., Gemfibrozil, Fenofibrate). These have the effect of both raising HDL and lowering triglycerides.

Main adverse effects observed were gastrointestinal upset together with an increased predisposition to cholelithiasis. Elevated liver transaminases and creatinine kinase are transient. There is risk of myopathy and rhabdomyolysis-especially if used with other agents, particularly statins.

Conclusion

Familial chylomicronemia syndrome (FCS) is a disease of late childhood and adolescence; however, cases have been reported in infants and neonates. The syndrome presentation is heterogeneous in a very young age group. Early diagnosis and medical intervention by lipid-lowering agents and dietary modification, at the time of diagnosis, can improve the prognosis and maintain a near normal lifestyle for affected children, as the risk of pancreatitis and frequency of hospital admissions is significantly reduced.

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EBOLA VIRUS DISEASE: An Update

Dr Prity Shetye

Ebola virus disease / Ebola Hemorrhagic disease is back into focus due to the 2018-2020 outbreak in North Kivu province of Democratic Republic of Congo, Africa. This is the world's 10th outbreak & on **17th July 2019** declared by WHO as a Global Health Emergency .

Ebola virus is so named after the Ebola river which was near the 1st identified virus outbreak in Zaire, Africa

Mode of transmission :

- zoonotic
- direct contact with body fluids(blood ,breast milk ,semen)
- HANDLING OF SICK OR DEAD HUMAN OR INFECTED ANIMAL

Pathophysiology

The virus enters through the mucus membrane / break in the skin /parenterally & then infects the monocytes, macrophages, dendritic cells, fibroblasts, hepatocytes, adrenal cortical cell & epithelial cells.

Virus then migrates to

- Regional lymph nodes
- Liver
- Spleen
- Adrenal gland

Lymphocytes undergo apoptosis (decrease in lymphocytes)

Vasculitis

- Hepatocellular Necrosis (dec. clotting Factors,coagulopathies)
- Adrenocortical Necrosis (hypotension)

Vascular leaks due to proinflammatory cytokines & finally hemorrhage, shock & multiple organ failure sets in.

INCUBATION PERIOD : 2-21 DAYS

Presentation

Symptoms similar to malaria /dengue /other viral hemorrhagic fever

- Abrupt fever
- Musculoskeletal(headache ,body ache, joint ache, muscle ache)
- Gastrointestinal(abdominal pain, diarrhea, vomiting)
- Bleeding(thrombocytopenia)
  As it progresses
  - Haemorrhage
  - Severe diarrhoea(more than 100 times daily)
  - Encephalitis
  - Acute kidney injury
  - Anuria
  - Multiple organ failure
  - Shock

Laboratory diagnosis

- Real time PCR & ELISA in early stages
- IgM antibodies(detected upto 4 months)
- IgG antibodies(detected 6-18 days after infection detected upto 10 years)

Management

- Primarily supportive
- Isolate patient
- Contact tracing
- Barrier nursing (HAND HYGEINE & PERSONAL PROTECTIVE EQUIPMENT)
- Avoid Aerosol generating procedure
- Rehydration
- Maintain blood volume& electrolyte
- Blood products as needed
- Dialysis if kidney failure sets in

VACCINE

Rvsv-zebov VACCINE is available with W.H.O

- **EFFECTIVE 10 DAYS AFTER VACCINATION**
- Ring vaccination

Ad26ZEBOV is another vaccine approved in Africa on 22nd October 2019

Steps taken by INDIA

- ALL PASSENGERS FROM EBOLA INFECTED PARTS OF AFRICA OR WHO HAVE TRAVELLED THERE THE AIRLINE COMPANY WILL INFORM AIRPORT AUTHORITY OF INDIA BEFORE PASSENGER BOARDS THE PLANE
- SCREENING OF ALL INCOMING PASSENGERS DONE AT AIRPORT (temp check)
- PASSENGERS FROM Ebola infected countries put in 3 categories

CATEGORY 1

- ANY TRAVELLER VISITED /STAYED IN Ebola infected parts in last 21 days
- No history of contact with infected person /no history of febrile death in family
- No symptoms
- Person told to self monitor & contact health facility if he has fever

CATEGORY 2

- PERSON WHO IS HAVING HISTORY OF CONTACT
- MONITOR FOR SYMPTOMS TILL INCUBATION PERIOD FOLL LAST EXPOSURE
- DAILY FOLLOWUP OF SUCH PATIENTS

CATEGORY 3

- HAS SYMPTOMS OF EBOLA DISEASE

- ISOLATE & TREAT
- SEARCH FOR CONTACTS

PROGNOSIS

- 25-95% RISK OF DEATH
- SURVIVORS VIRUS PERSISTS IN IMMUNE PRIVILEGED AREAS (testicles, inside the eye ,amniotic fluid, placenta & foetus)

References

Ebola virus disease (press release) WHO 12th February 2018

WORLD HEALTH ORGANIZATION TRAINNING OF RAPID RESPONSE TEAM ON PREPAREDNESS & RESPONSE TO EBOLA VIRUS DISEASE in Pune

2014 Ebola virus diseases outbreak in west Africa WHO 21 APRIL 2014ARCHIVED FROM THE ORIGINAL ON 29TH JULY 2014

Wikipedia Ebola virus disease

ANA PRACTICE POINTS

Dr Chetna Altekar

FICTION	FACT
ANA diagnoses `connective tissue disorders `	Though ANA is a hallmark of autoimmune rheumatic diseases, it can be found in a variety of clinical settings & even a fraction of normal population.
ANA is a ***diagnostic*** test	ANA are a diverse group of antibodies directed to cellular complexes containing proteins & nucleic acids. ANA is a ***screening test*** & once detected determination of the specific subset of antibodies based on clinical suspicion & staining pattern reported should be looked at.
ANA by ELISA/Immunoflorescence are comparable	*Immunoflorescence using Hep 2 cells, as substrate is the GOLD standard for ANA detection.*
To diagnose SLE ask for ANA & ds-DNA	When considering the diagnosis of lupus, it is not cost effective to proceed with specific assays such as ds-DNA if the ANA is negative.
ANA should be asked for in all cases of juvenile arthritis	Pattern recognition plays an important role in diagnosing sub sets of juvenile arthritis. It is the young girl with oligoarticular JIA, that ANA is most likely to be positive. Here the ANA positivity correlates with uveitis.
ANA titers do not give any additional information	Although a low titer is not clinically significant, A high titer (> 1: 160) is more likely to indicate presence of autoimmune rheumatic disease. Additionally, high titers of anti-dsDNA predict exacerbations of lupus flare.

CONDITION FREQUENCY OF ANA

1) Autoimmune rheumatic diseases

Drug induced lupus	100 %
SLE	98%
Systemic sclerosis	98%
Sjogren`s syndrome	80%
Oligoarticular juvenile idiopathic arthritis	70%
Dermatomyositis	60%
Rheumatoid arthritis	50%

2) Organ specific autoimmunity

Primary autoimmune cholangitis	100 %
Autoimmune hepatitis	70%
Myasthenia gravis	50%
Autoimmune thyroid disease	45%

3) Normal population

Children	8 %
Adults	15%
>1:40	20-30%
>1:80	10-12%
>1:160	5%

4) DISEASES for which ANA is NOT USEFUL FOR DIAGNOSIS (*though commonly performed*)

Rheumatoid arthritis	30-50%
Infectious diseases	Varies widely
Malignancies	Varies widely
Fibromyalgia	15-25%
Relatives of patients with autoimmune diseases(SLE or scleroderma)	5-25%
Idiopathic thrombocytopenic purpura	10-30%

Retinopathy of prematurity: A Review

Dr Rhuta Shevade

World Health Organization has identified Retinopathy of Prematurity (ROP) as an emerging cause of childhood blindness in developing and middle-income countries.[1,2]

Extensive clinical trials and publications[3-6] have established that among other factors gestation period and low birth weight are critical in the pathophysiology of ROP.

ROP blindness in India is increasing due to the highest number of preterm births in the world (3,519,100)[7],suboptimal neonatal care, lack of awareness, screening and treatment programs not in place, and increasing numbers of Neonatal Intensive Care Units and Special New Born Care Units opening all over the country. In addition to this, heavier and more mature preterm infants are developing severe ROP due to variable quality of neonatal services.[8]

ROP Screening

Why?

The premature child is not born with ROP and retinal disease is not present at birth. All preterm babies have a potential for normal vision, even if the retina is immature at birth.[9]

Screening aims to identify those infants who have reached or have the potential to reach threshold ROP, which if untreated may cause blindness or visual impairment. This has indefensible medico-legal implication. Moreover the grief for the family is tremendous, besides the economic burden of such childhood blindness.

Whom to screen?

The criteria for screening babies are based on two critical factors – the birth weight and the gestational age. Other additional factors contributing to the development of ROP are also taken into consideration. [9]

Screening criteria [9]

a. Birth weight of less than 1500 gms internationally.
In India this is now accepted as less than 2000gms as per the operational guidelines for ROP by PHFI

b. Gestational age at birth (length of pregnancy) of less than 34-35 weeks.

c. Exposed to oxygen for more than 30 days.

d. Infants weighing less than 1200 grams at birth and those born at 24-30 weeks gestational age are at particularly high risk of not only developing ROP but also developing it earlier, in more aggressive forms (Rush disease). Hence the definite need to screen these smaller babies at the earliest.

e. Other factors that can increase risk of ROP and where screening should be considered are other premature babies (< 37 weeks and/or < 2000gms) with
• Respiratory distress syndrome
• Sepsis
• Multiple blood transfusions
• Multiple births (twins/triplets, etc.)
• Apnoeic episodes
• Intraventricular haemorrhage
• Paediatrician has index of concerns for ROP

Research suggests that oxygen is not the cause of ROP, but one of the risk factors.[5] Low levels of oxygen and slow weaning from oxygen may help regression of early stages of ROP.[5]Oxygen levels must be well monitored to ensure optimum oxygen saturation of blood (95-98%), since hypoxia is a factor in increasing abnormal retinal neovascularisation.[9]
Poor postnatal weight gain during the first few weeks of life is a strong predictor for the development of sight-threatening ROP [10] (Type 1 ROP requiring treatment according to the early treatment for ROP study).[11] Various algorithms such as WINROP, CHOP-ROP, and ROP score use a weight gain predictive model for the occurrence of treatable ROP. These algorithms have demonstrated promise in accurately predicting ROP and reducing the number of ROP screening examinations in developed countries.
These screening tools have shown promise in Indian premature infants. Population specific tweaking of algorithm may improve result and practical utility for ophthalmologists and neonatologists.[13]

When to screen?

• 31 weeks PCA (post conceptional age) or 3-4 weeks after birth (whichever is earlier)

• Infants weighing less than 1200 grams at birth and those born at 24-30 weeks gestational age are screened early, usually not later than 2-3 weeks after birth.

• No examination needed in first 2-3 weeks of life

• Next date of examination to be decided by the ophthalmologist based on initial findings

• Complete one screening session definitely before 'Day 30'of the infant's life.[9]

What can be done?

Establishing and maintaining an airtight ROP screening programme at all hospitals with NICU. One of the key factors in a successful programme is to designate a responsible person in the nursery to coordinate the selection of the 'at risk' infants according to the guidelines of the ophthalmologist and ensure their eye evaluation at the appropriate time.
A trained ophthalmologist is needed to conduct the eye examination. This could be a paediatric ophthalmologist, a retina specialist or a general ophthalmologist .[9]

Longterm Vision Concerns in children with ROP

Premature children have a greater chance of developing refractive errors such as high myopia, myopic astigmatism, anisometropic amblyopia and strabismus. [5,14,15] These conditions can occur in premature children with or without ROP. Additional problems, specifically in eyes treated for ROP, include cataract, glaucoma and late onset retinal detachment or vitreous haemorrhage. Hence, children treated for ROP need life- long periodic eye examinations and depending on severity may need extensive vision training and visual rehabilitation measures (including low vision aids) to utilise the residual vision to its maximum potential.[9]

High rates of functional limitations in multiple domains occur in children who had threshold ROP, particularly if they have unfavorable visual acuity.[16]
An early and prompt management offers high success rates in ROP. Not only is the blindness prevented but the structural and functional outcome is excellent.

There is abundant evidence that children born prematurely are 'premature for life', with the visual system being affected in many ways along its course [17].Poor visual function may directly affect the development of cognitive and motor functions resulting in neurodevelopmental impairment.[18]
Early intervention for ROP along with multidisciplinary rehabilitation is needed to improve the quality of life in these children.

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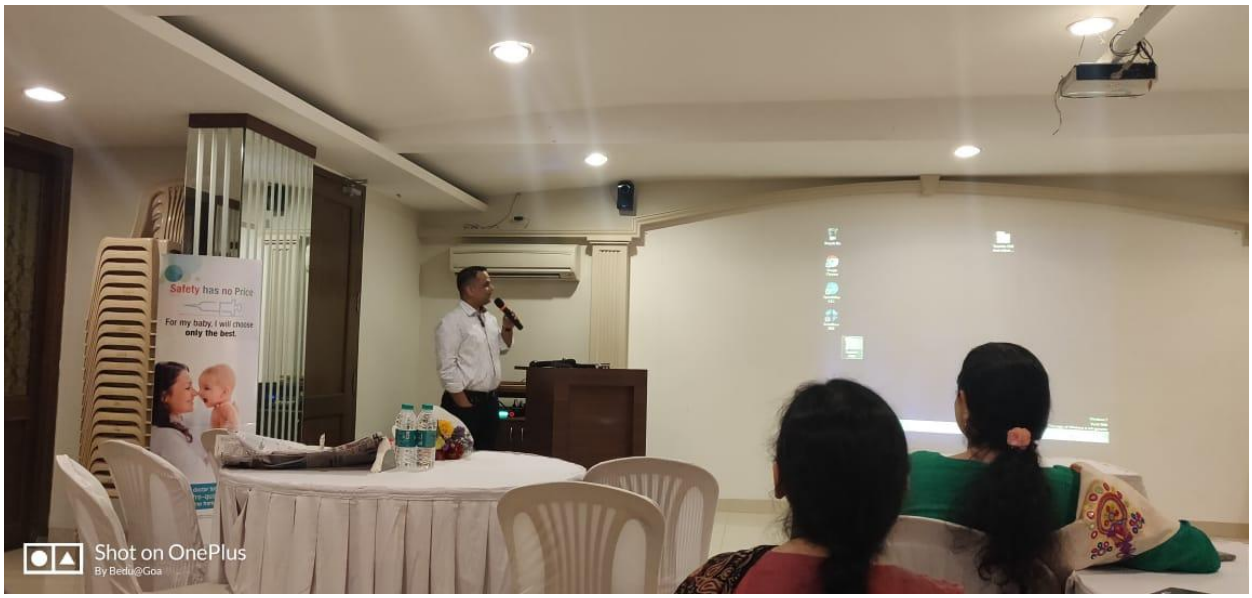
ACTIVITIES OF OCTOBER TO DECEMBER 2019

CME's held

1) Goa IAP State Chapter organised a CME on 15/12/2019 on the following topics
   - Recent Vaccinology updates
   - ARDS in children
   - What's new in HLH

   Speakers : Dr. Suhas Prabhu and Dr Sumant Prabhudesai

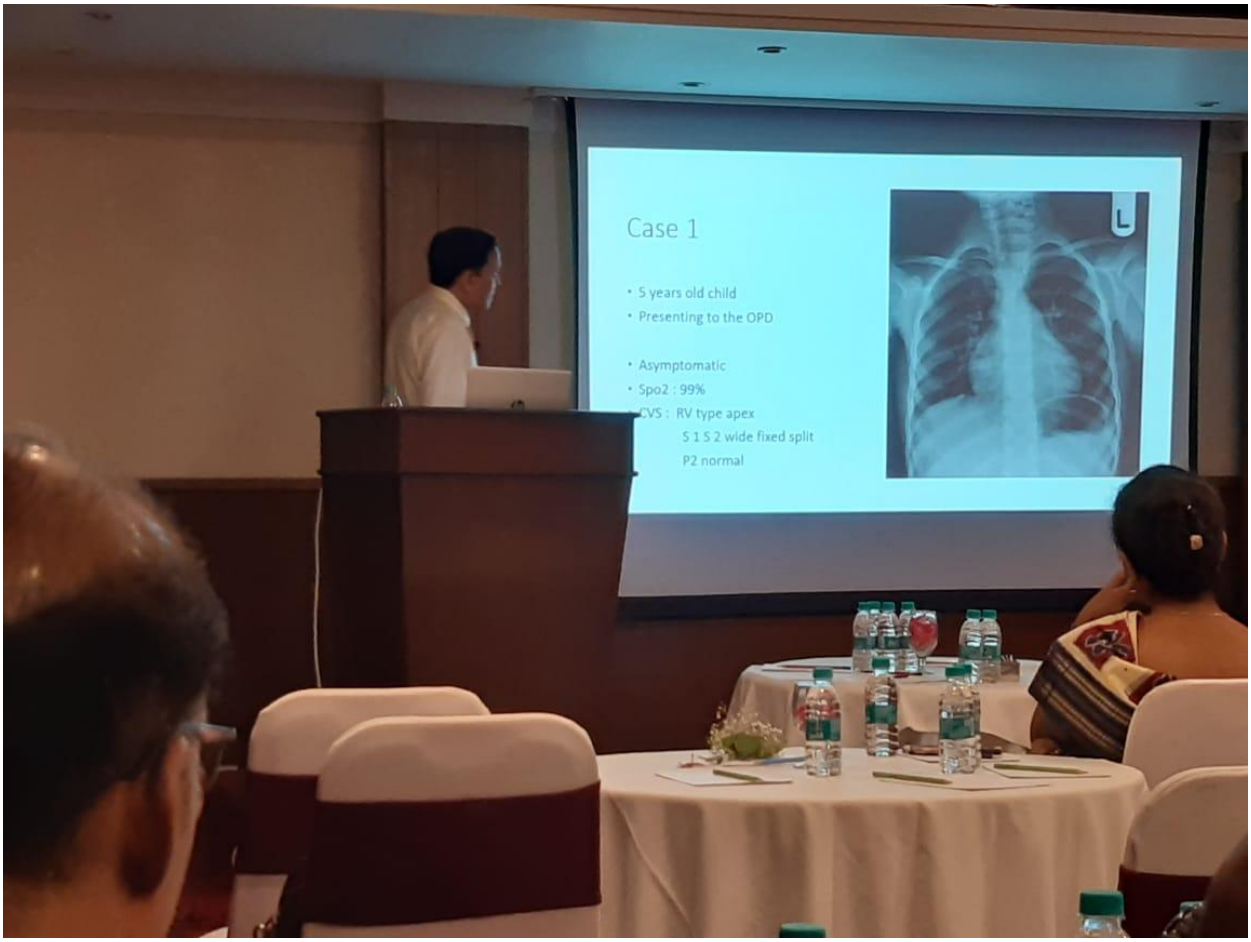



*The hallmark of HLH
Shot on OnePlus
By Bedu@Goa


Shot on OnePlus
By Bedu@Goa

2) IAP Goa Paediatric Sub-Speciality Session was held on 6/10/2019
Topics included – Paediatric UTI guidelines and Management
Speaker Dr Vaishali More

- Paediatric Cardiology : approach to cardiac cases in children
Speaker Dr Pradip Kaushik


Case 1
• 5 years old child
• Presenting to the OPD
• Asymptomatic
• Spo2 : 99%
• CVS : RV type apex
S 1 S 2 wide fixed split
P2 normal

3) IAP Goa State Chapter under the presidential action plan 2019 organised the PICNIC module on 20th October 2019
   The topics included-
   - Introduction and basics
   - Standard Precautions
   - PIC in PICU including bundle care
   - PIC in NICU
   - Biomedical waste, CSSD and NSI
   - Hands on training session and quiz on standard and contact precautions and aseptic procedures
   - Hexaxim

   Speakers included : Dr Shekh Minhaj Ahmed, lead paediatric intensivist at Lilavati hospital.
   Dr Shivaprakash Sosale C, Asst Professor BMCRI
   Dr A. Kossambe, EB Member Goa State

Health Camps

1) Dr Swapnil Usgaonkar and Dr Vishal Sawant organised a health camp


STD IX
HEALTHWAY
Healthway Hospital
Medical Check up
Camp
Healthway
Super Speciality Hospital
Ella, Old-Goa.
Ph: 0832 2467666
+917030961249
Email: info@healthwayhospitals.com

2) Dr Priyanka Dhakankar participated in a health camp at Little Heaven Home for orphan kids. 70 kids in the age group of 2-20 were examined by paediatrician, ENT surgeon, dentist and dermatologist. Free medicines were provided to the kids. The camp was held in association with IHRA.


Shot on OnePlus
By Tanmay Mahajan


Shot on OnePlus
By Tanmay Mahajan

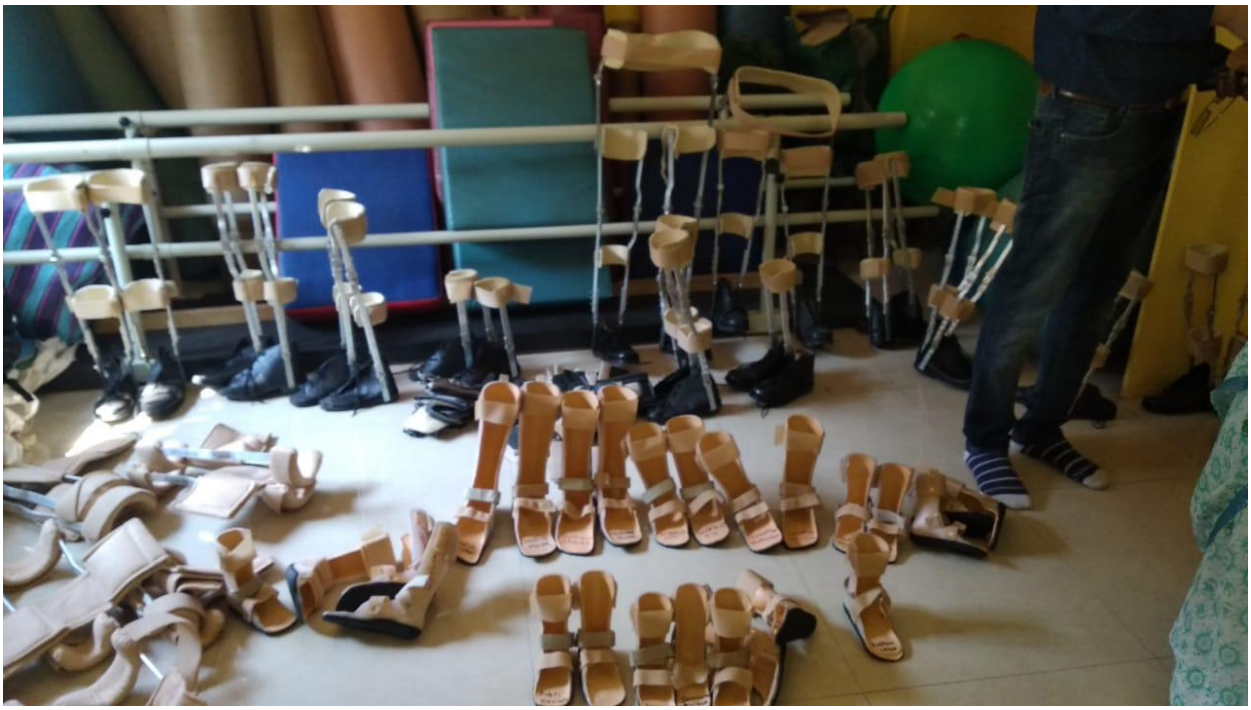
3) Medical Camp held at Ramnathi temple : Dr Surendra Juarkar and Dr Kini participated in the camp. 25 children benefitted from the camp.

4) Dr Swapnil Usgaonkar participated in a free health camp at a Goverment Primary School, Chimbel organised by Unnati Gram Seva Sangh on 15th December 2019. 68 children benefitted. Dr Simantini Sakharkande (dermatologist) also participated in the camp.


2ND OCTOBER
HEALTHWAY
HOSPITALS · GOA
Healthway Hospital
Medical Check up
Camp
Healthway
Super Speciality Hospital
0832 2467666
+917030961249
healthwayhospitals.com

5) Adolescent Health Camp held at Margaret Bosco Bal Sadan on December 8th 2019. Dr Anand Kini, Dr A.O Nazareth, Dr Sushma Kirtani and Dr Chetna Altekar participated in the camp.
40 boys in the age group of 10-18 years were examined. A talk was given on health and nutrition, prevention of sexual abuse. Laws related to sexual abuse were discussed by advocate Emidio Pinho, coordinator SCAN NGO.

6) The Paediatric neurorehabilitation centre, Bambolim Goa successfully conducted a camp for assessment of persons with disabilities on the 18th of October 2019. The camp was organised by the team of professionals from ALIMCO (Artificial limbs manufacturing corporation of India) under the CSR initiatives of General Insurance Corporation of Goa. The camp was attended by large number of children and adults with disabilities. The total number o patients registered were 320 out of which 270 patients benefitted with aids and appliances. Patients were prescribed free digital hearing aids, wheelchairs, rolators, motorised tricycle, AFO's, CP chairs and MSIED kits after the assessment. The camp was successfully conducted for the first time at Goa Medical College under the supervision of Professor M.P Silveira, Associate professor Dr Vaishali Joshi and in charge of PNRC Dr Aparna Wadkar.



Faculty at National Conferences: our prestigious teachers

1) Dr Harshad Kamat : faculty at the TRAC (Test Report and Clues) Workshop organised by IAP Villupuram- Puducherry Chapter on 10th November 2019, held at Sri Manakula Vinayagar Medical College, MIT Auditorium, Puducherry. Dr Harshad spoke on Liver Function tests.

2) Dr Dhanesh Volvoikar as faculty at the prestigious National Conclave of Allergist(Indian College of Allergy, Asthma and Clinical Immunlogy Conference) at Delhi.

Health Talks and Health Education

1) Dr Sushma Kirtani's article in the newspaper – on Dainik Herald on 1st December 2019.

मानसिक आरोग्याची काळजी आवश्यक

डॉ. सुषमा कीर्तनी यांचा सल्ला : सामंत विद्यालयात 'सुदृढ मन, सुदृढ शरीर' कार्यक्रम

बिठ्ठोण, दि. ३० (वार्ताहर) :

जशी आपण शरीराची काळजी घेतो, शारीरिक आरोग्याची काळजी घेतो तसेच आपल्या मानसिक आरोग्याची काळजी घेणे अत्यंत आवश्यक आहे. जर आपले मानसिक आरोग्य बिघडले तर आपले शारीरिक आरोग्य सुद्धा बिघडेल. जसे एखाद्याच्या पोटात दुखते तसेच मनाचेही दुखणे असू शकते, पण शारीरिक आजारांपेक्षा मानसिक आजारांकडे पाहण्याची समाजाची दृष्टी वेगळी असते. मानसिक आजारांबद्दल गूढतेचे, भीतीचे, वलय असते. सर्वसाधारण वैद्यकीय वर्तुळातही याबद्दल फार माहिती नसते. पोटदुखी, कानदुखीकरता जसे आपण चटकन

पर्वरी : कार्यक्रमात बोलताना डॉ. सुषमा कीर्तनी. (शेखर वायंगणकर)

डॉक्टरकडे जातो तसे मानसिक आजाराबद्दल जात नाही. त्यामुळे आजकाल लहान वयातच मुलांमध्ये मानसिक आजार दिसून येतात, असे उद्‌गार डॉ. सुषमा कीर्तनी यांनी काढले.

पर्वरी येथील एल. डी सामंत मेमोरियल हायस्कूलमधील बालिका शिक्षा समितीने आयोजित केलेल्या 'सुदृढ मन सुदृढ शरीर' कार्यक्रमात हायस्कूलच्या आठवी व नववीच्या मुलींना मार्गदर्शन करताना काढले.

पौगंडावस्थेतील मुलीं मुलींच्या सुटण्यास मदत व्हावी व त्यांचे मानसिक आरोग्य सुदृढ राहावे या हेतूने हा कार्यक्रम आयोजित करण्यात आला होता.

यावेळी व्यासपीठावर प्रमुख वक्त्या डॉ. सुषमा कीर्तनी, डॉ. अनंत केणी, हायस्कूलचे मुख्याध्यापक म्हाळसाकांत देशपांडे, शिक्षिका ज्योती चिपळूणकर, सरिता बोरकर उपस्थित होत्या. मान्यवरांचा परिचय शाळेच्या शिक्षिका गौरी हळदणकर यांनी करून दिला. तर करुणा मावळींगकर हिने स्वागत केले. हा कार्यक्रम यशस्वी होण्यासाठी गौरेश बगळी, नंदकिशोर सावळ देसाई, सोनाली सुतार, वैदेही तळेकर, प्रताप नाईक, प्रमोद गावडे यांनी मदत केली. सूत्रसंचालन भक्ती चोडणकर हिने केले. आर्या बोरगावकर हिने आभार मानले.

2) Dr Sushma Kirtani and Dr Kini gave a talk as a part of Daughter's Day celebrations in November 2019 at Vidya Prabhodini School. Dr Sushma spoke on the topic 'Healthy Mind in a Healthy Body' and Dr Kini spoke on cultivation of good habits and spirituality in life.

3) Dr Dhanesh Volvoikar addressing Rotarians and few students at the " End Polio Now" rally at Porvorim on 24th October 2019.

4) Dr Medha Bakhle wrote an article on obesity which featured in Herald Cafe on 16th November 2019.

5) Dr Anusha Kholkar, participated in a phone in programme on Doordarshan on Mission Indradhanush on 18th December 2019.

Awards

1) Dr Shivanand Gauns awarded Certification for passing International Programme for preterm nutrition conducted by Western Australian University.

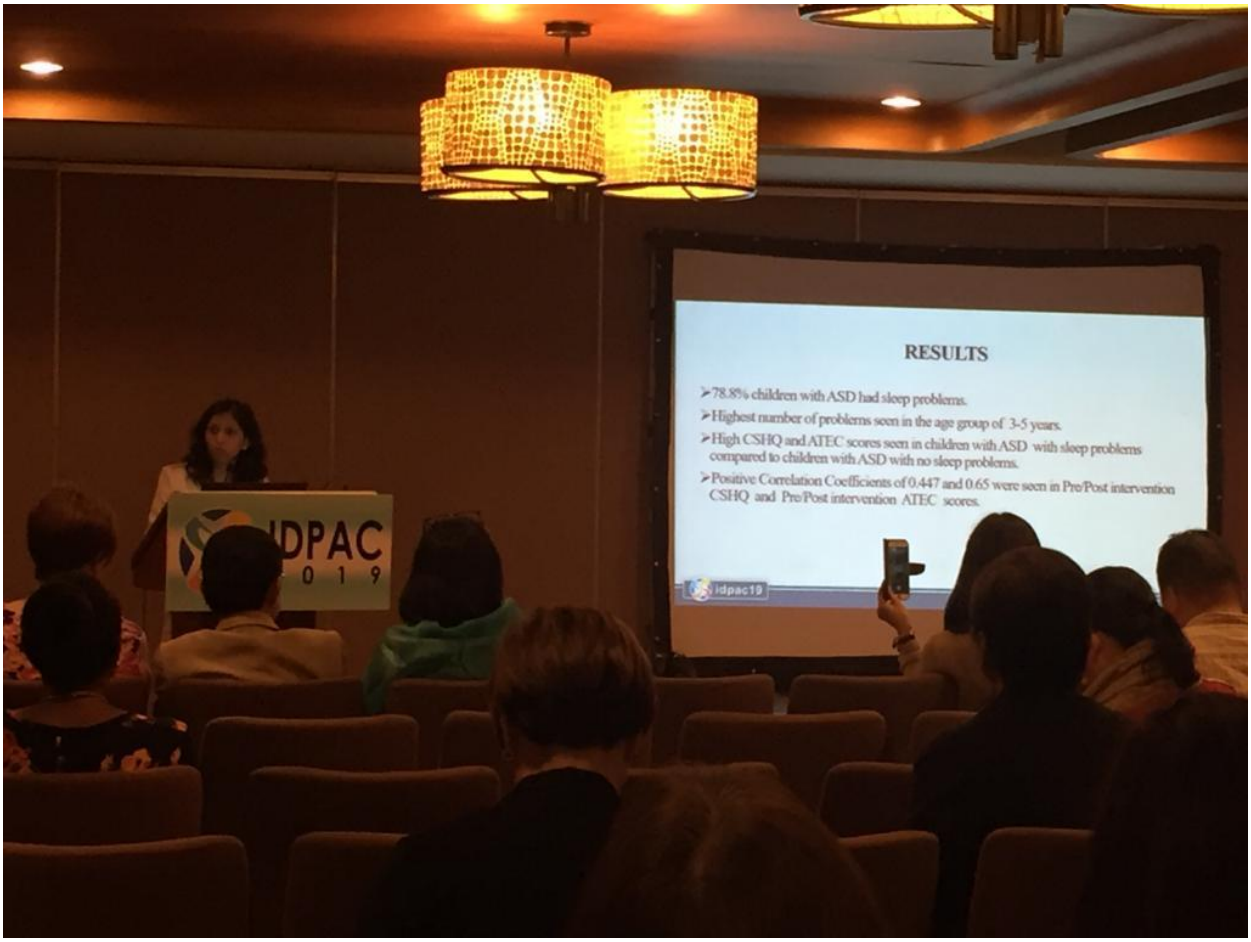
2) Dr Poornima Usgaonkar awarded 'Borim Dhanvantari Bhushan Award.'

Quiz held at Goa Medical College

1) Postgraduate quiz held in November 2019
Elimination round held with 15 participants. 8 best performers were selected, who formed 4 teams. The winning teams included Dr Sarvesh Komarpant and Dr Nandan Pai Kakode. The winners represented the state at the divisional round.

Dr Sumant Prabhudesai attended IAP BLS-ALS workshop at Wadia Hospital, Mumbai as an instructor on 19th and 20th October

Dr Aparna Wadkar presented an oral paper on sleep problems in children with Autism Spectrum disorders- a study of prevalence and behavioural intervention at the International Developmental Paediatric Association Congress (IDPAC) held at Manila, Philippines. The co-author of the paper was Dr Nandita De Souza, Director of Sethu centre for child development and family guidance.



Children's Day celebrations held at PNRC on 14th November 2019: talk conducted by Giselle Lobo, head of inclusive education at Sethu on life skills. Dr Aparna Wadkar conducted a talk on child safety. The talk was followed by a welcome speech by Dr. Mimi Silveira. There was an entertainment program conducted or the children. A large number of parents attended the same. The staff of PNRC contributed immensely to make the program a success. The students of the Allied health sciences also were actively involved.

ACTIVITIES by Sethu

The Sethu Team has had a very productive 3 months, providing clinical services and conducting training programs in ADHD, Autism, Childhood Sexuality and other topics for the community.

1. Aarambh: The Autism team conducted yet another Aarambh program in November 2019 over 5 weekly sessions for parents of newly diagnosed children with autism. This program gives an overview about autism, the importance of using visual supports, how play is an opportunity for communication, management of sensory needs and challenging behaviors. Each session concluded with the sharing of experiences by a resource parent with the participants thus giving families hope for the future of their children.

2. Comprehensive Sexuality Education (CSE) workshop for teachers: Dr. Nandita de Souza conducted a 3-day intensive training course from 14th to 16th November 2019, in Shillong for 30 teachers in the institutions run by the Christian Brothers. The teachers were educated about normal sexuality development, the changes of puberty, red flags in sexual behaviors, development of CSE curricula for preschool, primary, secondary and higher secondary schools, prevention of child sexual abuse and information on the POSCO laws. The program was well appreciated by all the participants, who will return to their parent institutions and undertake CSE sessions for staff, students and parents.

3. Discipline without Tears workshop: Dr. Nandita De Souza conducted a workshop on 12th October 2019 for the parents of the preschoolers at Nisha's Play School. The interactive session enabled parents to talk about the challenges of eliciting cooperation and provided valuable information on how playfulness and imagination can work like magic!

4. Toolkit for Smart Studying: During the Diwali vacation, Team Sethu conducted a workshop on 2nd November 2019, for students of Std 7-9 on how to study strategically and promote understanding, retention and exam performance.

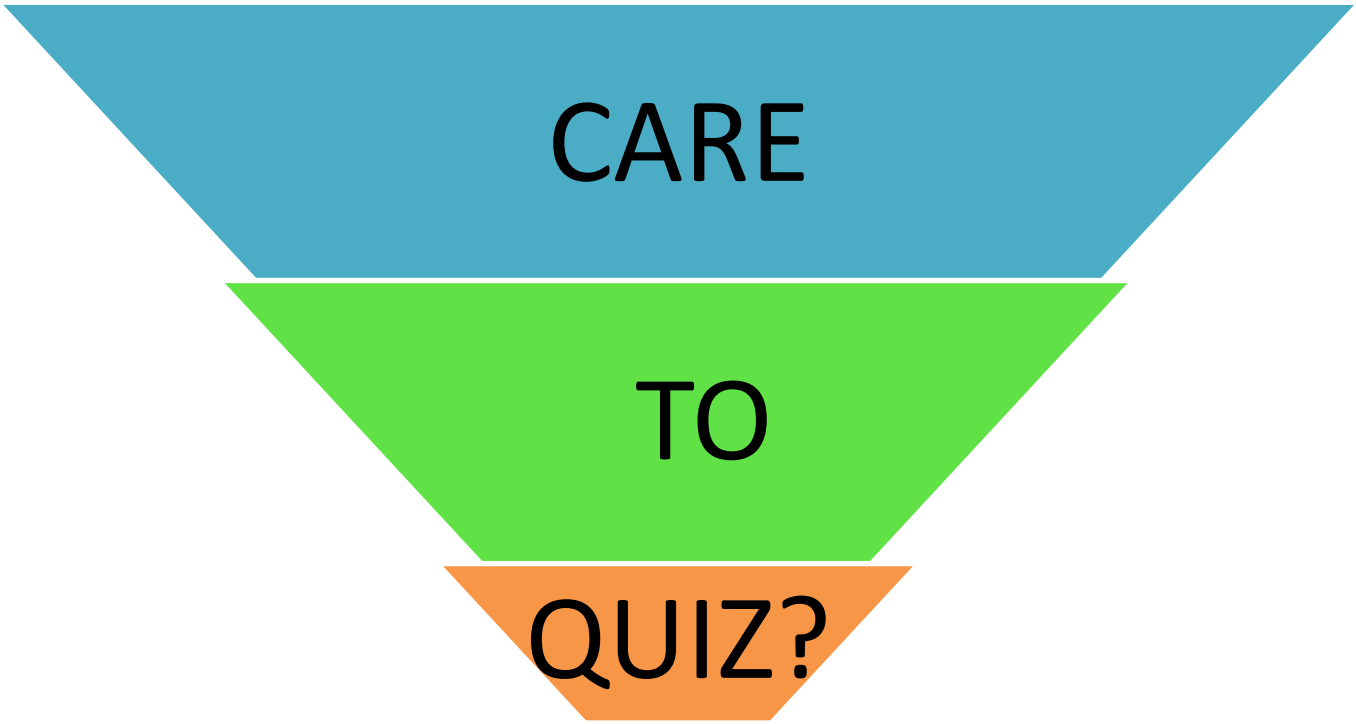
5. Workshops for Special Educators: On 30th October, Team Sethu conducted a CRE program on Transdisciplinary Approach to Multiple Disabilities for around 50 special educators across Goa. From 5th to 8th November, another series of training sessions on Functional Communication and Strategies for Teaching Children with Autism were held for the teachers of Sanjay School in Porvorim.

6. ADHD Parent support group: Parenting a child with ADHD is not easy and to ensure that families receive the support they require, Sethu has started monthly parent meetings during which training is imparted and families are given an opportunity to share their challenges and triumphs. During December 2019, the

topic of medication in the treatment of ADHD was discussed. Parents were able to gain knowledge about the advantages of medication, the mode of action, side effects, as well as clarify their doubts and concerns.

7. Recognition for Sethu: In recognition of its services to the community, on 19th December 2019, the Govt. of Goa bestowed the Goa State Award for Best NGO in the field of Disability on Sethu. The team at Sethu views this as a huge impetus to increase its efforts to reach out to every corner of Goa, together with the army of paediatricians and well-wishers who support our work.


S.F.X.



1. In Diabetic KETOACIDOSIS initial management is normal saline bolus. What is the rationale behind this?

    - Correct dehydration & make patient euvolemic
    - Reduce glucose level in blood
    - Improve end organ perfusion

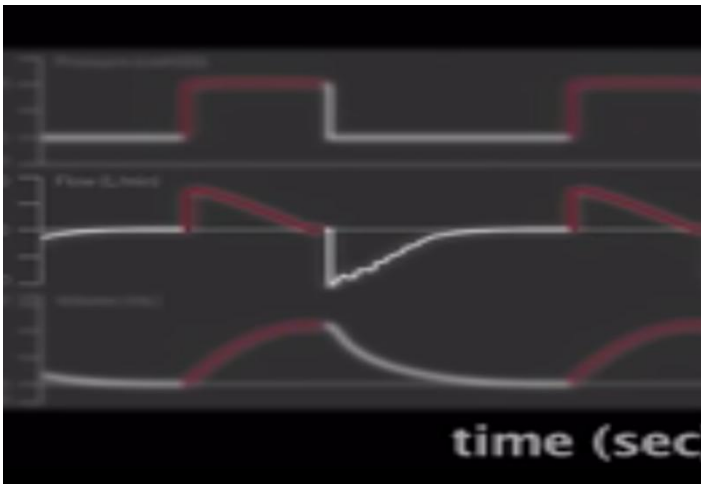
2. In Truncus Arteriosus cyanosis is due to
    - Shunts
    - Simple mixing of deoxygenated & oxygenated blood
    - Transposition of physiology

3. The _____part of the brain helps you to continue to pay attention(working memory) & control impulse

4. White papillary reflex is present in all except

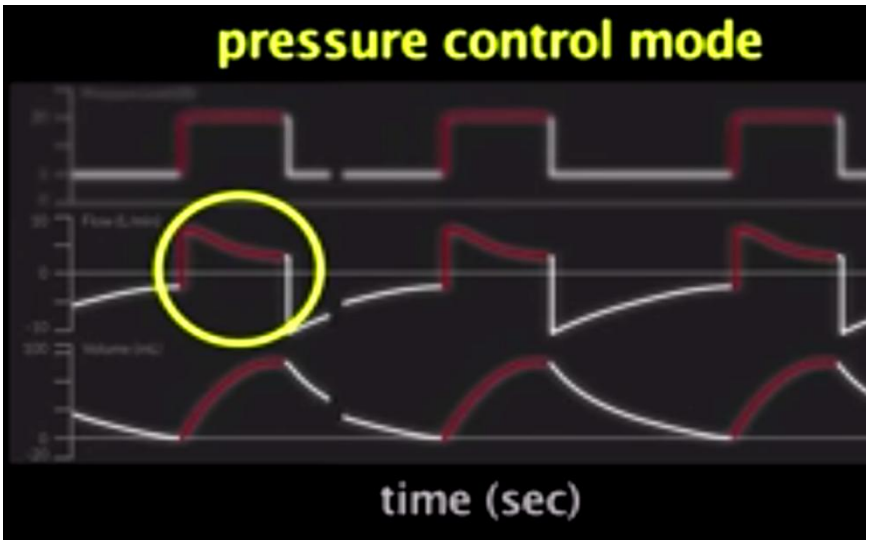
    - Retinoblastoma
    - Refractory error
    - Retinal detachment
    - Congenital Cataract

5. In this ventilator graphic screen interface waveform (pressure volume & flow waveform) what could be the most common cause of abnormality seen in exhalation curve of breath in flow waveform ?



6. He proposed the" multiple intelligence theory", which documents the extent to which students possess different kinds of minds & therefore learn ,remember, perform & understand in different ways
    - Eric Erikson
    - Lee Vygotsy
    - Howard Gardener
    - Jean Piaget

7. In the pressure control mode form what is the abnormality noted in this volume waveform
    - E.T. tube leak
    - Normal variant
    - Airflow obstruction (eg. Bronchospasm)
    - Ventilator malfunction



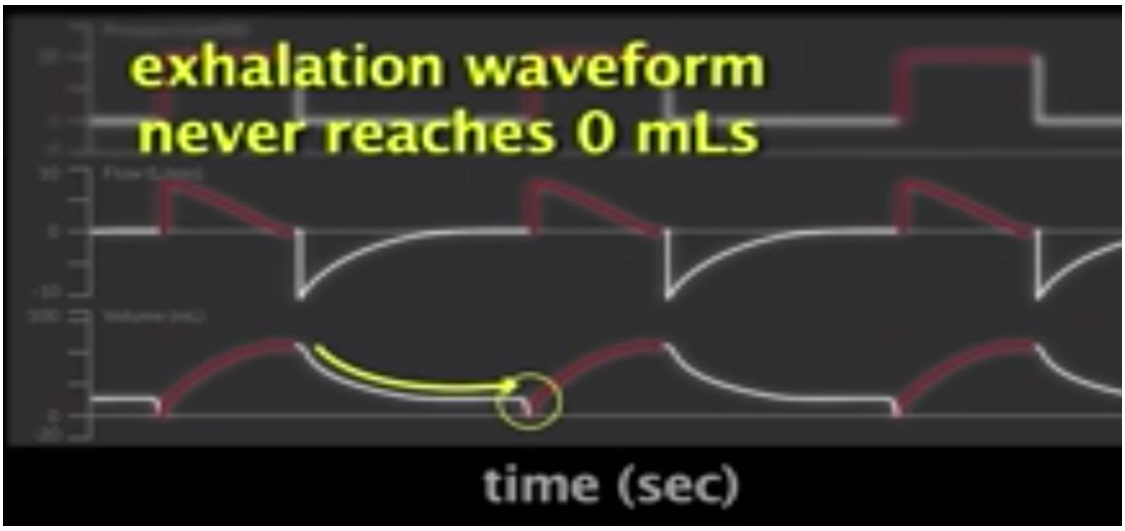
8. 1st line of management of congenital nasolacrimal duct block is
    - Surgery
    - Probing
    - Digital massage
    - Antibiotic drops

9. Asperger's disease is no longer classified as a disorder disability in DSM 5…….TRUE/FALSE

10. Which of the following does not fall under the umbrella of Autism Spectrum Disorder
    - Asperger's Syndrome
    - A.D.H.D.
    - Rett Syndrome
    - Pervasive Developmental Disorder

11. In this ventilator graphic interface what is the most common cause of exhalation volume waveform not reaching 0 mls

- E.T. Tube leak
- Airflow obstruction (eg. Broncospasm)
- Normal variant
- Breath stacking



Kindly mail your answers to **dr.celineandrade@gmail.com**