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Activities from

April 2019 to June 2019

Issue 7

GOA STATE CHAPTER

For Private Circulation

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SECRETARY'S ADDRESS

My fellow Paediatricians,

Hello and my warm greetings to you. The monsoons have finally arrived and although the weather is nice and cool, I am sure you all must be very busy looking after the unwell kids who are plagued with the different viral ailments going around.

In the last few weeks, we have witnessed much aggression against doctors in certain parts of the country and these events are likely to have made you ponder on your own safety among other things. We are fortunate we live in Goa where at least for now, the image of the doctor is held in good esteem and while not unheard off violence against doctors is not that frequent.

Let us continue to keep our young patients and their parents engaged with honest and effective communication and pray that our passion, hard work and dedication to this field is not dented in any way by fear or intimidation. We are the Goa IAP family so let us look out for each other.

We have organised a series of CME's this far and I hope you have found these helpful and interesting. Dr Arvind Almeida, Dr Kamlesh Kepkar and I are always available to listen to your feedback and any specific educational needs you may want covered. Please feel free to email us at iapgoastate@yahoo.com.

I would like to thank the editorial team for all their hard work in getting this bulletin up on time. Dr Kamlesh and I would like to acknowledge our dynamic president Dr Arvind for all his hard work towards IAP Goa programmes.

My friends, till we meet again be Safe, be Strong and most of all be Happy!

Dr Ryan Dias

Secretary, IAP Goa State Chapter

Editor's Note

Greetings All!

Monsoons are finally here and while the children excitedly enjoy the 'Monsoon Magic', we paediatricians are on the go working extra hours to deal with the flooding of patients with viral respiratory infections, diarrhoea and high grade fevers. Dealing with a large number of patients can be stressful yet rewarding as we get to learn patterns and crops of disease which makes it easier to arrive at a diagnosis with better confidence in every subsequent patient.

In the 7th issue of the IAP Goa state chapter e-bulletin we have touched up on topics such as acute rheumatic fever, new born hearing screening, developmental dysplasia of the hip, rotaviral vaccine roll-out in the UIP in Goa, which are of great concern in the health care of children.

I thank immensely all the members who have taken time off from their busy schedules to contribute to the learning process, on a special note Dr Anthony Nazareth, Dr Ira Almeida, Dr Harshad Kamat, Dr Bansi Khaunte and Dr Elyska De Sa, Dr Annely D'Lima and Dr Rohit Borkar.

A thunderous applause to all those who conducted activities in hospitals, OPDs, in clinics, at CMEs or at conferences and shared them on the e-bulletin→ 'YOUR WORDS INSPIRE HOPE AND ACTIONS HELP TO SAVE LIVES'.

In the words of Nelson Mandela "History will judge us by the difference we make in the everyday lives of children". So let us continue practicing paediatrics with **Healing Hands and Caring Hearts.**

Warm regards,

Dr Celina Andrade, Dr Priyanka Dhakankar, Dr Prity Shetye

Revisiting an old Foe - Acute Rheumatic Fever
Are we missing it?

- **Dr Harshad Kamat**
MD,DCH,DNB

Globally there are 30 million cases of RHD and alarmingly 27% are in India alone. The incidence in India is 100-200 cases of acute rheumatic fever/ Rheumatic heart disease per 100,000 children of school age group of 5-18 years. This is 100-200 times higher than the developed countries.

The clamour to revise the existing Jones criteria has been growing especially from the developing world.

The existing consensus statement of IAP on diagnosis and management of Acute Rheumatic Fever released in Indian Paediatrics July 2008 edition and a differing view from IB Vijaylaxmi of Shri Jayadeva institute of Cardiology, Bangalore- both make interesting reads.

- Eventually, what prompted the revision of Jones criteria was the acceptance of Subclinical Carditis (by 2D Echo) as a major criterion and the differential criteria used by ANZ board for high and low risk groups.

INDIAN PEDIATRICS 565 VOLUME 45—JULY 17, 2008

G U I D E L I N E S

Consensus Guidelines on Pediatric Acute Rheumatic Fever and Rheumatic Heart Disease

WORKING GROUP ON PEDIATRIC ACUTE RHEUMATIC FEVER AND CARDIOLOGY CHAPTER OF INDIAN ACADEMY OF PEDIATRICS

ABSTRACT

Justification: *Acute rheumatic fever and rheumatic chronic valvular heart disease is an important preventable cause of morbidity and mortality in suburban and rural India. Its diagnosis is based on clinical criteria. These criteria need verification and revision in the Indian context. Furthermore, there are glaring differences in management protocols available in literature. These facts prompted Indian Academy of Pediatrics to review the management of rheumatic fever.* ***Process:*** *Management of Rheumatic fever was reviewed and recommendation was formulated at national consultative meeting on 20th May 2007 at New Delhi.* ***Objectives:*** *To formulate uniform guidelines on management of acute rheumatic fever and rheumatic heart disease in the Indian context. Guidelines were formulated for the management of streptococcal pharyngitis, acute rheumatic fever and its cardiac complication as well as secondary prophylaxis for recurrent episodes.* ***Recommendations:*** *(1) Streptococcal eradication with appropriate antibiotics (Benzathine penicillin single dose or penicillin V oral or azithromycin). (2) Diagnosis of rheumatic fever based on Jones criteria. (3) Control inflammatory process with aspirin with or without steroids (total duration of treatment of 12 weeks). (4) Treatment of chorea according to severity (therapy to continue for 2-3 weeks after clinical improvement). (5) Protocol for managing cardiac complication like valvular heart disease, congestive heart failure and atrial fibrillation. (6) Secondary prophylaxis with benzathine penicillin and management of anaphylaxis.*

Keywords: Acute rheumatic fever, Guidelines, India, Practice, Rheumatic heart disease.

ACUTE RHEUMATIC FEVER: CURRENT SCENARIO IN INDIA

IB Vijayalakshmi, *Bengaluru*

INTRODUCTION

Acute rheumatic fever (ARF) and its long term sequel, rheumatic heart disease (RHD) is a major health problem in children, adolescents and young adults.[1] Despite the tremendous progress made in cardiology, the menace of morbidity and mortality due to acute rheumatic fever and its consequences remain very high in India.[2] Because of the preoccupation of the cardiologist with adult cardiac disease like ischemic heart disease, the problems of ARF/RHD have been sidelined and studies on prevalence, treatment and prevention receive only scant attention and only exotic palliative methods such as balloon mitral valvotomy, valve/replacement have become the centre stage in India.[3,4]

Precise diagnosis of acute rheumatic fever has presented problems since Hippocrates, who provided the first written description of arthritis in man in 400 BC.[5] Lack of specific criteria had led to diagnostic chaos until the Jones criteria in 1944.[6] Despite the Jones criteria and four revisions and modifications,[7-9] ARF is either under diagnosed leading to nearly 50% of established RHD not receiving prophylaxis or over diagnosed by depending on traditional characteristic auscultatory findings for diagnosing carditis. Unfortunately modern facility like echocardiography (ECHO) is not included in Jones criteria, despite the fact that ECHO can help to diagnose carditis more frequently than auscultatory findings.[9,10] Early diagnosis of ARF though difficult is very important to prevent the serious consequences in young.

PITFALLS IN JONES CRITERIA

The precise diagnosis of carditis in ARF is eluding the clinician because of many pitfalls in Jones criteria.

1. It is difficult to diagnose ARF when carditis is the only manifestation of the disease particularly in a recurrence.
2. When patient has sub clinical carditis the clinicians fail to detect clinically
3. Clinically apparent carditis is present but supportive minor criteria are not fulfilled.[30]
4. When previous cardiac status is unknown it is not possible to know in a new case whether the findings are due to acute carditis or it is recrudescence or it is established old case of RHD.

Table 4: Vijaya's Echo Criteria

Sl. No	Echo feature	Score
1	Mitral valve and aortic valve thickness ≥ 4 mm	2
2	Increased echogenicity of submitral structures	2
3	Rheumatic nodules (beaded appearance)	2
4	Mitral valve prolapse /aortic valve prolapse/tricuspid valve prolapse	2
5	Mitral regurgitation and / aortic regurgitation/tricuspid re-gurgitation	2
6	Reduced mobility of valves	2
7	Chordal tear	2
8	Pericardial effusion	2
	Total score	16

HOW SPECIFIC AND SENSITIVE IS VIJAYA'S ECHO CRITERIA?

'Vijaya's ECHO criteria' proposed for the precise diagnosis of both 'clinical carditis' and 'sub clinical valvulitis' has 81% sensitivity with 93% specificity.[29]

Why Revision of Jones criteria was needed

ANZ (Australia and New Zealand) health boards started in 2012, stratified criteria due to variance in the ethnic groups of aborigines, maoris, pacific islanders

- Epidemiological stratification of low v/s moderate to high risk groups
- Echo diagnosis of subclinical carditis

- In moderate to high risk group- Monoarthritis, polyarthralgia as major criteria; monoarthralgia- minor
- Revision of minor criteria to become more sensitive in the mod to high risk group
- 3 minor criteria are sufficient for diagnosis of acute rheumatic fever in patients with previous Rheumatic fever

Table III. Major changes in Jones criteria over the years

Sl. No.	Manifestations	Original Jones criteria 1944	AHA modified 1956	AHA update 1992	Revised Jones criteria AHA 2015
1.	Carditis	Major	Major	Major	Major
2.	Long PR		Minor	Minor	Minor
3.	Arthritis		Major	Major	**Major:** *Low risk area-* Polyarthritis only *High risk area-* Polyarthritis & Monoarthritis
4.	Arthralgia	Major	Minor	Minor	**Major:** *High risk area*-Polyarthralgia **Minor:** *Low risk area-* Polyarthralgia *High risk area*-Monoarthralgia
5.	Subcutaneous nodules	Major	Major	Major	Major
6.	Chorea	Major	Major	Major	Major
7.	Erythema marginatum	Minor	Major	Major	Major
8.	Pre-existing RF/RHD	Major	Minor	Minor	
9.	Fever, WBC, ESR,CRP	Minor	Minor	Minor	**Minor:** *Low risk area:* Fever ≥38.5°C, ESR≥60mm, CRP≥3mg/dL *High risk area:* Fever ≥38°C, ESR≥30mm, CRP≥3mg/dL
10.	Epistaxis, Abdominal pain, anemia	Minor			
11.	Recent streptococcal infection		Minor	Special consideration	Special consideration
12.	Subclinical carditis				Major

- ARTHRITIS- 75%

Knees, ankles, wrists and elbow joints are most commonly affected. The spine, small joint, hips and shoulder involvement is uncommon. The pain is a fleeting pain with dramatic response to aspirin within 48 hours. The arthritis corresponds to the peak ASO titre.

Change- (in mod to high risk group)
Monoarthritis, polyarthralgia –major
Monoarthralgia -minor

In some studies, 10-17% of Acute Rheumatic Fever (in high risk group) had monoarthritis.

- CARDITIS- 50-60%

Pancarditis- involving myocardium, pericardium, endocardium.
Endocarditis (valvulitis) is a **universal finding** in Rheumatic carditis.
Myocarditis and/or pericarditis without valvulitis are almost never seen in ARF (usually viral, immune, drug etc).

In the acute phase mitral regurgitation, mitral and aortic regurgitation are seen. Stenotic lesions are seen much later. Clinical features such as tachycardia, murmur, myocardial dysfunction, pericardial involvement are seen.

- **SUBCLINICAL CARDITIS-**(no murmur clinically, but e/o valvulitis on Echo). Incidence is 5-29% in various studies

Table II. Revised Jones criteria 2015[12]

Level of risk	Major	Minor
Low risk (RF incidence ≤2/ 100,000 school-aged children or all-age RHD prevalence of ≤1/1,000 population/ year)	• Carditis - Clinical and/or subclinical • Arthritis - Polyarthritis only • Chorea • Erythema marginatum • Subcutaneous nodules	• Polyarthralgia • Fever (≥38.5 °C) • Erythrocyte sedimentation rate (ESR) ≥60 mm in the first hour and/or C-Reactive protein (CRP) ≥3.0 mg/dL • Prolonged PR interval (unless carditis is a major criterion)
Moderate and high risk (RF incidence >2/100,000 school-aged children or all-age RHD prevalence of >1/1,000 population/ year)	• Carditis - Clinical and/or subclinical • Arthritis - Monoarthritis or polyarthritis- Polyarthralgia • Chorea • Erythema marginatum • Subcutaneous nodules	• Monoarthralgia • Fever (≥38 °C) • ESR ≥30 mm/hour and/or CRP ≥3.0 mg/dL • Prolonged PR interval (unless carditis is a major criterion)
Initial attack of ARF - two major manifestations or one major plus two minor manifestations with evidence of preceding GAS infection. *Recurrent RF - two major or one major and two minor or three minor manifestations are sufficient with evidence of preceding GAS infection.* *Exceptions for evidence of preceding GAS infection - chorea and chronic indolent rheumatic carditis with insidious onset and slow progression.*		

Table IV. Doppler findings for pathological regurgitation

	Pathological mitral regurgitation (all 4 criteria met)	Pathological aortic regurgitation (all 4 criteria met)
1.	Seen in at least 2 views	Seen in at least 2 views
2.	Jet length ≥2 cm in at least 1 view	Jet length ≥1 cm in at least 1 view
3.	Peak velocity ≥3 m/s	Peak velocity ≥3 m/s
4.	Pan systolic jet in at least 1 envelope	Pan diastolic jet in at least 1 envelope

Minor criteria

- Fever >38degrees Celsius
- Monoarthralgia
- Lab - ESR>30; &/or CRP>3mg/dl
- PR prolongation - 3-12y>0.16sec, 12-16y>0.18sec, above 17y> 0.20sec
- (PS- leucocytosis not mentioned now)
- **Mandatory**—ASO (>333 children>250 adults), anti DnaseB (>1:60 preschool>1:480 school age>1:340 adults), antihyaluronidase, RADT, Culture

Key Points

- If arthritis is a major criterion, arthralgia cannot be a minor criterion.
- If carditis major, PR prolongation cannot be a minor criterion.
- Erythema Marginatum and Subcutaneous Nodules, if by themselves alone as major criteria, review is necessary as many other conditions can cause them.
- If diagnosis is doubtful do not use NSAIDs. Paracetamol is preferable for pain relief.
- Polyarthralgia is a nonspecific feature, hence exclude other causes like viral, autoimmune, reactive arthropathies.
- Low ASO titres in suspected cases, need to be repeated after 1-2 weeks.
- Normal ESR/CRP- should prompt serious reconsideration of Acute Rheumatic fever (exception Chorea).
- Whenever there is a genuine uncertainty of diagnosis, the consensus statement is secondary prophylaxis for 1 year, followed by detailed review i.e. history, physical examination and Echo.

Table 6. Differential Diagnosis of Arthritis, Carditis, and Chorea

Arthritis	Carditis	Chorea
Septic arthritis (including gonococcal)	Physiological mitral regurgitation	Drug intoxication
Connective tissue and other autoimmune diseases such as juvenile idiopathic arthritis	Mitral valve prolapse	Wilson disease
Viral arthropathy	Myxomatous mitral valve	Tic disorder
Reactive arthropathy	Fibroelastoma	Choreoathetoid cerebral palsy
Lyme disease	Congenital mitral valve disease	Encephalitis
Sickle cell anemia	Congenital aortic valve disease	Familial chorea (including Huntington disease)
Infective endocarditis	Infective endocarditis	Intracranial tumor
Leukemia or lymphoma	Cardiomyopathy	Lyme disease
Gout and pseudo gout	Myocarditis, viral or idiopathic	Hormonal
Poststreptococcal reactive arthritis	Kawasaki disease	Metabolic (eg, Lesch-Nyhan, hyperalaninemia, ataxia telangiectasia)
Henoch-Schonlein purpura		Antiphospholipid antibody syndrome
		Autoimmune: Systemic lupus erythematosus, systemic vasculitis
		Sarcoidosis
		Hyperthyroidism

TREATMENT

2008 IAP consensus guidelines

- Aspirin to be given for 12 weeks

Start at 100 mg/kg/day for 2-3 weeks then taper to 60-70 mg/kg/day – total 12 weeks.
(Regime 2- aspirin 50-60 mg/kg/day for 12 weeks)

- Naproxen 10-20 mg/kg/day should be used in patients with aspirin intolerance.

In cases where there is no response to aspirin in 4 days switch to steroids

(Text book of Nelson-
Aspirin 50-70mg/kg/day divided doses for 3-5 days .Then, 50mg/kg/day in 4 divided doses for 3 weeks. Then 25 mg/kg/day in 4 divided doses for 3 weeks)

In Carditis, Prednisolone should be used 2mg/kg/day in 4 divided doses for 2-3 weeks, then half for next 2-3 weeks, then taper off by 2.5-5mg/day every 2-3 days. Add aspirin when tapering steroids to prevent rebound of inflammation. Nonresponders to prednisolone require Intravenous Methyl prednisolone - 30 mg/kg/day for 3 days
Reappearance of symptoms, ESR elevation after completion of therapy= rebound, in which case increased doses are required.

AHA Scientific Statement

Revision of the Jones Criteria for the Diagnosis of Acute Rheumatic Fever in the Era of Doppler Echocardiography

A Scientific Statement From the American Heart Association

Endorsed by the World Heart Federation

Michael H. Gewitz, MD, FAHA, Co-Chair; Robert S. Baltimore, MD, Co-Chair; Lloyd Y. Tani, MD, FAHA; Craig A. Sable, MD, FAHA; Stanford T. Shulman, MD; Jonathan Carapetis, MBBS; Bo Remenyi, MBBS; Kathryn A. Taubert, PhD, FAHA; Ann F. Bolger, MD, FAHA; Lee Beerman, MD; Bongani M. Mayosi, MBChB; Andrea Beaton, MD; Natesa G. Pandian, MD; Edward L. Kaplan, MD, FAHA; on behalf of the American Heart Association Committee on Rheumatic Fever, Endocarditis, and Kawasaki Disease of the Council on Cardiovascular Disease in the Young

Background—Acute rheumatic fever remains a serious healthcare concern for the majority of the world's population despite its decline in incidence in Europe and North America. The goal of this statement was to review the historic Jones criteria used to diagnose acute rheumatic fever in the context of the current epidemiology of the disease and to update those criteria to also take into account recent evidence supporting the use of Doppler echocardiography in the diagnosis of carditis as a major manifestation of acute rheumatic fever.

Methods and Results—To achieve this goal, the American Heart Association's Council on Cardiovascular Disease in the Young and its Rheumatic Fever, Endocarditis, and Kawasaki Disease Committee organized a writing group to comprehensively review and evaluate the impact of population-specific differences in acute rheumatic fever presentation and changes in presentation that can result from the now worldwide availability of nonsteroidal anti-inflammatory drugs. In addition, a methodological assessment of the numerous published studies that support the use of Doppler echocardiography as a means to diagnose cardiac involvement in acute rheumatic fever, even when overt clinical findings are not apparent, was undertaken to determine the evidence basis for defining subclinical carditis and including it as a major criterion of the Jones criteria. This effort has resulted in the first substantial revision to the Jones criteria by the American Heart Association since 1992 and the first application of the Classification of Recommendations and Levels of Evidence categories developed by the American College of Cardiology/American Heart Association to the Jones criteria.

Conclusions—This revision of the Jones criteria now brings them into closer alignment with other international guidelines for the diagnosis of acute rheumatic fever by defining high-risk populations, recognizing variability in clinical presentation in these high-risk populations, and including Doppler echocardiography as a tool to diagnose cardiac involvement.

Table 1. Applying Classification of Recommendations and Level of Evidence.

ESTIMATE OF CERTAINTY (PRECISION) OF TREATMENT EFFECT	SIZE OF TREATMENT EFFECT: CLASS I *Benefit >>> Risk* Procedure/Treatment **SHOULD** be performed/administered	CLASS IIa *Benefit >> Risk* *Additional studies with focused objectives needed* **IT IS REASONABLE** to perform procedure/administer treatment	CLASS IIb *Benefit ≥ Risk* *Additional studies with broad objectives needed; additional registry data would be helpful* Procedure/Treatment **MAY BE CONSIDERED**	CLASS III *No Benefit* or CLASS III *Harm* COR III: No benefit — Procedure/Test: Not Helpful — Treatment: No Proven Benefit COR III: Harm — Procedure/Test: Excess Cost w/o Benefit or Harmful — Treatment: Harmful to Patients
LEVEL A Multiple populations evaluated* Data derived from multiple randomized clinical trials or meta-analyses	■ Recommendation that procedure or treatment is useful/effective ■ Sufficient evidence from multiple randomized trials or meta-analyses	■ Recommendation in favor of treatment or procedure being useful/effective ■ Some conflicting evidence from multiple randomized trials or meta-analyses	■ Recommendation's usefulness/efficacy less well established ■ Greater conflicting evidence from multiple randomized trials or meta-analyses	■ Recommendation that procedure or treatment is not useful/effective and may be harmful ■ Sufficient evidence from multiple randomized trials or meta-analyses
LEVEL B Limited populations evaluated* Data derived from a single randomized trial or nonrandomized studies	■ Recommendation that procedure or treatment is useful/effective ■ Evidence from single randomized trial or nonrandomized studies	■ Recommendation in favor of treatment or procedure being useful/effective ■ Some conflicting evidence from single randomized trial or nonrandomized studies	■ Recommendation's usefulness/efficacy less well established ■ Greater conflicting evidence from single randomized trial or nonrandomized studies	■ Recommendation that procedure or treatment is not useful/effective and may be harmful ■ Evidence from single randomized trial or nonrandomized studies
LEVEL C Very limited populations evaluated* Only consensus opinion of experts, case studies, or standard of care	■ Recommendation that procedure or treatment is useful/effective ■ Only expert opinion, case studies, or standard of care	■ Recommendation in favor of treatment or procedure being useful/effective ■ Only diverging expert opinion, case studies, or standard of care	■ Recommendation's usefulness/efficacy less well established ■ Only diverging expert opinion, case studies, or standard of care	■ Recommendation that procedure or treatment is not useful/effective and may be harmful ■ Only expert opinion, case studies, or standard of care

1. It is reasonable to consider individuals to be at low risk for ARF if they come from a setting or population known to experience low rates of ARF or RHD *(Class IIa; Level of Evidence C)*.
2. It is reasonable that where reliable epidemiological data are available, low risk should be defined as having an ARF incidence <2 per 100 000 school-aged children (usually 5–14 years old) per year or an all-age prevalence of RHD of ≤1 per 1000 population per year *(Class IIa; Level of Evidence C)*.
3. Children not clearly from a low-risk population are at moderate to high risk depending on their reference population *(Class I; Level of Evidence C)*.

1. Echocardiography with Doppler should be performed in all cases of confirmed and suspected ARF *(Class I; Level of Evidence B)*.
2. It is reasonable to consider performing serial echocardiography/Doppler studies in any patient with diagnosed or suspected ARF even if documented carditis is not present on diagnosis *(Class IIa; Level of Evidence C)*.
3. Echocardiography/Doppler testing should be performed (strictly fulfilling the findings noted in Tables 2 and 3) to assess whether carditis is present in the absence of auscultatory findings, particularly in moderate- to high-risk populations and when ARF is considered likely *(Class I; Level of Evidence B)*.
4. Echocardiography/Doppler findings not consistent with carditis should exclude that diagnosis in patients with a heart murmur otherwise thought to indicate rheumatic carditis *(Class I; Level of Evidence B)*.

1. At present, consideration that monoarthritis may be part of the ARF spectrum should be limited to patients from moderate- to high-risk populations *(Class I; Level of Evidence C)*.

1. The inclusion of polyarthralgia as a major manifestation is applicable only for moderate- or high-incidence populations and only after careful consideration and exclusion of other causes of arthralgia such as autoimmune, viral, or reactive arthropathies (Table 6) *(Class IIb; Level of Evidence C)*.

1. Increased or rising anti-streptolysin O titer or other streptococcal antibodies (anti-DNASE B) *(Class I; Level of Evidence B)*.[38] A rise in titer is better evidence than a single titer result.
2. A positive throat culture for group A β-hemolytic streptococci *(Class I; Level of Evidence B)*.[38]
3. A positive rapid group A streptococcal carbohydrate antigen test in a child whose clinical presentation suggests a high pretest probability of streptococcal pharyngitis *(Class I; Level of Evidence B)*.[38]

1. With a reliable past history of ARF or established RHD, and in the face of documented group A streptococcal infection, 2 major or 1 major and 2 minor or 3 minor manifestations may be sufficient for a presumptive diagnosis *(Class IIb; Level of Evidence C)*.
2. When minor manifestations alone are present, the exclusion of other more likely causes of the clinical presentation is recommended before a diagnosis of an ARF recurrence is made *(Class I; Level of Evidence C)*.

1. Where there is genuine uncertainty, it is reasonable to consider offering 12 months of secondary prophylaxis followed by reevaluation to include a careful history and physical examination in addition to a repeat echocardiogram *(Class IIa; Level of Evidence C)*.
2. In a patient with recurrent symptoms (particularly involving the joints) who has been adherent to prophylaxis recommendations but lacks serological evidence of group A streptococcal infection and lacks echocardiographic evidence of valvulitis, it is reasonable to conclude that the recurrent symptoms are not likely related to ARF, and discontinuation of antibiotic prophylaxis may be appropriate *(Class IIa; Level of Evidence C)*.

Developmental Dysplasia of the Hip (DDH/CDH)- Screening and Prevention

- Dr. Bansi Khaunte

Fellowship in Paediatric Orthopaedics (MUHS, SIOR-Pune)

Paediatric Orthopaedic Surgeon

As mentioned in the title the terminology has changed over period of time from Congenital dislocation of hip (CDH) to Developmental Dysplasia of hip (DDH). The latter term allows us to understand the condition as a sequence of events rather than an acute condition. The spectrum varies from frank dislocation to mere instability without any deformity.

A concentric well covered stable femoral head is necessary for a normal painless gait. Failure to achieve a normal hip increases chances of a limp and painful early osteoarthritis needing early total hip replacement, and even the best one restricts you from strenuous activities (sports), squatting or sitting cross legged (palthy).

Unfortunately we do not have data on DDH in our country and we largely rely on foreign literature to tackle this particular condition. In current literature when we compare prevalence of DDH, where ultrasound is not routinely used for screening (0.8 to 1.6 per 1000 live births) against where ultrasound is used (1.6 to 66 per 1000 live births) , it is almost 40 times higher in the latter. This higher incidence may be due to variable definitions of DDH or over diagnosis.

Ideal screening technique is still controversial.

The incidence of late diagnosis of DDH, i.e. one needing surgical intervention, has not decreased in UK in past 35 years of introduction of National selective screening programmes, was recently published in 2019.

Recent Cochrane review also reveals inconsistencies about the approach to screening of DDH. Universal new born clinical or ultrasonographic screening has not reduced the incidence of late diagnosis of DDH .Universal ultrasound screening has shown 90 % of unstable hips in new-borns spontaneously become normal later and increased rates of unnecessary treatments. Similarly majority of ‘clicky’ hips in new-borns spontaneously resolve within a week.

"*Where infants are clinically detected as having unstable but not dislocated hips, or are detected on ultrasound to have mild hip dysplasia, there is evidence that delaying treatment by two to eight weeks reduces the need for treatment without a significant increase in late diagnosed dysplasia or surgery".*

In the neonatal period we have to look for syndromic / teratological dislocations e.g. Arthrogryposis multiplex congenita.

Hence all kind of screening programmes in immediate postnatal period have not shown any significant decrease in late diagnosis of DDH. This was mentioned by Tanabe et al in Japan depicting irrelevance of mass screening.

In the following diagram the larger circle depicts children with positive clicks at birth, smaller circle indicates number of children having unstable hips at one year of age. Figure A shows actual relation of cases (shaded area depicts unstable hips at one year with instability at birth). Figure B. Shows imaginary relation warranting mass screening.

Fig A. Actual

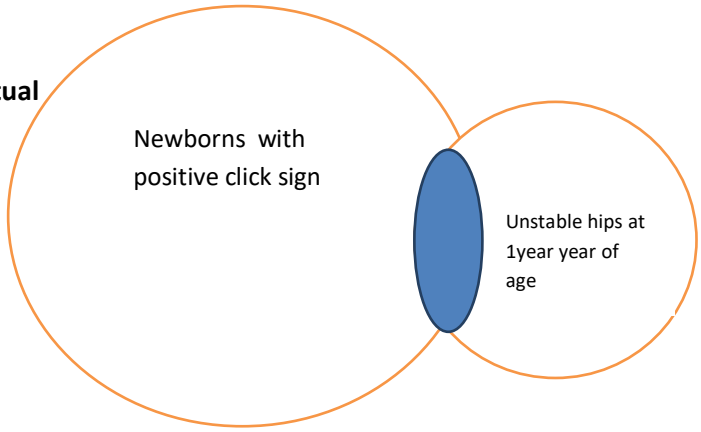
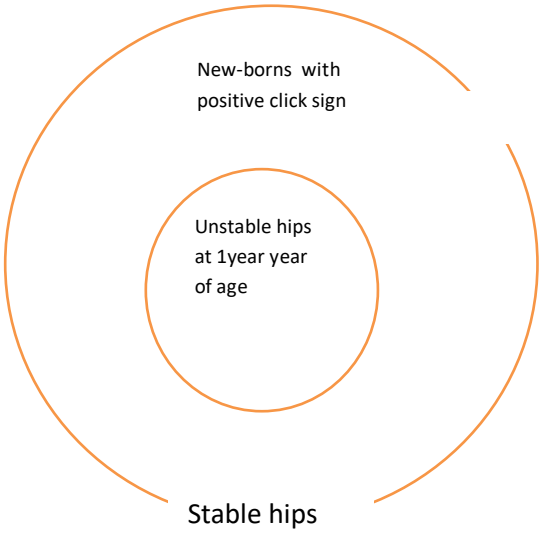


Fig B. Imaginary



Hence screening cannot stop at birth and has to be continued till the walking age.

Now the question arises, are we, clinicians missing something? Are we focused on objective static parameters?

We have an understanding that etiology is multifactorial, however in 75% of the cases, there are no risk factors in retrospect.

The risk factors are First born, female child, Breech presentation, Family history.

Late dysplasia has been observed in up to 30 %of patients with breech delivery. In addition to the four mentioned above Hyperlaxity and Malpositioning post-natally, and /or in infancy are factors contributing to the condition.

Explanation for these two factors is as follows

The hips in children have 40-50 degrees of fixed flexion deformity .This implies hip flexors and hamstrings are tight, not allowing straightening (extension) of hips .This may be a cause or effect of intrauterine positioning, this is altered in breech presentation, observed as a risk factor . Countering this attitude lends us in problems. Hence forceful extension of hips in neonatal period during swaddling has to be avoided.

I do not agree with the thought of increasing incidence of dysplasia due to adduction, because intra uterine positioning is hips flexed, adducted and internally rotated. This flexion of hips gradually decreases over period of time where disappearance of flexion deformity coincides with standing, that is beyond 8-9 months of age. Hyperlaxity may have loose hip capsule thus allowing the hip to slide out of the acetabulum.

When we examine the child during well baby follow ups at 3-5months we can see for Matsudo criteria for risk assessment.

Matsudo criteria for risk assessment

Sr. no	Examination	Points
1	Click sign	3
2	Limited hip flexion and abduction	2
3	Asymmetry of thigh crease	1
4	Family history	1
5	Female sex	1
6	Breech presentation	1
X-ray (pelvis with both hips AP and frog leg lateral view) or Hip Ultrasound at the age of 3-5 months if ≥ 3 points		

Each criterion has been given points as mentioned. 3 or more points necessitate x-ray/ ultrasonography and/or referral to Paediatric Orthopaedic surgeon. Ortolani and Barlow manoeuvres are done to assess for click sign. Normal hip abduction in children varies from 70-90 degrees. Rest are fairly self-explanatory.

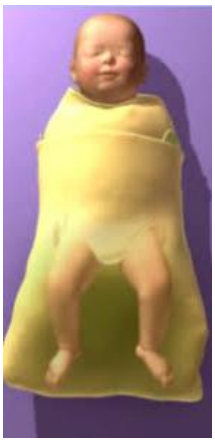
In addition to these, in case of unilateral DDH difficult abduction while wearing diapers, positive Galeazzi sign, limb length discrepancy in pre ambulatory phase and later, externally rotated limb or dragging one foot compared to another may be the presentation.

In case of bilateral DDH, delayed standing/walking with other gross motor milestones normal. It is easier to miss bilateral DDH than a unilateral one due to lack of asymmetry.

It is well documented that swaddling with in hip extension in Navajo tribes of North America, and previously in Japan, increases incidence of DDH. It is also documented that Africans have a deep acetabular socket and hence gives immunity from DDH. However it is also postulated that the piggy back, or holding on hips with child's hips widely abducted may be the reason for low incidence of DDH, which is synonymous with "Hander Marpanchem" in Konkani Language.

International Hip dysplasia institute (hipdysplasia.org) has videos about hip healthy baby holding techniques.

In 1975 Yamamuro documented decrease in Incidence of DDH from 1.1%-3.5% in 1965 to 0.2% in 1975 by introducing healthy swaddling techniques. That's a 10 fold decrease in incidence.



(hipdysplasia.org)

Thus in addition to screening, hip healthy swaddling and carrying technique education can act as **mass immunisation** against DDH. Healthy swaddling would include avoidance of extension, loose enough to allow limb movement inside and tight enough to prevent Moro's reflex and promote sleep. After 3 months when baby starts holding the neck, "Hander Marpachem (Konkani)" is the intervention I have started in my clinical practice where I explain the need for flexion and wide abduction of child's hips while holding up. Before neck holding whenever the baby is being carried against the chest, child's lower limbs have to be kept wide apart in abduction (hipdysplasia.org.).

Archaically this has been the practice in this part of the world; however, currently I have observed a consensus against holding children with hips widely

abducted, usually fearing physiological genu varum (bow legs) and not often reluctance.

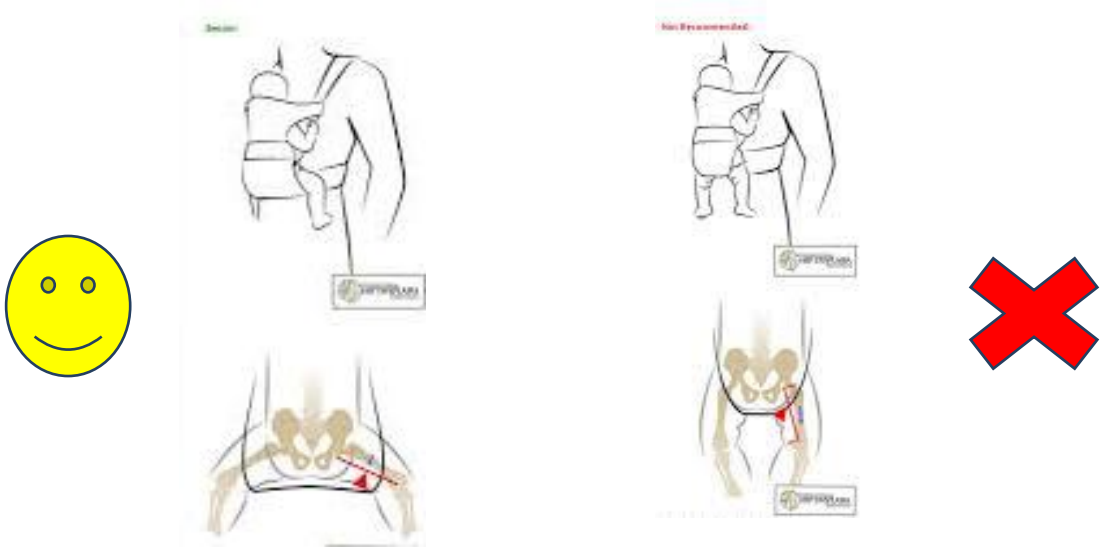
Holding children straight up or lower limbs asymmetrically is not advisable, since we tend to counter the inherent hip flexor tone, thus risking normal development of hips. I have also noticed asymmetrical anteversion of femur, who present as asymmetrical in toeing /out toeing of feet in ambulatory kids, which I am postulating to unhealthy and asymmetrical baby carrying habits (research paper in making).

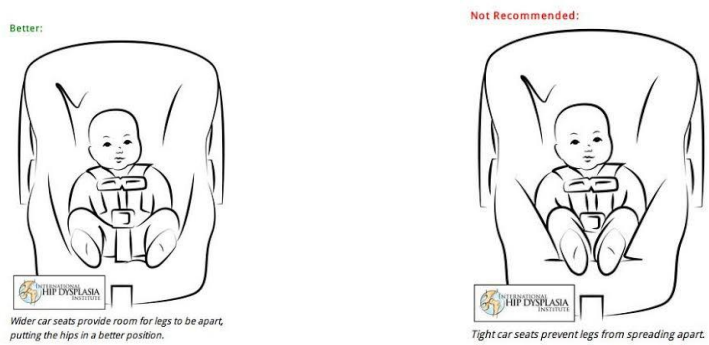
Key Messages

Screening to be continued till walking age

Healthy hip swaddling technique sensitisation.

Healthy Hip carrying technique sensitisation - “Hander Marpachem”.





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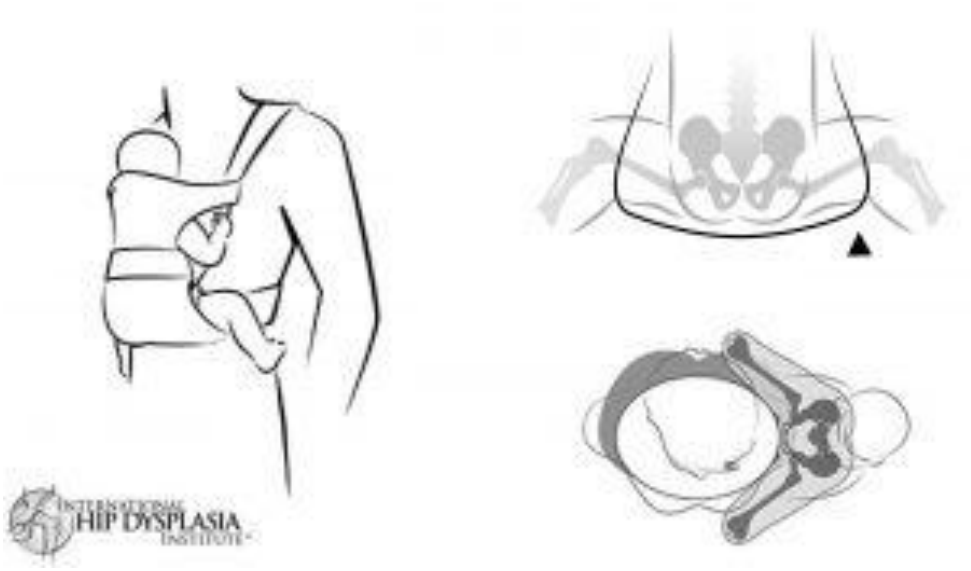
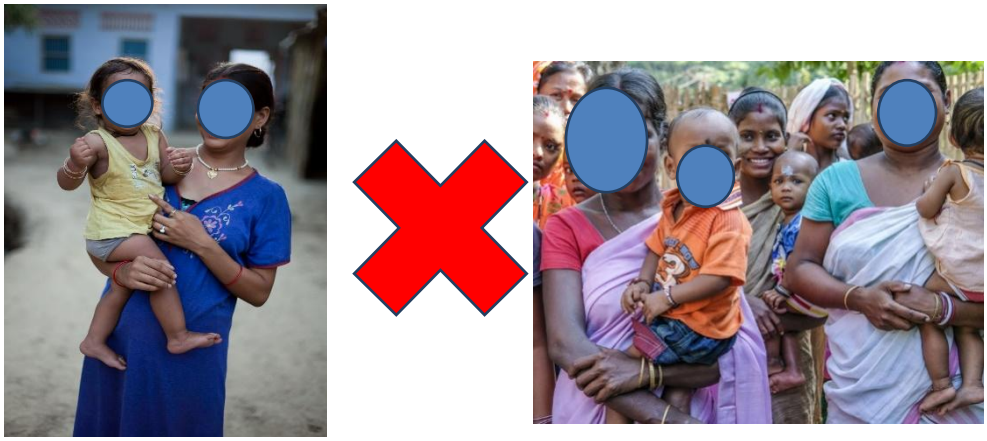


((hipdysplasia.org)

Symmetrical, hips flexed and abducted. Recommended



Asymmetrical and hip in extension. Not recommended.

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THE GENTLEMAN PEDIATRICIAN

'Not all heroes wear capes, some also wear coats'

"Doctor, my son does not want to pursue a career in medicine!" an anxious mother barging into a busy doctor's OPD, stated.

The doctor asked "Why should that worry you? There are so many career options available, let him choose what he has a liking for."

"No Doctor! I have come to say 'Sorry' & 'Thank you' to you."

Quiet perplexed the doctor replied "I don't understand Madam…..

She interrupted "His reason doctor for not wanting to be a doctor….

"Which is?"

"He said, I couldn't be like Dr. Nazareth! I have seen, how you have harassed and pestered him over the years. I don't have that kind of patience. So medicine isn't for me!"

That's why I have come to thank you for bearing up with me and always being polite"

That in short describes the quiet unassuming, very polite Dr. Nazareth.

Born on 5th April 1949 in Belgaum, Sir did his schooling in Holy Cross School, Bastora and then in St Joseph's European High School, Bangalore. He excelled in all subjects except in Math, where he was at the bottom of the class, a condition which changed when a new teacher came and taught with such passion that the next exam saw Sir coming 1st in Math too!!!

Being smaller than the other children in his class, he was considered a weakling, an opinion which was demolished because Sir excelled at most sports be it football, hockey, basketball & long distance running. Sir fondly remembers his First Holy Communion when the priest asked him to say his two times table and he went on reciting them, till he reached 2 times 10. When no one stopped him he went on reciting till 2 times 18, much to the surprise of the gathered guests!

Dr. Nazareth did his Higher Secondary at Xavier's, and completed MBBS in 1972 & DCH in 1976 at Goa Medical College (GMC). GMC then was situated in Panaji with the gynaecology department still in Ribander. During his residency neonatal tetanus was very common, which fortunately we don't see any longer. There were also a lot of cases of TB meningitis then, the incidence of which has reduced too! Though not many allergic conditions were seen then.

After completing his DCH, Sir worked for 2 years in the blood bank before starting his private practice in 1978. A unique thing about Dr. Nazareth's practice is that he has kept records of all his patients right from the beginning! That's 41 years! So if your parents ever took you to Dr. Nazareth your records would be there too!

If not a doctor then….. Sir would have been a teacher as he wanted to inspire and guide young minds.

Role model: His mother….who left sir at the ripe age of 104! Sir fondly remembers his mother who at the age of 85 walked 3 kilometers carrying a 2 kg can of oil!

Advice to young paediatricians: Work hard, study harder & don't stop learning. If you can get into research, try it and maintain records.

Advice for younger doctors starting private practice : Communicate well with patients, make the patient knowledgeable of small symptoms and how to tackle them so you don't get night calls. Money will come, don't run after it and stay abreast with changes in paediatrics.

About ageing gracefully: Stay active, exercise regularly, stay in touch with nature and create a hobby. Learn something new. Sir learned to play the organ at the age of 50!

As Dr. Nazareth says 'If you treat a disease you may win or lose but if you treat a person you will always win despite the outcome.'

Study on Awareness about CLABSI and its prevention among Doctors and the Nursing staff in the NICU of Goa Medical College

Dr Rohit Borkar, Dr Annely D'Lima

Department of Paediatrics

Goa Medical College

Abstract

Introduction

The incidence of Central Line associated Blood Stream Infections (CLABSI) in neonates has shown an increasing trend over the last few years owing to an increase in the number of Preterm deliveries requiring IV access for a longer duration. As in the case of any disease, awareness can help in decreasing the incidence of CLABSI. This Study is being conducted to know the level of awareness about CLABSI and the ways to prevent it among the Doctors and Nurses in NICU setting.

Introduction

Central venous catheters are very commonly used in NICU settings for the administration of Intravenous fluids, especially in VLBW & ELBW infants in whom access using peripheral intravenous cannula is difficult. The commonly used Central venous catheters include Umbilical Vein Catheters (UVC), Umbilical Arterial Catheters (UAC) & Peripherally Inserted Central Catheters (PICC).

CLABSI has been reported in about 25 % of central lines placed in VLBW infants with an incidence of 5 per 1000 catheter days. Therefore, CLABSI is a major contributor to Health Care Associated Infections (HAI) in NICU's. A great percentage of these infections can be prevented through proper sterile insertion techniques and following a proper dressing regimen for the central catheters. This needs a proper awareness about CLABSI and its prevention among Health care staff involved frequently in the handling of these CVC's.

This study aimed at finding the level of awareness on CLABSI and its prevention among Health care staff in NICU of Goa Medical College.

Definition and Pathophysiology

CLABSI is defined as primary blood stream infection in a patient who had a central line at least for the last 48 hr period before the development of the blood stream infection and is not related to an infection at another site.

The common organisms implicated in CLABSI are Coagulase negative Staphylococcus (37%), *S. Aureus* (13%) and Enterococci (13%). Infection can occur through the following mechanisms.

- Migration of pathogens from skin through entry site along the tract.
- Colonization of the hubs during handling of lines.
- Hematogenous seeding of the lines from other sources of blood stream infection
- Very rarely the infusion fluid may be contaminated.

Materials and Methods

- Study was conducted in the NICU of Goa Medical College.
- The subjects that included Doctors and the Nursing staff were interviewed using a pre-tested questionnaire on CLABSI and hand hygiene.
- Total number of subjects included in the study = 40
- The results of the study were interpreted using graphs and percentages as it is a descriptive study.

Results

40 subjects in NICU were interviewed. This included 25 Nurses and 15 Doctors.

Out of the 25 nurses interviewed only 15 (60%) were aware about CLABSI, all 25 (100%) had awareness and hand hygiene and the steps of hand washing, and 15 (60%) were aware about the "Scrub the Hub" protocol.

Of the 15 doctors interviewed 12 (80%) were aware about CLABSI, all 15 had awareness on hand hygiene and the steps of hand washing, while 10 (67%) were aware about the "Scrub the Hub" protocol.

Conclusion

Based on the above study, it was noted that the knowledge on CLABSI and its prevention was low among Hospital nursing staff and Doctors. Education on CLABSI and the various ways to prevent it would definitely lead to a decline in the incidence of CLABSI and also thus, improve the quality of healthcare in the NICU.

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New born hearing screening

- **Dr ELYSKA DE SA**

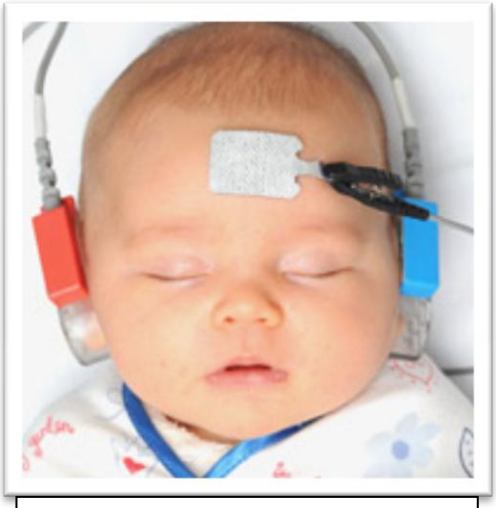
"Blindness separates us from things, but Deafness separates us from people."

Hearing Impairment in children can be a serious obstacle to proper growth and development of a child. According to WHO data (2012) 5.3% of the world's population has hearing impairment out of which 91% are adults and 9% are children. The prevalence of disabling hearing loss in children is greatest in South Asia, Asia Pacific and Sub-Saharan Africa. According to a range of studies and surveys conducted in different countries, around 0.5 to 5 in every 1000 neonates and infants have congenital or early childhood onset sensorineural deafness or severe-to-profound hearing impairment.

Congenital and early childhood onset deafness or severe-to-profound hearing impairment may affect the auditory neuro pathway of children at a later developmental stage if appropriate and optimal interventions are not provided within the critical period of central auditory pathway development thus resulting in delayed speech and language development, poor cognition and social skills thus resulting in learning difficulties and academic backwardness. Thus early identification and intervention in such cases is of utmost importance.

The biggest hindrance to hearing screening programmes in developing countries is the cost factor. Other issues like availability of screening equipment, training of personnel, screening methods, follow up and quality controls are the other issues. However after the newborn hearing screening programme was launched in India in 2011, it has developed its own protocol for screening which has been advocated in around 65 districts at an institutional and community level as well.

The relevance of a screening program is to provide effective treatment at the earliest, thereby reducing the sufferings due to the disorder. Most of the screening tests target permanent or sensorineural hearing loss but the value of screening may lie in the identification of mild to moderate hearing loss and unilateral hearing loss that are amenable to treatment and can reduce the complications of this condition.



Child undergoing ABR .

Indications for Screening

- Geographical subset activities
- SCBU/NICU babies
- Babies with risk factors (family history of permanent childhood hearing loss; infections such as TORCH, cranial-facial anomalies; syndromes associated with hearing loss, adverse perinatal conditions such as birth asphyxia, low birth weight and hyperbilirubinaemia; and neurodegenerative disorders such as Friedreich-Ataxia)
- Universal hearing screening – to identify all neonates and infants with permanent hearing loss it is necessary to screen all babies in the targeted area. Universal hearing screening using physiological measures (either OAE or AABR) should therefore be the goal wherever feasible.

The Principles of the screening tests are as follows:

- It must be non-invasive
- It should not pose a risk of injury to the infant
- It should be sufficiently robust that the test performance will not be affected by the environment
- It should be possible to perform the test in a minimal amount of time
- The test should correctly identify auditory status in both high risk and well-baby population

OAE screening in Newborns

SCREENING GUIDELINES

- Babies are screened preferably before discharge from hospital
- Babies are screened by portable handy equipment. OAE or ABR is usually the test of choice. Time taken for test is 1-2 minutes.
- If abnormal result (no response), test repeated after 4 weeks or at first immunisation visit.
- If fails again, (after a maximum of 2 hearing screenings), BERA should be done for confirmation and quantification of hearing loss.
- All NICU babies should be screened by BERA.
- If BERA abnormal, all babies should undergo detailed evaluation by ENT specialist, hearing aid fitting and auditory rehabilitation before 6 months of age.
- The goal is to screen new born babies before one month of age, diagnose hearing loss before three months of age and start intervention before six months of age

R. B. S. K (Rashtriya Bal Swasthya Karyakram)

The 'Child Health Screening and Early Intervention Services' Programme under National Rural Health Mission initiated by the Ministry of Health and Family Welfare aims at early

Detection and management of the 4Ds prevalent in children. These are **Defects** at birth, **Diseases** in children, **Deficiency** conditions and **Developmental Delays** including Disabilities.

Health screening of children is a known intervention under the School Health Programme. It is now being expanded to cover all children from birth to 18 years of age. Lots can be achieved by early detection and management of conditions in all age groups.

Out of every 100 babies born in this country annually, 6 to 7 have a birth defect. In Indian context, this would translate to 1.7 million birth defects annually and would account for 9.6 per cent of all newborn deaths. Various nutritional deficiencies affecting the preschool children range from 4 percent to 70 percent. Developmental delays are common in early childhood affecting at least 10

percent of the children. These delays, if not intervened timely, may lead to permanent disabilities with regard to cognition, hearing and vision.

There are also groups of diseases which are very common in children e.g., dental caries, otitis media, rheumatic heart disease and reactive airways diseases which can be treated if detected early. It is understood that early intervention and management can prevent these conditions to progress into more severe and debilitating forms, thereby reducing hospitalisation and resulting in improved school attendance.

Child Health Screening and Early Intervention Services under NRHM envisage to cover 30 identified health conditions for early detection and free treatment and management.

Selected Health Conditions for Child Health Screening & Early Intervention Services	
Defects at Birth	**Deficiencies**
1. Neural tube defect 2. Down's Syndrome 3. Cleft Lip & Palate / Cleft palate alone 4. Talipes (club foot) 5. Developmental dysplasia of the hip 6. Congenital cataract 7. Congenital deafness 8. Congenital heart diseases 9. Retinopathy of Prematurity	10. Anaemia especially Severe anaemia 11. Vitamin A deficiency (Bitot spot) 12. Vitamin D Deficiency, (Rickets) 13. Severe Acute Malnutrition 14. Goiter
Diseases of Childhood	**Developmental delays and Disabilities**
15. Skin conditions (Scabies, fungal infection and Eczema) 16. Otitis Media 17. Rheumatic heart disease 18. Reactive airway disease 19.Dental conditions 20. Convulsive disorders	21. Vision Impairment 22. Hearing Impairment 23. Neuro-motor Impairment 24. Motor delay 25. Cognitive delay 26. Language delay 27. Behavior disorder (Autism) 28. Learning disorder 29. Attention deficit hyperactivity disorder
30. Congenital Hypothyroidism, Sickle cell anemia, Beta thalassemia (Optional)	

Screening will take place at the following facilities

- *For new born*:

• Facility based newborn screening at public health facilities like tertiary hospitals, district hospitals local PHC's etc.

• Community based newborn screening at home through ASHAs for newborn till 6 weeks of

age during home visitation.

- *For children 6 weeks to 6 years:*

• Anganwadi Center based screening by the dedicated Mobile Health Teams

- *For children 6 years to 18 years*:

• Government and Government aided school based screening by dedicated Mobile Health Teams.

All suspected cases are referred for registration and further management to the ***DISTRICT EARLY INTERVENTION CENTRE (DEIC)***

The purpose of Early Intervention Center is to provide referral support to children detected with health conditions during health screening. A team consisting of Paediatrician, Medical officer, StaffNurses, Paramedics are engaged to provide services.

At present there are two DEIC's in the state of Goa, one each at both the district hospitals. Facilities like IQ testing, counselling, physiotherapy, early interventions are provided apart from thorough evaluation by paediatrician. Referrals to DEICs come from the MHT's, private practitioners, schools and other rehabilitation professionals.

All children are routinely screened for hearing and vision irrespective of the case. New born hearing screening for all inborn babies is in the process of starting soon.

ROTAVIRAL Vaccine ROLL OUT In The Universal Immunisation Programme in Goa – 'Serving the Community with the Gift of Immunity'

-Dr Ira Almeida

'Vaccines are the tugboats of preventive health'.

The Rotaviral vaccine has already been introduced in the Universal immunisation programme in a phased manner in 11 states in India since 2016. Goa has good indices with under 5 mortality being only 9 and hence other states with poorer indices were given priority.

The Directorate of Health Services is all set to roll out the vaccine in Goa. The live, attenuated oral freeze dried vaccine **Rotasil** will be used in Goa, the schedule being 3 doses at 6, 10 and 14 weeks. Under the UIP, the upper age limit for administering the first dose is one year provided it is along with the 1st dose of Pentavalent vaccine. This is done so that we can give the vaccine to the unimmunised/high risk groups who are at high risk of death/ severe morbidity due to rotaviral diarrhoea.

The vaccine is effective when all 3 doses have been given. It is recommended that the RVV series be completed with the same product/brand whenever possible, however vaccination should not be deferred because the product used for previous doses is unknown or not available. This becomes especially important in interstate migration. Evidence suggests mixed vaccine schedules are not inferior when compared to single vaccine groups.

The vaccine has a Vaccine Vial Monitor -30 (VVM-30), which means it can remain stable at 37 degrees Celsius for 30 days, the most stable of all the currently available rotaviral vaccines. However once reconstituted with the diluent the vaccine becomes heat labile and has to be used within 4 hours of reconstitution.

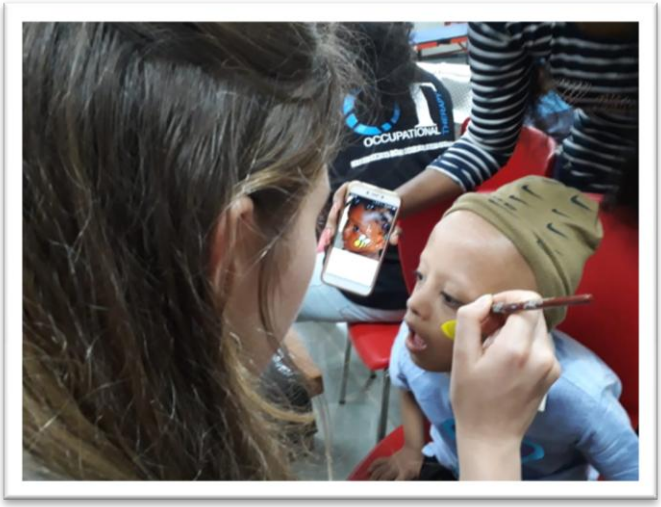
The State and District level trainings have been completed and the health worker trainings have commenced as well. Focus on reconstitution of vaccine, as well as recognition of AEFI is ensured.

It is heartening to note that not a single case of intussuception has been reported till date with the rotasil vaccine, since it was introduced in 2018 in India.

'**Imagine the action of a vaccine not just in terms of how it affects a single body but also in terms of how it affects the collective body of a community**' and that is exactly what the rotaviral vaccine does- it produces herd immunity not only to infants but even older children and adults.

Diarrhoea accounts for 9% of under 5 mortality. 40% of severe diarrhoea (death and hospitalisations) is caused by rotavirus. Rotaviral diarrhoea leads to 32 lakh outpatient visits, 8 lakh hospitalisations and 78000 deaths every year in India. Vaccination against rotavirus can reduce mortality from diarrhoea by 34% hence rotaviral vaccine is the need of the hour.

ACTIVITIES AND ACHIEVEMENTS



Paediatric Neurorehab Center celebrated world Down syndrome day at the Goa Medical College. Two children with Down syndrome were felicitated for having won medals at the world special Olympics held in Abu Dhabi last month in skating and weight lifting. The Owl house Aldona conducted a culinary work shop training as well as on music instruments. Around 50 children from Sanjay School, Ferry land and Gujrati Samaj Margao participated. Avila Kane was felicitated for winning bronze medal in skating and Suvet Lotlikar for winning medal in weight lifting. Dr Shivanand Bandekar Dean of GMC was the chief guest for the function. The event was organized by DR M.P Silveira and the staff of the Paediatric Neurorehab Centre. The event was a big success with stations in nail art, face painting, handkerchief painting, mehendi and quillings conducted by the Occupational therapy students. The event was sponsored by Sesa Goa limited.

Dr Aparna Wadkar was invited to conduct a CME on Autism on the eve of world autism day at the District hospital Mapusa Goa .The talk was attended by the consultants and Medical officers in DEIC and was well received.

Autism day was celebrated on 2nd April 2019 at Hospicio Hospital, Margao. This year's theme was 'Assistive technologies, Active participation'. Celebrations started early morning with an 'autism run' up the Monte hill at 6 am by the group 'Hill repeats' in collaboration with doctors from Hospicio. It was followed by an interactive session for parents in the afternoon by 2 well known personalities working in the field, Mr. Clifford D'Silva from Goa Institute of Counselling in Navelim and Ms. Varsha Naik , special educator from Jyot school for children with autism, Davorlim.

Mr Clifford spoke about the importance of play and social interaction with the child and had a hands-on demonstration on which games can be used in such children whereas Mrs. Varsha spoke on her personal journey on dealing with this condition in her son and the rehabilitative techniques used in these kids at school level.

It was attended by 25+ parents and staff of DEIC, Hospicio.

The 1st International TAHB-GMC Goa Neonatal Conference was organised on the 9th of June, 2019 by the Department of Paediatrics, Goa Medical College in collaboration with Train and Help Babies organisation (TAHB).
The Conference included lectures on body cooling case scenarios with trouble shooting plus management of complications, infections in neonates and management of septic shock, respiratory management in neonates, central lines and PICC insertion. Besides lectures there were also workshops on the above topics.
The Faculty for the conference included Dr Sharada Gowda (Neonatologist at Texas Children's hospital), Dr Prakash Kabbur (President of TAHB), Dr Lakshmi Katakam (Neonatologist and Medical Director of NICU at Texas Children's Hospital), Dr Monika Gadhia (Neonatologist at Texas Children's Hospital), Ms Mercy Thundiyil and Ms Andrea Crane (Neonatal Nurse at Texas Children's Hospital).

IAP Goa State Chapter held 3 CME's from 31st March till June 30th 2019

On 31/3/2019 a CME was held on Treatment of TB: new RNTCP guidelines 2019 and updated Paediatric TB guidelines 2019 followed by Rotavirus Vaccine update and Immunization. The speakers for the CME included Dr Ira Almeida, Dr Harshad Kamat and Dr Kalpana Gauns.

The 2nd CME held on 14/4/19 was on Paediatric hematology and Immunology. The topics covered include

- Indications for Bone marrow transplant in children,
- Primary Immunedeficiency,
- Experience and outcomes in Thalessemia and Immunedeficiency,
- Clinical case Presentation.

The faculty for the meet included Dr CP. Raghuram, Dr Sagar Bhattad, Dr Stalin Ramprakash.

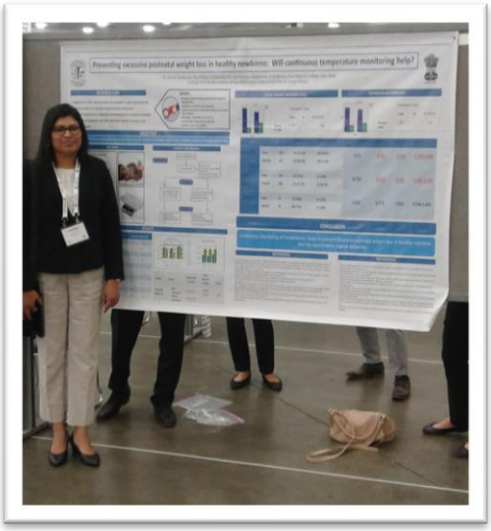
On 16/06/19 the 3rd CME was held. The topics covered were:

- Spinal Dysraphism,
- Recent advances in neonatal sepsis management
- Quadrivalent Flu vaccine
- Update on DTaP Hexavalent Vaccine.

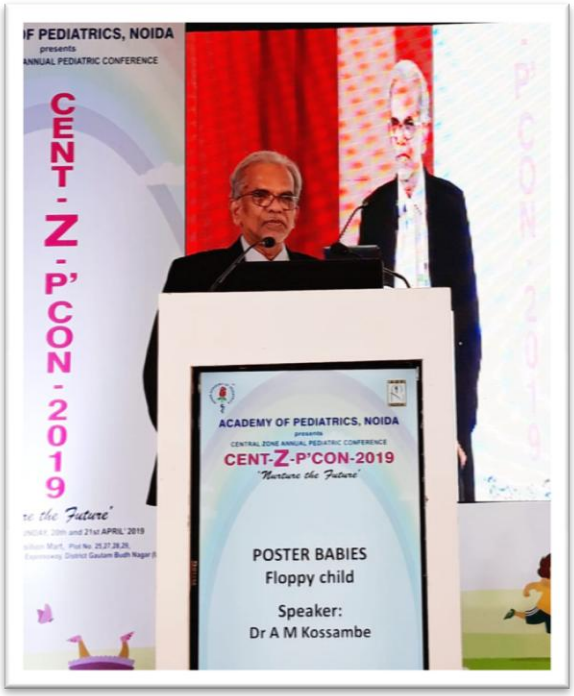
The speakers included Dr Naresh Biyani, Dr Kavita Sreekumar, Dr Harshad Kamat, Dr Himanshi Dubey.

Healthway hospital old Goa organised a CME on 26th May 2019

Topics discussed were surgical complications of pneumonia by Dr Vishal Sawant (paediatric surgeon) and the need for quadruvalent influenza vaccine by Dr Harshad Kamat (consultant paediatrician).



Dr Kavita Sreekumar presented poster of research done at department of paediatrics at Goa Medical College at the Paediatric Academic Societies Meeting (PAS 2019) at Baltimore in April 2019



Dr Avadhut Kossambe as speaker on floppy child at Central Pedicon-Noida April 2019

Dr Danesh Volvoikar as faculty for PAEDALLERCON 2019 (National paediatric allergy conference)

The Incredible Goan, 'Dr Nandita De Souza' receiving the award for "Excellence in social work" at the hands of editor/publisher of Incredible Goa, Mr Rajesh Ghadge @ The Incredible Goa Awards 2019

Dr Priyanka Dhakankar giving a talk to 150 students (11th and 12th std) at multipurpose high school on adolescent vaccination

Intensified Diarrhoea Control Fortnight (IDCF)

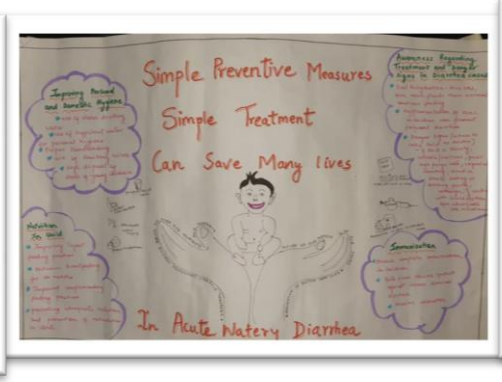
IDCF activities at Asilo hospital

https://www.dropbox.com/s/h9zv1uk1kt3o6pl/VID-20190628-WA0023.mp4?dl=0

IDCF activities at Hospicio Hospital

1) Establishment of ORS and Zinc corners in the wards as well as in the OPD.
2) Talks by doctors on ORS, Zinc and prevention of diarrhoea in the OPD

3) Poster competition on diarrhoea prevention was held for Medical Officers



4) 5 Slide power point competition was held for Nurses on Prevention of Diarrhoea

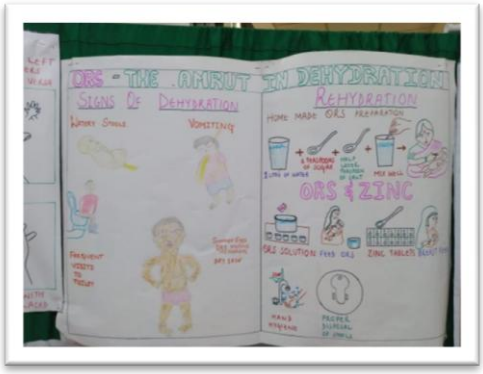
5) District level IDCF programme was held on the 28th of June at Urban Health Centre, Margao.

The programme started with a 5 round quiz on diarrhoea which included a visual round and case scenarios. This was followed by a talk by the chief guest, Dr Avadhut Kossambe on management of diarrhoea.

The nurses from 4 different wards had made 30 second rhymes on handwashing (https://www.dropbox.com/s/4sj5la343dkbo62/VID-20190701-WA0015.mp4?dl=0, https://www.dropbox.com/s/jwchclwj2g0df3r/VID-20190701-WA0016.mp4?dl=0) which were shown to the audiences which consisted of nurses, medical officers and consultants from Hospicio as well as other PHC's , CHC's and health centres.The event ended with a talk on rotaviral vaccine by Dr Kalpana.

IDCF activities at IDC Ponda

a) Poster competition On ORS – Amrut in dehydration

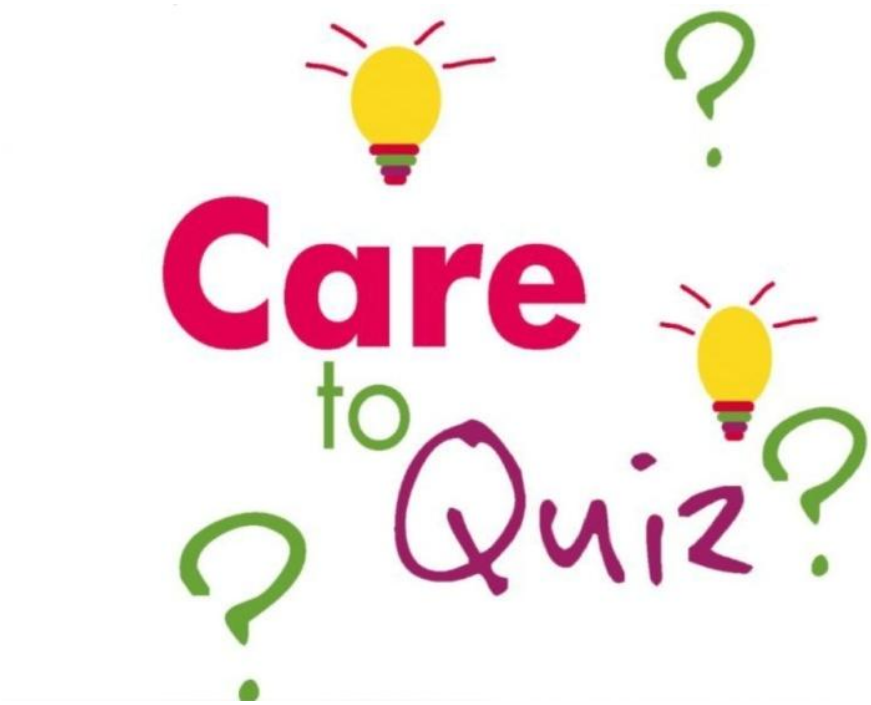


b) ORS station

c) Nurses teaching mothers the right technique of hand washing

d) Talk by medical officers to OPD patients on diarrhoea prevention and management.

e) Talk by Dr Vinda on exclusive breast feeding as a preventive measure of diarrhoea



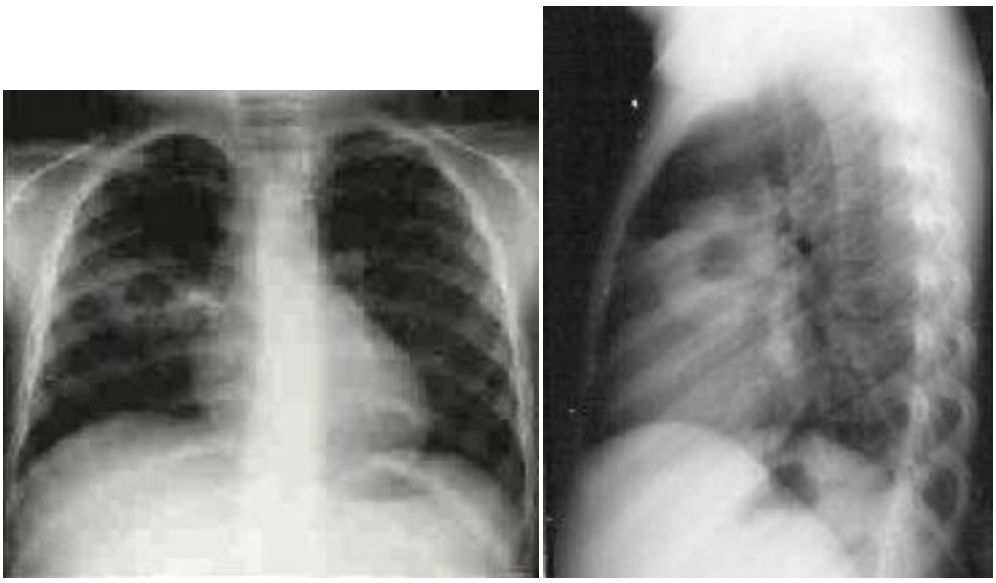
1) A 4 year old boy falls from the back of a 3 wheeler, hitting his head. He has no loss of consciousness, is alert and well oriented. On examination he has blood behind his left tympanic membrane. CT scan of the skull is likely to show
   a) Basilar fracture of skull
   b) Epidural hematoma
   c) Intraventricular haemorrhage
   d) Subdural hematoma

2) All of the following statements are true regarding bowlegs and knock knees except
   a) Infants often have bowlegs during normal development
   b) These conditions never run in families
   c) Unilateral bow legs or knock knees need attention
   d) Child may become knock kneed by about 18 months of age
   e) Special shoes, wedges, inserts or exercises only make the child feel bad and do not correct the shape

3) An 18 month old boy was brought with h/o irritability since 2 weeks and swelling of left eye. He was not taking feeds adequately for last one week. Mother had noticed swelling in the left eye for last 3 days which is more in the morning. There is no h/o insect bite or trauma. There are many pet animals in the house. One f the following is most probable diagnosis.
   a) Retinoblastoma
   b) Vitreous Haemorrhage
   c) Ocular Toxocariasis
   d) Cataract

4) Central Cyanosis with systolic murmur is seen in
   a) PDA
   b) Endocardial Cushion Defect
   c) TGA
   d) VSD

5) A 9 year old boy presented with 8 days h/o high grade fever with rigors and chest pain.
   On auscultation air entry was decreased on the right mammary and infraclavicular areas.
   Investigation: Chest xray



   What would be the most likely diagnosis
   a) Pneumatocoele
   b) Tuberculous cavity
   c) Lung abscess
   d) Bronchopleural fistula

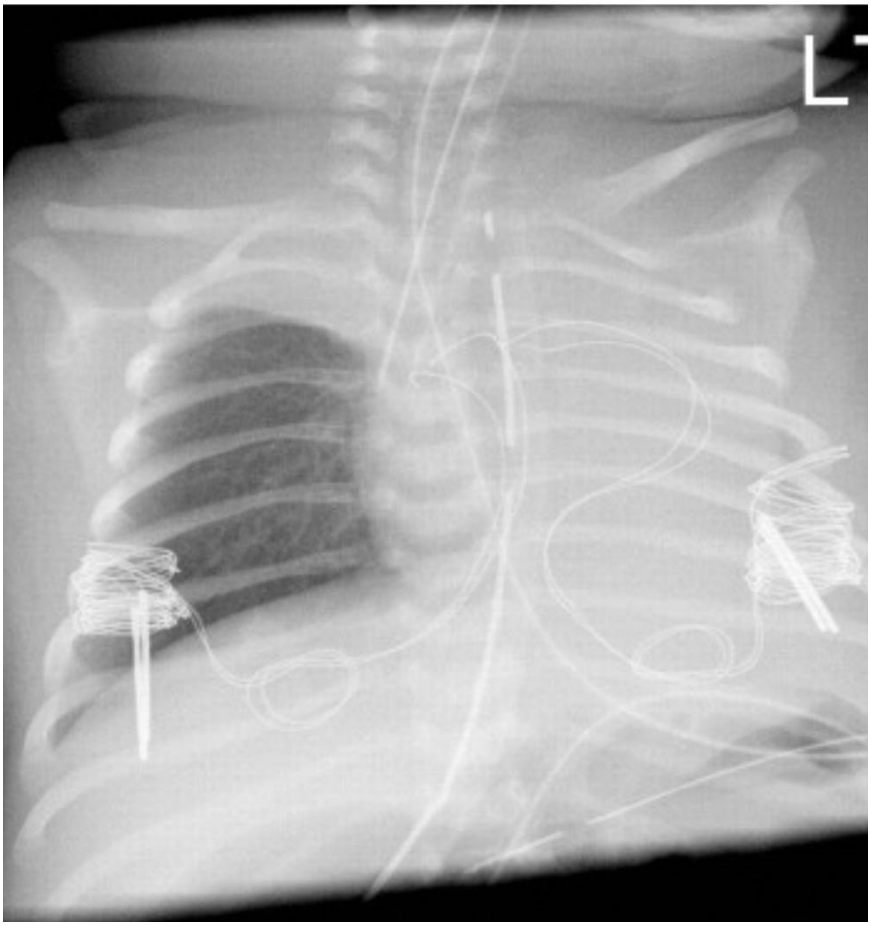
6) A 4 year old boy is brought to the clinic by his mother because he has an area of sores on the scalp that she noticed while cutting his hair. Weight is 19.1 kg. Vital signs are within normal limits. Physical examination shows a grouping of pustules in the right parietal region. The area surrounding this grouping is very boggy and tender and annular hair loss is noted in that region. The cervical lymph nodes are diffusely tender and enlarged. No other abnormality is noted. What is the most likely diagnosis?
   a) Alopecia areata
   b) Atopic dermatitis
   c) Herpes simplex virus
   d) Kerion
   e) Mastocytosis

7) You are called to the newborn nursery to see a 3 day old that has a rash. The parents are concerned because they did not notice the rash until this morning and are sure that it was not present the first 2 days of life. You find a well appearing baby who has scattered red papules all over the body and are in clumps on the cheeks and on the trunk, some of them even look like vesicles. You take a scrapping of one of the vesicles to examine under the microscope and find that these vesicles contain a large number of eosinophils. What is the recommended treatment for this patient?

   a) Acyclovir
   b) Topical steroids
   c) Antidandruff shampoo
   d) Antibiotic ointment
   e) Observation

8) This 8 week old baby girl underwent corrective cardiac surgery 24 hours ago and had been stable postoperatively with oxygen saturations of 100%. However in the past 30 minutes her ventilatory requirement has increased and oxygen saturation is 88% in 100% oxygen.

   Her chest radiograph is shown.



What is the problem?

a) Acute respiratory distress syndrome
b) Acute pulmonary edema
c) Aspiration Pneumonia
d) Displaced endotracheal tube
e) Lobar collapse secondary to mucus plugging
f) Pneumothorax
g) Pulmonary embolus
h) Pulmonary haemorrhage
i) Severe bronchospasm

9)

A 7 year old boy presents with complaints of a rash on his chin, cheeks and nose. These lesions initially started around his mouth two months ago. His mother thought that they were related to eczema and applied tropical triamcinolone 0.1% cream to the lesions. At first the rash improved, however it soon recurred and has since spread to involve his cheeks and nose. The child does not seem to be bothered by the lesions other than occasional pruritus and is otherwise very healthy. On physical examinaytion there are monomorphic erythematous papules on bilateral cheeks, nose and perioral area.

What is the diagnosis?

a) Acne neonatorum
b) Acne vulgaris
c) Angiofibromas
d) Contact dermitis
e) Eczema
f) Periorificial dermatitis

10) A 10 year old girl returned from a trek in the forest with a rash on her left foot. She has no fever or itching. What is the likely diagnosis?

Kindly mail your answers of the quiz to dr.celineandrade@gmail.com. Special prizes await our first 3 correct entries.