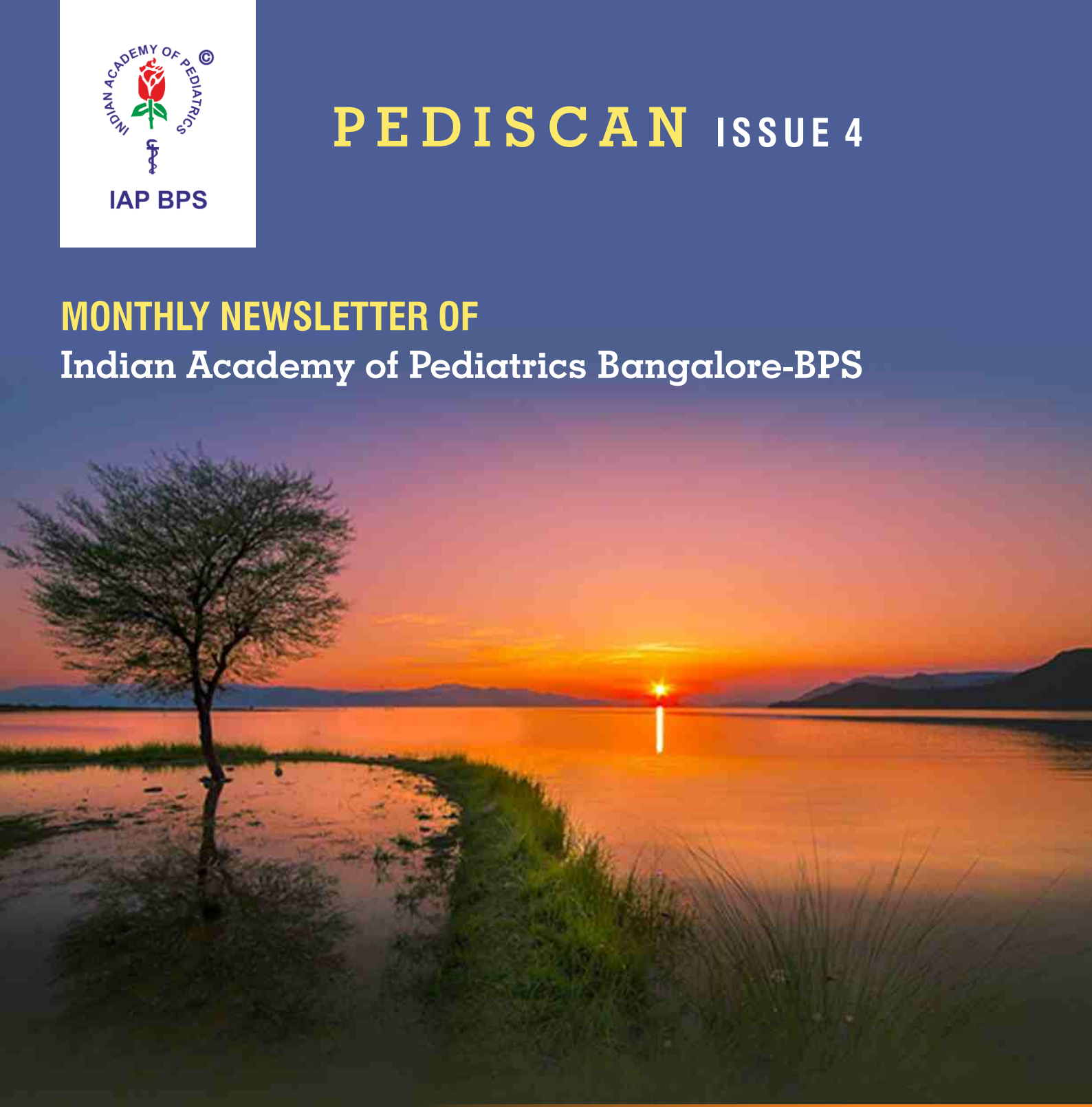
IAP BPS

PEDISCAN ISSUE 4

MONTHLY NEWSLETTER OF
Indian Academy of Pediatrics Bangalore-BPS



Tranquil

April - 2021

Greetings from the Editorial Team

It is with great pleasure that we step into the second trimester of our yearly activities reiterating our resolve to bring in the change necessary to "BUILDING A FAIRER & HEALTHIER WORLD" this year's WHO theme. The COVID pandemic, unfortunately in its more rampant second avatar has brought out the inconsistencies of the unfair distribution of health services based on regional imbalance, wealth, poverty, and other factors. It is expected of all nations to take steps for equitable distribution of the health resources so that the whole of mankind is benefitted.

Health is said to be not merely an absence of disease but a dynamic state of expression of life in its myriad forms. It is established in the self. It is we who are responsible for our own health & its absence. One can be said to be in a perfect state of health when one is physically fit, mentally calm, and emotionally steady.

The month also marks the celebration of Autism Day (2nd April) and Hemophilia Day (21st April). This issue of Pediscan has articles dedicated to these subjects.

Our Thanks to Dr Anil Sapare, this month's C & C (compere in chief) for collecting and bringing out this issue. Dr Sapare, a senior colleague of ours' is a senior consultant Pediatric Pulmonologist & Intensivist at the Mazumdar Shah Medical Center, Narayana Health City,Bangalore.

On our continuing WATER series, we explore the TRANQUIL state related to it. The noun tranquility means "a state of peace and quiet," like the tranquility you feel at the shore of a quiet lake. Like water which can clearly reflect the sky only so long as its surface is undisturbed,the mind can only reflect the image of the self when it is Tranquil and wholly relaxed. We wish Peace and tranquilty to all IAPians in these troubled waters during the Covid resurgence.

It is said that a photo speaks a thousand words.A peep into our photo gallery is proof of the multifarious activities that our vibrant branch members undertook during the past month led dynamically by President Dr H.B.Mallikarjun and Secretary Dr Priya Shivalli and their energetic Team.

Adieu for now.

Wishing all a Happy New Year (UGADI)

Dr Kishore Baindur
Editor in Chief

Dr Ramitha Pai
Managing Editor

Editorial Team 2021 **(Drs Anil Sapare, Krithika MV, Pooja Chebbi, Rajanish KV, Vandana Bharadwaj)**

AUTISM SPECTRUM DISORDER (ASD) IN PRIMARY CARE SETTING

Dr Rajanish K V, Dr Kishore Kotha, Dr Adarsh E
RRMCH

"Why fit in when you are born to stand out"

BACKGROUND:

As we celebrate 14th annual world Autism awareness day, its our duty and responsibility as pediatricians to sensitize and orient parents and caregivers to recognize a child with Autism and other neurodevelopmental disorders.

In addition to broad developmental screening , it is recommended by IAP to screen all children with Autism specific tool at 18 months and 24 months.

Rationale being early intervention even before a formal diagnosis is the key for optimal functional outcome and mainstreaming of such kids with Autism

BURDEN OF ASD:

Though large scale population based epidemiological data is lacking in India, expert believe ASD is a developmental disability of public health importance, with direct and indirect cost implications on the nation.

Systematic review and metanalysis on prevalence of ASD showed a point prevalence in rural India to be 0.11% (0.01-0.2) in the age range of 1 to 18 years and urban prevalence percentage of 0.09% (0.02-0.16) in the age range of up to 15 years. Data gap do exist, and large-scale studies are required. U S A studies estimated prevalence of approximately 1.7% which translates Autism of 1 in 59 children.

Another observation has been an increase in reported prevalence over time, pointing to the need of more epidemiological studies and surveillance.

SYMPTOMATOLOGY:

Core behaviorally defined clinically symptoms:

Symptom cluster are in 2 domains:

1) Social communication and interaction deficits

2) Restricted, repetitive patterns of behavior

The hallmark symptom of ASD being deficits in social – emotional reciprocity

The diagnosis is based on patterns described in DSM- 5 criteria (2013) (diagnostic and statistical manual of mental disorders 5th edition).

DSM 4 had subgroups of pervasive developmental disorder – not otherwise specified (PDD-NOS), childhood disintegrative disorder, Asperger disorder and Rett's disorder as distinctive diagnoses

DSM 5 established a single category of ASD, consolidating the subgroups.

Further DSM 5 also introduced approach to severity rating, which reflects the impairment of the ASD symptoms and the resultant services needs of the individual.

Level 1 "requiring support"

Level 2 "requiring substantial support"

Level 3 "requiring very substantial support"

Co-occurring symptoms and conditions include sleep disorders and seizures, other developmental or behavioral disorders such as ADHD, anxiety, mood disorders, self-injury, aggression, intellectual disability, catatonia, motor deficits (abnormal gait, clumsiness, toe walking or hypotonia), gastrointestinal and nutritional problems (constipation, GER, Restricted diet)

RED FLAGS : EARLY SYMPTOMS OF ASD :

AGE	SYMPTOMS
By 12 months	Does not respond to name
By 14 months	Does not point at objects to show interest
By 18 months	Does not pretend play
General	• Avoids eye contact and may want to be alone • Has trouble understanding other peoples feelings or talking about their own feelings • Has delayed speech and language skills • Repeats word or phrases over and over (echolalia) (parroting) • Gives unrelated answers to questions • Gets upset by minor changes • Has obsessive interests • Makes repetitive movements like flapping hands, rocking or spinning in circles • Has unusual reactions to the way things sound, smell, taste, look or feel

SCREENING:

Developmental surveillance for ASD includes asking caregivers about concerns they have about their child's development or behavior, informal observation, and monitoring of symptoms

Developmental surveillance alone is not sufficient to identify children who need further evaluation because children with ASD may not demonstrate characteristic symptoms in brief office visits, and caregivers may not volunteer social and emotional concerns unless specifically asked.

All children should be screened by a standardized Autism screening tool at 18 months and 24 months of age.

M-CHAT-R/F (Modified checklist for Autism in toddlers, revised with follow up) is a 2 stage screening tool, freely available for download from the source:

http://mchatscreen.com/

Stage 1 is a parent completed questionnaire designed to identify children at risk for Autism from the general population;

Stage 2 (follow up) is clinician administered questions and repeat questionnaire required for specificity.

This is applied for the age range of 16 – 30 months, has 20 questions and takes about 10 minutes to administer, available in many of the regional languages (including kannada)

SCREENING PROCESS :

M-CHAT-R Total Score <3 → No follow up test needed unless surveillance or other procedure suggests risk for ASD

M-CHAT-R Total Score = 3-7 → Administer M-CHAT-R follow up

↓

Total score > 2 on M-CHAT-R /F: refer for diagnostic evaluation and early intervention

M-CHAT-R Total Score > 8 → Bypass follow up; refer immediately for diagnostic evaluation and early intervention

NOTE:

Score 3-7 need follow up (stage 2) clinician administered questionnaire for specificity, thus decreasing the likelihood of false positive results.

Follow up interview is conducted including only those questions on which child had a 'at risk' response in initial stage 1 screening

Other screening tools:

Social communication questionnaire (4 + years)

Trivandrum Autism behavior checklist

Results of a screening test are not diagnostic; they help the primary care provider identify children who are at risk for a diagnosis of ASD and require additional evaluation.

Once a child is determined to be at risk for a diagnosis of ASD, a timely referral for diagnostic evaluation and early intervention is indicated,

Diagnostic tools used for Autism are :

1. INCLEN diagnostic tool for ASD (INDT-ASD)
2. Indian scale for assessment of Autism (ISAA)
3. Childhood Autism rating scale (CARS)
4. Autism diagnostic observation schedule (ADDS)
5. Autism diagnostic Interview (ADI)

The above tools serve to elicit the diagnostic features of ASD (as per DSM 5 criteria)

Specialist services of developmental pediatricians, child psychologist, neurologist and psychiatrist are needed depending on the clinical manifestations.

ETIOLOGICAL EVALUATION :

Sequence of evaluation the proceeds to etiological evaluation including genetic testing, G banded karyotype, CMA, Fragile X testing as per clinical indication.

OTHER WORKUP:

1. Screening for hearing and vision, assessment of cognitive ability and adaptive skills.
2. Evaluation for any motor deficits/difficulties
3. Based on family history, examination and any dysmorphic features, additional tests for hypothyroidism, homocystinuria, head injury, fetal alcohol syndrome or chromosomal abnormalities.
4. Landau kleffner syndrome should be ruled out (aphasia and distinctive EEG features)
5. MeCP2 gene for possible Rett's disorder if suspected.
6. Wood lamp examination for signs of tuberous sclerosis

INTERVENTION:

Intervention should begin as early as possible, even while evaluation for definitive diagnosis is ongoing

The goals of treatment of children with ASD are to

1. Minimize core deficits
2. Maximizing functional independence by facilitating learning and acquisition of adaptive skills
3. Eliminate, minimize or prevent problem behaviors that may interfere with functional skills

Treatments are individualized, developmentally appropriate and intensive, provided through interdisciplinary teams (pediatric neurologist, child psychologist, occupational therapist, speech and language therapist, special educator, nutritionist and social worker)

OUTCOME:

Factors known to be associated with positive outcomes include presence of joint attention, functional play skills, higher cognitive abilities, mild severity of ASD symptoms, Early identification and intervention.

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HEMOPHILIA

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Keywords : Hemophilia, Coagulation, Recombinant factors, Inhibitors, Bethesda

Abbrevations : HA- Hemophilia A, HB- Hemophilia B, VWF- Von Willibrand factor

INTRODUCTION:

- Hemophilia is an X chromosome -linked bleeding disorder caused by mutation in gene encoding Factor VIII (Hemophilia A) or Factor IX (Hemophilia B) located on long arm of chromosome X. Both factors play a major role in intrinsic pathway of coagulation cascade (Figure1).
- Males manifest with disease. Female with hemophilia occurs; when both affected X chromosome is inherited or X chromosome which has normal gene is inactivated (Lyon hypothesis). A female who has one affected gene is called carrier of haemophilia.1
- 80% of hemophilia is Hemophilia A and about 20%is Hemophilia B.2
- The prevalence of HA is 1 in 5000 live male births while that of HB is 1 in 30,000.3, 4
- Other rare bleeding disorder includes Hemophilia C (Factor XI def) and Parahemophilia (Factor V def) which may not present with significant clinical bleeding.

Pathophysiology :

- FVIII is protein made up of 2351 amino acid chain. VWF acts as a carrier of factor VIII. Activated factor (VIIIa) binds to IXa in the coagulation pathway as shown in the figure 1 leading to clot formation.

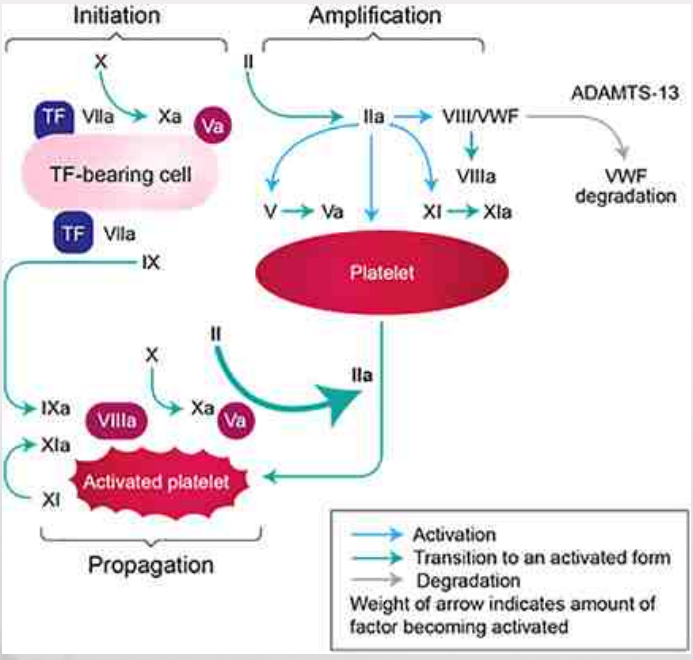

Figure 1[5]

Classification of hemophilia : Table (1) Factor level and severity of bleeding[2]

Severity	Plasma factor level	Bleeding frequencies
Severe	<1% of normal (<1 IU/dl)	Frequent and spontaneous
Moderate	1-5 % of normal (1-5 IU/dl)	With minimal trauma
Mild	5-40% of normal (5-40 IU/dl)	Only with major trauma or surgery

Clinical manifestations :

- Hemophilia should be suspected if child presents with following symptoms
  - Easy bruising
  - Spontaneous bleeding: In to joints, muscle or soft tissue without history of trauma or with trivial trauma
  - Excessive bleeding following trauma or surgery
- Family history of bleeding particularly in siblings, maternal uncle, cousin or grandfather
- Life threatening bleed in neonates including Intracranial bleed especially during forceps delivery, pulmonary bleed or GI tract bleed with no other identifiable cause[6]

Table (2) Sites of bleeding with approximate frequency in haemophilia[7]

Serious	Joints (Hemarthrosis)- 70-80% Muscular bleed (Iliopsoas, calf, forearm)- 10-20% Mucocutaneous bleed (Epistaxis, Gum bleed) - 5-10%
Life-threatening	Intracranial - <5% Neck or throat Gastrointestinal

- Long term complications of joint bleed:
  - Bleeding into a target joint leads to arthropathy similar to rheumatoid arthritis.8,9
  - Neurovascular compromise secondary to muscle bleed

Diagnosis:

- Diagnosis
  - Clinical suspicion based on specific history
  - Screening tests - prothrombin time (PT) and activated partial thromboplastin time (APTT) or platelet function tests to identify the exact cause of bleeding. (Table 3). PTT can be prolonged in VWF disease type 2 also; hence confirmation test with factor assay and VWF assay is necessary to differentiate between the two.
  - Confirm diagnosis with specific factor assays
- Blood should be collected in citrate tube containing trisodium citrate hydrate(3.2%) with blood to citrate ratio of 9:1 and sample should be mixed adequately by gentle inversion of tube 3-4 times. Sample should be analysed within 8 hours (within 4 hours for FVIII assay).10
- Table (3) Interpretation of screening tests

Possible diagnosis	PT	APTT	Platelet count
Normal (N) or Factor XIII deficiency	N	N	N
HA or HB	N	Prolonged[a]	N
VWD	N	N or prolonged[a]	N or reduced
Platelet defect	N	N	N or reduced

Abbreviations: APTT, activated partial thromboplastin time; PT, prothrombin time; VWD, von Willebrand disease. a The same pattern can occur in the presence of FXI, FXII, prekallikrein, or high molecular weight kininogen deficiencies.

- Inhibitors are assayed using Modified Nijmegan Bethesda assay. Patient plasma is mixed with normal plasma and incubated for 120 minutes with pH control. One Bethesda unit is defined as the amount of inhibitor that inhibits 50% of the FVIII: C activity resulting in 50% of residual FVIII: C activity in the test mixture. An inhibitor titre of > 0.6 is considered clinically significant 11,12
- High responding inhibitors- > 5 Bethesda units/ml. Patients develop high titres of inhibitors with repeated exposure to factor VIII, called anamnestic response
- Low Responding inhibitors remain <5 BU despite repeated exposure to factor VIII.

Treatment :

Factor replacement with Recombinant factor, should start at onset of "aura". 13

Factor VIII

- One unit of factor VIII per Kg of body weight raises plasma level by approximately 0.02 U/ml
- Half-life – 10-12 hrs14
- Dose of FVIII (units) = (desired FVIII percentage) x (body weight) x 0.5
- For example to achieve plasma level of 50% in a 10 kg child, calculated dose is
- 50 x 10 x 0.5 =250 units

Factor IX

- One unit of factor IX per Kg of body weight raise the plasma level by 0.01 u/ml
- Half-life – 16 to 18 hrs14
- Dose of factor IX(units)=(desired F IX percentage) X body weight
- For example to achieve plasma level of 50% in a 10 kg child, calculated dose is 50 x 10 =500 units

Table (4) required peak plasma factor level (IU/dl) and duration (in weeks) of administration (WFH 2020 Guidelines)

	Hemophilia A		**Hemophilia B**	
Type of haemorrhage	Peak factor level	Treatment duration	Peak factor level	Treatment duration
Joint	40-60	1-2[a]	40-60	1-2[a]
Superficial muscle(Except iliopsoas)	40-60	2-3[a]	40-60	2-3[a]
Iliopsoas or deep muscle Initial Maintenance	 80-100 30-60	 1-2 3-5[b]	 60-80 30-60	 1-2 3-5[b]
Intracranial Initial Maintenance	 80-100 50	 1-7 8-21	 60-80 30	 1-7 8-21
Throat and neck Initial Maintenance	 80-100 50	 1-7 8-14	 60-80 30	 1-7 8-14
Gastrointestinal Initial Maintenance	 80-100 50	 7-14 -	 60-80 30	 7-14 -
Renal	50	3-5	40	3-5
Deep laceration	50	5-7	40	5-7
Surgery (Major) Pre-op Post-op	 80-100 60-80 40-60 30-50	 1-3 4-6 7-14	 60-80 40-60 30-50 20-40	 1-3 4-6 7-14
Surgery (Minor) Pre-op Post-op	 50-80 30-80	 1-5[c]	 50-80 30-80	 1-5[c]

a. May be longer if response is inadequate.
b. Sometimes longer as secondary prophylaxis during physical therapy.
c. Depending on procedure; the number of doses would depend on the half- life of the CFC used

FFP (Fresh frozen plasma) and Cryoprecipitate

- Given only when factor VIII/IX is not available
- One mL of FFP = 1 unit of factor activity, dose is 15-20 mL/kg 15
- Cryoprecipitate contains FVIII (about 3-10 IU/mL), VWF, fibrinogen, and FXIII but not FIX and FXI.
- One bag of cryoprecipitate made from 1 unit of FFP (200-250 mL) = 70-80 units of FVIII

Pain management:

Table (5) shows stepwise management of pain

1	Paracetamol (10-15mg/kg/dose) 3-4 times a day
2	a. COX2 inhibitors(celecoxib, meloxicam)
	b. Paracetamol + Codeine (3-4 times a day)
	c. Paracetamol +Tramadol (3-4 times a day)
3.	Morphine

Other measures

- RICE : Rest, Immobilisation, cold application and Limb elevation
- PRICE therapy: Protection, rest, ice pack around the joint for 15-20 minutes every four to six hours for pain relief16, compression, and elevation.
- POLICE: protection, optimum loading, ice, compression, and elevation. (“rest” is replaced by optimum loading to ensure early mobilisation to prevent joint arthropathy due to Immobilisation17)
- If symptoms persist beyond three days presence of inhibitors, septic arthritis and fracture should be considered18, 19
- Joint aspiration if septic arthritis and faciotomy if neurovascular compromise is suspected

Adjuvant treatment:

1. DDAVP, 1-deamino 8-D arginine vasoporessin [3, 20]

1. Mild to moderate hemophilia only
2. Transient increase of FVIII levels by 3-5-fold
3. Nasal spray (1.5 mg/ml, delivers 150 mcg/spray)
   - <50 kg body weight =1 spray in one nostril
   - >50 kg body weight =1 spray in each nostril [21, 22]
4. DDAVP infusion-0.3 mcg/kg iv over 30 minutes in 50 to 100 ml NS [23, 24]

2. Tranexamic Acid

- Helps in oral bleeds
- Do not give in -
  1. Hematuria
  2. Patients with FIX deficiency receiving prothrombin complex concentrates, as this will exacerbate the risk of thromboembolism[25-29]

Prophylaxis:

- Factor VIII and IX both need to be administered 2-3 times per week. Dose varies from low to high (from 10 IU of VIII/kg to 40 IU/kg) with aim of maintaining trough levels above 1%, which is the minimally effective level to reduce risk of spontaneous bleeds.30
- Benefits of regular prophylaxis
  - Fewer bleeding episodes
  - Less joint damage
  - Decreased disability, hospitalization, time lost from school
  - Improved quality of life

Types of prophylaxis: [31]

- Episodic (On demand): Factors given at the time of clinically evident bleeding only
- Continuous prophylaxis: prophylaxis for 52 weeks/year, minimum of 45 weeks (85%) in a year [32]

1. Primary prophylaxis
   - started before the second clinically evident large joint bleed and age 3 years and thus reducing the impact of arthropathy[33]
2. Secondary prophylaxis
   - started after 2 or more bleeds into large joints and before the onset of joint disease[34]
3. Tertiary prophylaxis
   - started after the onset of joint disease

Inhibitors:

- High responders can be treated with high doses of factor VIII. Bypassing agents such as activated prothrombin complex concentrate (aPCC/FEIBA) and recombinant activated factor VII (rFVIIa/Nova seven) are used to stop persistent bleed.[35,36]
- Immune tolerance Induction (ITI) can eradicate inhibitors in 60% and 30% for HA and HB patients respectively[37]

Newer therapy (Figure2)

- PEGylated factor VIII
- Non-Factor treatment - these includes Factor VIII mimics
  - Emicizumab
  - Fitusiran
  - Concizumab
- Gene therapy

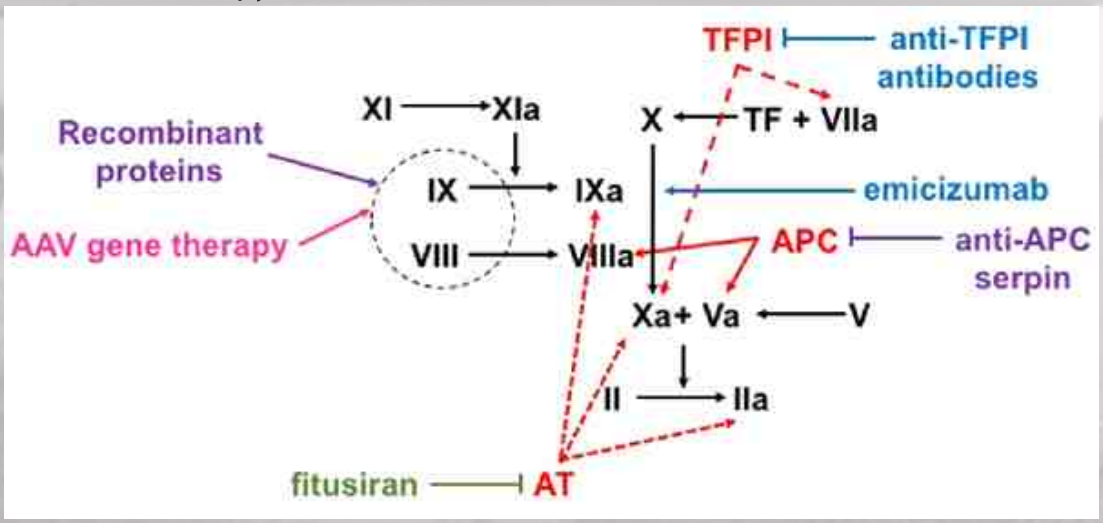

Figure 2. Coagulation cascade and mechanism of action of different hemophilia therapies[38]

Abbreviations: TFPI- tissue factor pathway inhibitor, AT- Anti thrombin, APC- activated protein C, TF- tissue factor, AAV- adeno-associated virus

Colour code: Natural anti-coagulants targeted by non-factor therapeutics are represented in red. Protein-based therapeutics are represented in purple, nucleotide-based therapeutics are represented in blue, and antibody-based therapeutics are represented in green.

Genetic counselling includes[39-41]

- Prenatal diagnosis, management of pregnancy and delivery in haemophilia carriers
- Understanding disease biology
- Establishing diagnosis in difficult cases
- Predicting risk of inhibitor development
- Detecting female carriers

Conclusions:

Hemophilia A and B are factor 8 and 9 deficiency respectively, causing poor clot formation resulting in bleeding disorders. It is an X linked disorder with males developing disease and females being carriers. It can be diagnosed with prolonged APTT, specific factor assay. Inhibitors to factors can be diagnosed with Nijmegan Bethesda assay. Treatment of Hemophilia is by replacement with recombinant factors. Gene therapy and other novel therapies are upcoming and promising mode of treatment. Genetic counselling is important for prenatal diagnosis. Prophylaxis helps a patient with hemophilia lead a good quality life with few episodes of bleeding.

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Interview with Dr. Sanjeev S Managoli on his Passion for Wildlife Photography.

Interviewer: Dr. Anil Kumar Sapre

1) How did you come to love photography, were there any early influences?

My first influence was my daughter when she was 3-years-old. Unlike other kids, who were stuck to Cartoon TV, she used to watch Animal planet. She preferred to go to lakes or parks and used to watch birds and animals with great interest. She used a point and shoot reel camera in those days. My wife is a Doctor and equally interested in nature outings. Since then, over the last 20 years, our family outings are in a forest, always.

A decade back, my friends told me to document our jungle visits. That is how photography started and now it is an integral part of our outings. Taking an image, freezing a moment, reveals how rich wildlife truly is.

My Daughter who is pursuing MBBS, my Wife who is a Radiologist, and myself, we carry our own set of gadgets into the jungle and compete with each other! It is a Family of Wildlife Lovers and enthusiasts.

From my extended family of IAP, Dr Pramod Shanbag and Dr. Manoj Sindigi, have inspired and mentored me. I also closely follow Dr. Eash Hoskote's awesome and inspiring wildlife images.

2) Would you call yourself a wildlife Photographer only, or are there any other genres you like to practice?

Yes, only Wildlife photography, because "Nature never goes out of Style"

Birds, Mammals, and Macro (Insects, Frogs and Snakes), in that order!

3) What interests you to keep pursuing Photography?

Ralph Waldo Emerson rightly quoted "Adopt the Pace of Nature: her Secret is Patience". Wildlife Photography taught me patience and is the biggest stress buster for my family and me.

I finished my Naturalist Training Certification 10-years back. Being a Naturalist, gave me a more logical understanding of nature and animal behavior. The more you learn about nature, the more you get interested to keep pursuing wildlife and its photography.

I am not a professional wildlife photographer, so my interest is absolutely NOT commercial.

4) Tell us about how often you practice your genre of Photography? Do you set some time from your busy schedules or just pick a walk and Click or do you plan specifics?

Pediatrics nourishes my stomach, Wildlife Photography nourishes my Soul! So on an average I do wildlife outings practically every month. I spend 6 to 7 days every month in wild. Overseas trips can be from 10 to 15 days depending on the destination. Being a Pediatrician, work can be is hectic sometimes. I am a Professor at a Medical College and I do Practice after college hours. However, to pursue my passion for wildlife photography, in between, I took a sabbatical from my college job for approximately 5-years. Where there is a will, there is a way.

We do need to plan often in relation to the expected sightings according to the seasons. Sometimes it is very impulsive too.

5) Since the digital world is blooming, what do you think is the scope of Photography?

The scope is immense!

Because of

1. Increased awareness from social media,
2. The improved purchasing power,
3. A large number of camera and lens choices available in all budgets.

6) What is your future plans with respect to Photography and how you plan to achieve them?

I want to:

1. Continue to visit, a long bucket list of destinations.
2. Keep upgrading the knowledge and gadgets periodically!
3. Participate and or hold Exhibitions of my Photography.

All this is achievable, with time management.

7) What are the different places you have visited locally and in Karnataka?

I keep visiting all most all parks and lakes of Urban and Rural Bangalore. But my terrace garden is my favorite, followed by places around Bangalore.

Karnataka is a paradise for Wildlife enthusiasts because of its unmatched biodiversity. Long coastline, Western Ghats, many rivers and lakes as well as arid areas in northern parts of the state make Karnataka a wildlife hotspot. I have visited Kabini-Nagarhole, Bandipur, MM Hills, BR Hills, Bhadra and Dandeli National Parks, especially for Tigers, Leopards and other mammals. Hampi is unique for Sloth Bear sightings.

Birds are seen in all these reserves mentioned. But I will specially mention Ranganthittu, Magadi in Gadag, Ganeshgudi, Kundapura, Coorg that are very rich in birdlife.

For macro photography (Insects, Butterflies, Frogs and Snakes) I prefer Agumbe, Coorg and Dandeli wildlife sanctuaries.

8) What are the different places you have visited in India?

Long List: Almost all tiger reserves and Birding Hot spots, except Ladakh, some places in Northeast and Andaman & Nicobar Island. I will cover them as soon as possible once the pandemic restrictions are over!

9) What are the different places you have visited Globally?

Overseas, I have visited Ecuador, Botswana, Kenya, Srilanka, and Bhutan.

10) What is your advise to our fellow Pediatricians who want to pursue wildlife as their hobby. How should they start this hobby and carry it forward?

Photography is a powerful visual storytelling tool often underestimated by many. As a medium and in it's purest form, it possesses the ability to prescribe desire, joy, sadness or pain. An image is potent enough to change the world's view in an instant.

Just pick up any camera that you have, study the instruction manual thoroughly, and move to outdoors. There is a world outside the clinic and hospital too waiting for you. Don't wait to do it later, because "Yeh Zindagi na milegi Dobara!"

And the most important thing: don't think you are indispensible.

I have managed to make "Work- Wildlife balance" a habit. Work hard and Photography Harder!

Any hobby, for that matter, done religiously keeps your mind and body young and healthy.

You can always contact me personally for specific details.

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Unmet needs of medical profession in India

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Medical profession – has risen time and again to unexpected challenges, the most recent one being the Covid - 19 crisis. The whole fraternity came together and dealt with this crisis and continues to overcome the challenge with the ongoing vaccine drive, despite inadequate compensation. During these demanding times, it becomes more important to pay attention to the issues around teamwork, communication, patient safety and quality of care. There is a need for change in the existing systems at a national level; clinical leadership and focus on quality improvement to steer things in the right direction. We need to learn lessons from the western world who have unfortunately overdone it; and aim to balance autonomy Vs accountability.

Patient centered care

Patient centered care is vital and it's important to treat patients like one would care for their own family member. Patients may get confused if services are disjointed when health care teams have not communicated among themselves, thus leaving patients to piece the puzzle together. Yes, doctors are under financial, management and time pressures, and often must meet patient's (and their families') demand and expectation. But that should not let us deviate from the prime focus of patient care. An attitude of consumer culture is displayed toward the health sector, wherein patients have unreasonable expectations and complain when the result is not favorable. With the number of litigations on the rise, doctors are inclined toward defensive medicine by offering every option, but a dilemma exists as societal expectations demand doctors to be prescriptive. Doctors under litigations also need support and advice from a strong medical defense union.

Patient safety

Patient safety is paramount and still needs more focus and improvement. Management and medical staff may trade blame when patient's safety has been compromised. However, all professionals must bear equal responsibility, be attuned toward patient safety and reduce errors which can happen due to system failure or human error.

Evidence suggests that focus on quality of health-care not only improves patient safety, but is also cost effective in the long run. The challenge however, is to combine the need of maintaining services under pressure and professional obligation to maintain good clinical standards; thereby transforming 'recommendations' to 'actions'.

Audits may sometimes focus on implementation of tasks and processes, rather than unearthing and fixing underlying issues. Morbidity and mortality meetings should be conducted in an open and non-accusatory environment. Just like the airline industry, we in the medical profession must aim for good safety records.

In order to implement the above, it's useful if a national single-governing body like the NMC oversees these efforts. This is the need of the hour and the way forward.

Challenges faced by doctors

Doctors tend to be perfectionists and high achievers, hence stressing themselves toward burnouts. Doctors face conflicts between ideal medical management versus suboptimal management due to the financial constraints of the patient. In the recent past, there have been many incidents of violent attacks on doctors and hospital staff. It's appreciable that the government has passed an ordinance to protect healthcare workers and made violence against them a punishable offence.

Applied ethics

Being ethical can be unpopular among doctors. Whistle blowing / raising concerns requires enormous courage and can leave people exposed. In addition, hierarchies and power relationships can cause impediments. Teaching sessions should highlight ways to translate ethics into equivalent behavior. Culture of being open minded and non-blaming needs to be fostered. All staff should be empowered to influence the way a service is executed and feel free to raise concerns. Team work with supportive and effective leadership will help voice concerns and reduce the risk of blame.

Reflective practice

There is a need for strong emphasis on critical appraisal, reflection and improving practices rather than remaining stagnant / completing a check-box exercise. Mistakes happen – the critical aspect is what ensues. Owning mistakes encourage others to do so too and promotes open culture.

Medical professionalism

Medical professionalism should be included in undergraduate curriculum which will help students reflect on the realities of practice; the complex human interactions involved; applied ethics; team work; facing difficult conversations and other challenging aspects of practice. Shadowing during training helps in appreciating how to deal with dilemmas while taking clinical decisions. Continued supervision, mentorship, continuing professional development and critical appraisals are needed even after one completes education.

Clinical leadership

Monthly team meetings and Schwartz rounds raise teamwork and ensure good liaison. Schwartz Rounds are grand rounds style events that focus on a case or a theme related to the emotional impact of patient care that care team members experience. A multidisciplinary panel is facilitated to share their experiences, and then the discussion opens to comments from audience participants. It is a great way to reflect on subjects that may not be typically discussed in a group forum. Well-functioning teams are vital in modern health system. Clinical leadership and team spirit need to spread.

Team working

Teamwork, networking, and multidisciplinary work combine to enhance academic progress, encouraging debate and discussion and foster a protective learning environment. Culture and actions of the organization will influence behavior within the team. There is substantial evidence that effective teams reduce mortality and morbidity and increase patent satisfaction.

Quality improvement

Strong clinical leadership is the key to quality improvement. Often this comes through small things such as offering help, praising good work, coffee breaks with subordinates and encouraging staff to raise concerns. We need to establish a culture of improvement with recruitment of local 'improvement champions'. Private hospitals emphasize on income generation and productivity and quality control may not be on the forefront. Doctors are caught in organizational pressures with little time for creating a culture of reflective practice, innovation and risk taking. Hierarchies and fear of failure can stifle innovation.

As we are in the 21st century, it's important that we learn how to manage risks, harness innovation, and improve clinical leadership and team work with an ultimate goal of improving overall health care outcomes. We need a strong clinical governance structure by the NMC combined with able leadership to lead us forward; and systems will improve if doctors also engage with the same.

Congratulations

Dr. Sumitha Nayak,
CIAP EB Member, on being selected Member of the National Platform on Vaccine Confidence.

PHOTO GALLERY

PG Teaching Online

PG Teaching at RRMCH

Addressing Press
Dr. Mallikarjun HB, Pres BPS

Dr. Srinivas S addressing media

Dr. Santhosh - Talk on CHD

Dr. Meenakshi Bhat
briefing media on Gaucher case

PHOTO GALLERY

NTP-PPO Workshop at St. Johns Medical College

World Down Syndrome Day at B & LCH

NTEP Workshop at Ramaiah Medical College

BAHA 2021 Inaugural Ceremony