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# IAP BANGALORE – BPS

# NEWSLETTER

## Message from the President

Respected seniors and my dear friends,
Happy new year 2020 and greetings for the festival of renouncing negative thoughts, appreciation of the warmness, best of health, and springing of friendliness, and growth -**Makara Sankranthi**

I am very happy to take over as the president of IAP Bangalore which was formed by great visionaries of yesteryears to propagate knowledge, develop camaraderie among the pediatricians. This chair has been occupied by many great academic stalwarts of great standard and I humbly accept this task of fulfilling their aspirations with all your co-operation and support.

Going ahead, conducting a good quality program is becoming a challenge for many reasons. The attendance of the members for each meet is very important and should increase month by month and year by year. Let us strengthen the organization. It will be of great help if the members themselves indicate what type of programs, and what topics they are anticipating from their team. Ultimately the association is created for the members. It's survival is in their own interest. Let us join hands together and make this association a vibrant one in serving this society and the members.

The medical fraternity is facing many difficulties, and it has become a great hurdle to resolve and go ahead in serving the society, confidently and rationally with peace of mind. It needs a combined effort from all of us and other medical organizations jointly to face the obstacles. Hope all of us can do together in the coming years.

One can practice with confidence only by learning , gaining and sharing knowledge by attending academic meetings regularly

Thanking you and once again wishing all the members a happy and progressive year ahead

**Dr Ravishankara M**

**President -2020, IAP Bangalore BPS**

## Message from The Secretary

Dear IAP Bangalore members,

Greetings from TEAM 2020!!

I take this opportunity to convey my wishes for a peaceful, healthy and Happy New Year to you and your family.

There are plenty of academic activities that have been planned this year. Besides these, we are also looking at conducting several fun- filled events and activities for the members.

We will continue to bring forth the monthly e-Pediscan, and request the members to kindly send in their contributions in the form of academic and non-academic articles.

Looking forward to your whole hearted support in the year ahead.

Regards,

**Dr Sumitha Nayak**

**Hon Sec, IAP Bangalore BPS.**

## Message from the Editor

Dear Bengaluru IAPians

Greetings from team IAP BPS team 2020

It gives me immense pleasure to be a part of this team as the editor of the monthly Pediscan

We will try to comprehensively cover practitioner and PG oriented topics across specialities this year along with few non-academic articles highlighting the hidden talents of our BPS IAPians and keep you updated about the activities of BPS

We wholeheartedly welcome academic and non-academic articles from our members, also suggestions, if any, for the betterment of Pediscan

Regards

**Dr Chidananda N K**

**Editor- Pediscan**

## Immune Thrombocytopenic Purpura

Immune Thrombocytopenic Purpura (ITP) is a disease caused by increased destruction of platelets. Antibody sensitized platelets are destroyed by phagocytic cells especially in spleen. It is the most common autoimmune haematological disorder in children. It occurs in about one in 10,000 children. It is diagnosed when platelet count is below 100000/cu mm

Acute ITP usually occurs in children below 10 years with peak incidence between 2 to 6 years. There is no sex predilection. It usually occurs after URTI and resolves within few weeks or months. It is considered as chronic ITP when platelet count stays below 1,50,000/cu mm for more than 6 months.

Children present with sudden onset of bruising in an otherwise well child. There may be history of preceding viral infection or vaccination. Few children might have epistaxis and oral mucosal bleeds. Haematuria, melaena or haematochezia can happen in less than 10% of children. Even though children present with very low platelet counts, severe bleeding is very rare in these children. Presence of fever, bone pain, arthralgia, lymphadenopathy, hepatosplenomegaly must alert us to a different diagnosis.

Complete blood picture shows normal Haemoglobin and WBC count with low platelet count. Anemia can happen if there is significant blood loss. All children with suspected ITP should have peripheral smear done which should be normal except for isolated thrombocytopenia. Giant platelets may be seen on peripheral smear. Mean platelet volume and Immature platelet fraction are elevated and are useful investigations and might be done in places where they are available.

Need for bone marrow examination is debatable especially as it is an invasive painful procedure needing sedation in children. There is no need to do bone marrow examination in a child with typical features of ITP who is being treated with observation or IVIG or anti D. It would be prudent to do bone marrow examination to rule out leukemia, especially if there are any atypical features. It is debatable whether to do bone marrow examination before starting steroids. Blood group, DCT should be done when considering to give anti D.

ITP is a benign self-limiting disorder which can be managed with wait and watch approach in most children. Indications for treatment would be severe bleeding or platelet count of less than 20,000/cu mm with mucosal bleeding. The incidence of intracranial bleed in ITP is less than 1%. It would be wise to remember to treat the child and severity of symptoms rather than the platelet count.

First line treatment of Acute ITP consists of glucocorticoids, or IVIG or anti D. There are various regimens for starting glucocorticoids. Prednisolone is preferred over Dexamethasone. Prednisolone at 2mg/kg for 3 weeks was the traditional regimen. Other regimens with higher doses for shorter periods are now being used more commonly. It is recommended to go for shorter courses of 5-7 days.

Prednisolone at dosage of4mg/kg, maximum doe 200mg, for 4 days is the most commonly used regimen. Pulse methylprednisolone with 30mg/kg for 3 days followed by 20mg/kg for 4 days will bring up the platelet count quickly. The usual side effects are cushingoid facies, weight gain, hyperglycemia, hypertension, behavioural changes, osteoporosis and avascular necrosis.

The traditional dose of IVIG - 2g/kg is used. Lower dose of 0.8-1g/kg is equally effective and is recommended now. IVIG gives more rapid increase in platelet count than steroids, but more expensive than other options. IVIG can cause flu like symptoms and in some cases aseptic meningitis with headache and photophobia. Risk of blood borne infections is a potential concern with plasma products. Immunisation MMR and varicella vaccines should not be given for 8-11 months after IVIG and if given within 2 weeks before receiving IVIG, should be repeated after 8-11 months.

Anti D can be used to treat Rh positive children with ITP. It is given in the dosage of 50-75 ug/kg as short IV infusion. It can cause haemolysis. It is less effective in splenectomised children.

Drugs affecting platelet function like Aspirin and NSAIDS, intramuscular injections should be avoided. Head injury, contact sports should be avoided. Use of helmet while cycling is advised.

Most cases of ITP resolve in 6months with or without treatment. 55-75 % by 1 months, 80-90% by 4-6 months. Some of the children can have recurrent ITP and can be treated with one of the three frontline therapies which has not been already used.

Children in whom thrombocytopenia persists between 3-12 months are considered as Persistent ITP and 10% of children can progress to Chronic ITP in whom thrombocytopenia persist beyond 1 year. In these children spontaneous remission becomes more uncommon.

In children with chronic ITP, further testing like ANA, Immunoglobulin levels, liver, renal, thyroid function tests, complement levels, tests for HIV, Helicobacter Pylori and immunodeficiency should be done. ANA may be positive in 30% of children and might represent a subset of children at risk of developing further autoimmune symptoms in future.

In children who do not respond to first line treatment, thrombopoetic receptor agonists can be used. Drugs like Eltrombopag and Romiplostin are easily available in Bangalore now. They are approved for use in chronic ITP. Eltrombopag is given orally 25mg once a day for children 1-5 years of age and 50 mg once a day for older children. Dose can be increased to a maximum of 75 mg depending on response. Romiplostin is given weekly with starting dose of 1mcg/kg subcutaneously and dose titrated up according to response. Doses up to 10mcg/kg have been used. Development of myelofibrosis is of concern with prolonged use of these medications.

The next line of treatment would be Rituximab, an anti CD20 monoclonal antibody. It is given at 375mg/m2, weekly for 4 doses. It causes rapid depletion of B cells. Lower doses might be sufficient.

Children who fail all the above may need splenectomy. Appropriate immunisations should be done prior to splenectomy and children will need penicillin prophylaxis post splenectomy. It should only be considered as a last resort in children who have failed all available medical therapies and are having thrombocytopenia-related bleeding, and whose life is at risk

**Dr C P Raghuram**
**Paediatric Haemato Oncologist**
**Aster CMI Hospital, Bangalore**

# PHOTO GALLERY

Valedictory function

Pediscan release at valedictory


IAP-BPS getting the best branch award

Health Camp At Vijayanagar Vivekananda School

Dr Srinath Mugali being felicitated


Dr Sumitha Nayak receiving the FIAP

Dr Shantharaj receiving the FIAP


Dr Naveen Benakappa receiving the FIAP