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IAP BANGALORE – BPS

NEWSLETTER

Message from the Editor

Dear Bengaluru IAPians

Greetings from IAP BPS

This is the second edition of Pediscan for the year and since the first edition we have seen a wonderful Inaugural of BPS and IAP Karnataka at Hotel Capitol with PG teaching from eminent academicians and a guest talk from Dr Vijayabhaskar.

BPS was involved with the latest ATM TOT conducted at IISc- Bengaluru in association with the Respiratory Chapter, which was attended by over 60 delegates.

A talk on corona virus by Dr Nagaraj, Director of Rajiv Gandhi Institute for TB and Chest Diseases was organised on 16th Feb which was attended by close to 100 members who cleared their doubts

As a philanthropic gesture, suction machines were donated to Kidwai hospital.

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

Regards

Dr Chidananda N K
Editor- Pediscan 2020

HENOCH - SCHONLEIN PURPURA

Dr Chandrika S Bhat MD (Pediatrics), RCPCH

Henoch Schonlein Purpura (HSP) is the most common childhood vasculitis. It is a hypersensitivity vasculitis with IgA dominant immune complex deposition in smaller venules, capillaries and arterioles. The characteristic tetrad consists of non thrombocytopaenic palpable purpura, arthritis or arthralagias, gastrointestinal (GI) and renal involvement. However, all features of this tetrad may not be present leading to diagnostic confusion. It is more common in males and has a seasonal variation with higher incidence in winter. The precise etiopathogenesis of HSP still remains unclear. It has been associated with a history of preceding infections especially in the upper respiratory tract.

CLINICAL FEATURES

1. **RASH**: The typical rash evolves from erythematous to urticarial to non blanching palpable purpura with petechiae and ecchymoses. In 50% of the cases, palpable purpura maybe seen at presentation. Rash is usually symmetrical in distribution and has a predilection for dependent areas such as lower limbs and buttocks. It can also involve the upper limbs, trunk and face. In more severe cases, haemorrhagic or necrotic lesions maybe seen and this has to be differentiated from septic emboli or meningococcal septicaemia especially in an unwell child. Rarely, angioedema can be seen in the scalp, extremities and back.

2. **GI:** The most common symptom of GI involvement is a colicky pain that tends to worsen with intake of food. Nausea, vomiting, malaena, haematochezia, haematemesis secondary to mesenteric vasculitis can also be seen. In 25% of the cases GI involvement can precede skin manifestations. HSP should be considered in the differential of acute abdomen in children.

3. **JOINT INVOLVEMENT:** Arthralgia/arthritis usually involves the large joints. They are transient, non-migratory, non-erosive and do not cause permanent joint damage. In 25% joint involvement can precede the onset of rash.

4. **RENAL:** Haematuria is the most common renal manifestation. Proteinuria is usually seen along with haematuria and is rarely an isolated finding. Most of them develop renal manifestations within the first 3 months but in some cases can occur upto a year after onset of disease. Only 5% of children progress to end stage renal disease. Renal involvement is the most important prognostic factor.

Other rare and uncommon features include- Testicular torsion, seizures, encephalitis, visual disturbances and weakness.

DIAGNOSIS

HSP is a clinical diagnosis. However, when presentation is atypical tissue biopsy (skin/kidney) may be helpful. Several criteria have been formulated to aid in diagnosis. The most commonly used are ACR/ EULAR criteria.

The **ACR criteria** requires the presence of any 2 of the following:

- Age less than 20 years at onset
- Palpable purpura
- acute abdominal pain
- biopsy showing granulocytes in the wall of small arterioles or venules.

The **EULAR criteria** have been summarized below:

Purpura * (mandatory criterion) - commonly palpable and in crops or petechiae, with lower limb predominance, not related to thrombocytopenia.

And at least one of the four following criteria:

1. **Abdominal pain** - Diffuse abdominal colicky pain with acute onset assessed by history and physical examination. May include intussusception and gastrointestinal bleeding
2. **Histopathology -** Typically leucocytoclastic vasculitis with predominant IgA deposit or proliferative glomerulonephritis with predominant IgA deposit
3. **Arthritis or arthralgias -** Arthritis of acute onset defined as joint swelling or joint pain with limitation on motion Arthralgia of acute onset defined as joint pain without joint swelling or limitation on motion
4. **Renal involvement -** Proteinuria >0.3 g/24 h or >30 mmol/mg of urine albumin/creatinine ratio on a spot morning sample, haematuria or red blood cell casts: >5 red blood cells/high power field or red blood cells casts in the urinary sediment or ≥2+ on dipstick.

*For purpura with atypical distribution a demonstration of an IgA deposit in a biopsy is required.

DIFFERENTIALS

Conditions with similar presentation include hemolytic uremic syndrome, Crohn's disease, Wegener's granulomatosis, infective endocarditis and IgA nephropathy.

TREATMENT

Symptomatic treatment is sufficient for rash and arthritis. Acetaminophen or NSAIDs are generally preferred and use of aspirin should be avoided. Steroids are indicated in the presence of severe disease i.e severe abdominal or joint pain, renal, scrotal or testicular involvement. When indicated oral or parenteral steroids at a dose of 1 to 2mg/kg/day with gradual tapering over 2 weeks can be used. Rarely high dose steroids (methylprednisolone 30mg/kg/day) may be required especially in the presence of nephrotic range proteinuria or mesenteric vasculitis. Severe renal involvement warrants referral to a paediatric nephrologist. In the face of worsening renal function plasmapheresis or high dose of intravenous immunoglobulin may be required.

In some cases, HSP can run a chronic course with persistent skin disease. Dapsone or Colchicine can be used in such situations.

SUGGESTED MONITORING OF CHILDREN WITH HSP FOR NEPHRITIS

Check urine dipstick (preferably early morning urine sample) and BP - Week 1 to 4: Weekly; Week 5 to 12: Fortnightly; Week 13 to 1 year: Monthly

Discuss with paediatric rheumatologist/nephrologist if there is: hypertension, macroscopic haematuria for 5 days and more, or proteinuria

PROGNOSIS

HSP is a self-limiting disease and renal involvement determines the long-term prognosis. One third of patients may have relapses although they tend to be milder and shorter.

REFERENCES

1. Sohagia AB, Gunturu SG, Tong TR, Hertan HI. Henoch-Schonlein purpura - a case report and review of the literature. Gastroenterol Res Pract. 2010;2010:597648.

2.Ozen S, Marks SD, Brogan P, Groot N, de Graeff N, Avcin T, Bader-Meunier B, Dolezalova P, Feldman BM, Kone-Paut I, Lahdenne P, McCann L, Pilkington C,Ravelli A, van Royen A, Uziel Y, Vastert B, Wulffraat N, Kamphuis S, BeresfordMW. European consensus-based recommendations for diagnosis and treatment of immunoglobulin A vasculitis - the SHARE initiative. Rheumatology (Oxford). 2019 Sep 1;58(9):1607-1616.

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UPCOMING EVENTS

March 15th 2020 - Addressing Adolescents

March 29th 2020 - Updates in managing TB

April 5th 2020 - Recent guidelines in managing Childhood Asthma

April 19th 2020 - Handling neonates- Knowledge Updates

IT'S COMPLICATED : THE DOCTOR-PATIENT RELATIONSHIP

A myriad of thoughts run through my mind as I walk the crowded corridors of the hospital, going from ward to ward for fundus calls, watching doctors working tirelessly in the middle of the night. Scurrying around like mice, barking out instructions to nursing staff, checking vitals and changing treatment orders, these doctors take the meaning of multi-tasking to a whole new level. And within all this organized chaos, the doctor has to take time out to document every single decision he/she makes because if it's not on paper, it has never happened. And people wonder why doctor's handwriting is so bad.

With the ever-growing awareness among patients, medicine now is not just about curing a disease, it has moved beyond what was the fight between a doctor's mind and the disease process. Every patient now is a potential physical threat or a lawsuit waiting to happen. Gone are those days when patients had faith in their doctor, nowadays every move of the doctor is eyed with suspicion.

There is no other profession that needs more mental fortitude than being a doctor. 99% of the cases we treat fall in about 10 % of the diseases we read about. The only time we really have to apply our mind is to those 1 % of cases. Treating patients is repetitive, but that's where it gets tricky, that is what the years of training is for! A simple case which looks like just another run of the mill case maybe something much more complicated, missing the subtle signs can lead to devastating complications not only for the life of the patient but even the life of the doctor in present day scenario.

Being a doctor is not about treating a disease, it is about treating the patient , a human being. Reading about diseases during MBBS, and seeing a few select cases in the wards never truly made us realize that a disease isn't just about cure or pain relief. It is a process, a physical and mental journey that not only the patient goes through but also his/her family and the doctor himself.

Telling the patient what medication to take is as important as telling the patient about the disease and how it affects the body. Patients do not understand words like genetic or idiopathic so easily. They only understand action and consequences. A patient smokes and drinks, he has a related disease, that's ok but if he doesn't, the patient /relatives can't seem to wrap their brains around any other disease process. They can't digest the fact that sometimes they are affected by a disease that has no treatment or that despite trying every treatment modality possible sometimes we just cannot win. And a loss always

needs to be analysed, be it a sport or in real life, someone has to be held accountable. And if the blame is not on the patient themselves, the only person left is the doctor. Because obviously no one can blame god, god can never do wrong, can He?. In their minds blaming god may have disastrous consequences and who wants to take that chance.

So, that anger is directed somewhere else. We have been taught since childhood that anything bad that happens is because of human nature and anything good that happens is because of God's will. So after a successful surgery or resuscitation, the first words we get to hear are 'Thank you, oh Almighty' followed by maybe a 'thank you doctor' . But when a patient dies, the first words are 'there must have been a mistake from your part, doctor' never an accusation on God, as to why he didn't use his magical powers to bring the patient back to life.

This hypocrisy is faced by doctors every day. Initially it hurts, it pains us too when we do everything in our power but it is not enough. But after a few times of being wrongly accused of not doing your best when you have sacrificed sleep, food and family time, doctors start to tune out these words and emotions thrown at them because what else can one do? It is either tune it out or go crazy and the mind almost always chooses the first one. This is wrongly seen to the outside world as apathy, they see no sadness in the face of the doctor and start to think that maybe he/she did not do his/her best or maybe made a mistake. And to top it off they feel that since they have given money to the doctor, it must translate to life. A common dialogue by the family is 'money is not an issue'. Because anything and everything can be bought with money these days and so they think that money should also be able to buy life and if that doesn't happen it is the middle man who is at fault, this middle man has conned them and taken their money but not delivered the goods.

Such is the thought process because the brain cannot suddenly accept the death of a loved one. It is a knee jerk response which all doctors understand and are ready to take the blame and bear the brunt of the anger that needs an outlet but when this same anger translates to violence and law suits, that is when a doctor questions if all this is worth it. This is what is said about us, that God put us here to relieve the suffering of the people and such a service should be selfless and should not be for the money. But neither does God feed us nor does He magically give me that watch I always wanted. And not just that, He didn't even give us the manual that is supposed to come with the human body something we had to go and make from scratch ourselves nor did He give us any warranty period on this oh so fragile object.

Nowadays even computer viruses cannot be fully controlled, something that has been made completely by the human race from scratch and here people expect doctors to fully control real world viruses and other diseases!

But why did God even create such devastating diseases? If He is all powerful, why is there so much suffering in the world? I guess every doctor may have asked this question to themselves at one point of time during their careers. This happened to me during my pediatrics posting. There are congenital disorders that can make a child suffer beyond our wildest dreams, and for what fault of that child?

The most common explanation given would be of karma, that this child must have done something bad in his/her previous life for which he/she is paying a price in this one. Again God is not at fault here, is He? He is just meting out the punishment, a tit for tat. Something religious heads all over the world say is the one thing that we should all refrain from, they all say forgive because that is God's way but somehow gladly accept it when God does it. There maybe explanations for all of this, something in the religious texts that justify all of this, but try explaining that to that child and mother when the child's kidney or heart is failing and every single moment of life is a struggle.

Even though we may be surrounded by such negativity, it is also the patients because of whom we don't completely give up on this profession. Those few patients who still believe in us, deep down who know that it was our hard work that kept them alive or cured them, those patients who search for you in the OPD and don't mind waiting a few more minutes just so that they can follow up with you is what brings a smile to our faces. These are the lives to whom we have made a difference and will be remembered in their prayers and thoughts.

In the end I guess more than anything, what we actually want is recognition. Something all we humans strive for in any aspect of life, that the person in front of us understands how much we have worked to gain these skills and gives us the benefit of the doubt when things start to get out of hand. This trust is what we want, this trust would make the whole community feel more secure and more willing to give it their all because a person's best comes out when they work in a positive environment, and in the end this benefits everyone.

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PHOTO GALLERY

PG Case discussion during inaugural

Lighting of lamp during inaugural

Dr K. Y. Prabhakar being honoured

Pediscan release during Inaugural

Team IAP-BPS 2020

Asthma Training Module on 8th and 9th Feb

Donation of suction machines to Kidwai

Talk on Coronavirus at RGICD