



EDITORIAL

We are glad to present the November newsletter! We extend our heartfelt gratitude and thanks to every member for their invaluable contribution.

In this edition we have an article on Neonatology. Neonatal Alloimmune Thrombocytopenia though a rare entity needs careful evaluation and timely management which a pediatrician needs to be aware of. We had Children's Day celebrations, Adolescent week celebrations and Newborn week celebrations at various centers.

We look forward for interesting articles.

Happy reading!

Warm regards,

Dr Nandeesh

Dr Priya Shivalli



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Neonatal Alloimmune Thrombocytopenia (NAIT)

Dr. Sahana Manjunath, Professor of Pediatrics,
RRMCH, Bengaluru

NAIT is defined as fetal /neonatal platelet count less than 1.5 lakhs/microliter resulting from maternal sensitization to fetal platelet antigens. It is equivalent to red blood cell alloimmunization and is due to transplacental passage of paternally derived fetal platelet antigens. This diagnosis should be considered for any neonate with unexplained severe thrombocytopenia. It is one of the important cause of severe thrombocytopenia and intracranial hemorrhage in term infants. The reported incidence is 1000-1500 live births. Diagnosing NAIT is important not only to treat the newborn but also to determine the future pregnancy risk and the treatment plan.

PATHOGENESIS:

NAIT is the platelet equivalent of red blood cell alloimmunization. Fetal platelets contain paternally derived platelet antigens (most common is HPA1a, HPA5b) that maternal platelets lack. After an

episode of fetomaternal hemorrhage, IgG antibodies are produced in mother against these specific platelet antigens which crosses the placenta and causes destruction of fetal/neonatal platelets resulting in thrombocytopenia.

The platelet immunology scientific subcommittee of the International society of thrombosis and hemostasis recommended the following criteria for suspected fetal NAIT.

- Platelet count below 100000/micro L at birth or within seven days after birth of the affected child
- Fetal intracranial haemorrhage
- Both in the absence of an alternative cause.

CLINICAL MANIFESTATIONS:

Most cases are diagnosed incidentally, when shortly after birth the first-born infant is found to have thrombocytopenia with petechiae, ecchymosis or bleeding. Additionally, spontaneous neonatal or fetal ICH(intra cranial haemorrhage) is the first marker of the disease. Several studies have shown that 7-20% of affected neonates or fetuses will have ICH. Spectrum of the disease ranges from mild asymptomatic thrombocytopenia to severe thrombocytopenia. 75% of ICH occurs in the antenatal period. The greatest risk of bleeding in the postnatal period is in the first 96 hours after birth. Platelets have a half-life of 8-10 days and therefore platelet count returns to normal by 1- 2 weeks. Mothers are asymptomatic with normal platelet counts. Factors affecting severity of disease include HPA1a antigen, alloantibody levels, previous child affected by ICH.

DIAGNOSIS:

Currently routine screening of all pregnant mothers for HPA1a discordancy is not recommended. Maternal platelet count to rule out maternal thrombocytopenia is done as an initial step. If maternal platelets are normal, maternal-paternal platelet antigen typing is done. Maternal serum can be tested for HPA antibodies.

NEONATAL MANAGEMENT:

Although it resolves by 1-2 weeks, serial platelet counts should be done for the first 5-7 days. Goal is to keep the platelets above 30000/microL in the absence of bleeding. If active bleeding or evidence of ICH present then platelets should be maintained above 100000/microL. IVIG is the treatment when NAIT is strongly suspected or confirmed, 1gm per kg for 2 days is given. Platelet transfusion may be given to maintain platelets above 30000/microL.

MANAGEMENT OF PREGNANT WOMEN WITH PREVIOUS HISTORY OF NAIT:

All these mothers should be followed up in high risk obstetric clinics in all future pregnancies. These mothers should be started with IVIG with or without prednisolone starting at 12 or 20 weeks depending on the risk of development of ICH in the present pregnancy.

CONCLUSION:

It is important to remember that though NAIT is a rare condition, it is an important cause of severe thrombocytopenia in term neonate. The disease spectrum may range from mild to severe thrombocytopenia. Neonatal management is with IVIG and platelet transfusion whereas maternal management in subsequent pregnancies include early treatment with IVIG and steroids. Multidisciplinary approach is required involving obstetricians, neonatologists, haematologists and blood bank team.

Dr. Sahana Manjunath
Professor of Pediatrics
RRMCH, Bengaluru

A NEONATE NARRATES

Hurray! I have made it. From the wet, watery, restricted womb to this big, bright world. Mind you, it was not easy. I was not actually prepared for this. I was taken by surprise. It was that fateful moment, suddenly I saw a gaping opening in the roof of my chamber. The water around me suddenly drained. It is a horrible experience! Have you ever been in a bath tub full of water, soaped and without your knowledge, all the water has run out? Then two green heads with face half covered, peered down the hole. Do they want to hide their identity, lest I may take revenge? Before I could blink, two rubberized hands grabbed me, pulled me out and severed my life-line. What more, one of them held me upside down and was raising the hand, as if to spank me. Just then, out of sheer fright, reflexly I gave a loud shriek. Funnily enough, this seems to have made all around heave a sigh of relief! Anyway, I was spared the bash, instead, passed onto another green person who placed me on a green towel in the corner of the room. Strangely enough, though it was a shock to me, I believe people around had planned and arranged this calculated mission of dislodging me from my private chamber..

As I was celebrating my escape from spanking, a tube was shoved into my nostril. I spluttered, sneezed, and cried in protest, which stopped them continuing this assault. Next was the act of rubbing me with a green dry cloth. I enjoyed it; it was exhilarating! I thought that life was going to be fun. Sorry, just then I heard somebody saying, "he is three weeks early, we have to keep a close eye on him." I felt like a convict who had escaped from prison. Just then I started feeling this heat from above. Good gracious, it was a heater coil above me. Instead of a baby boy, I felt more like a beef burger on the barbecue!

I was then shifted to a room and put in a glass case. Have you ever slept inside an empty aquarium? This was mean. But worse was yet to come. The people around me, most of them in green/blue gowns, did all sort of nasty things like shoving tubes up and down my various orifices. I was tired. I wanted to be left alone to take a nap. This I thought they did, when nothing happened for a few moments. Then came this young lady with a needle. She may be pretty at other times, but at that moment she looked scared, nervous even more than me! She poked me three times before she could take some blood and shove a cannula into me. I was wondering whether she was one of Dracula's assistants and how often was she going to do this to me?

ಸಾರ್ಥಕ ರಾಜ್ಯೋತ್ಸವ

ವರ್ಷ ವರ್ಷ ಹರ್ಷದಿಂದ
ಬಂದೆ ಬರುವುದು ಕನ್ನಡ ಹಬ್ಬ
ನಾಡ ಹಬ್ಬ ಹಾಡು ಗಬ್ಬ
ಸಡಗರ ಸಂಭ್ರಮ ಅಬ್ಬಬ್ಬ

ತಾಯಿ ಭಾಷೆಯ ಕರುಳಿನ ಸೆಳಿತ
ಒಂದೆಡೆ ಒಗ್ಗಟ್ಟಾಗುವ ತುಡಿತ
ಒಂದೇ ನಾಡಿಯು ಬಡಿಯುವ ಮಿಡಿತ
ಹಿಗ್ಗುತ ಪ್ರತಿ ಮನ ತಕಧಿಮಿತಾ

ನಾಡು ನುಡಿಯೆ ಜೀವನಾಡಿ
ನೆಲ ಜಲ ರಕ್ಷೆಗೆ ಬಡಿದಾಡಿ
ರಾಜ್ಯೋತ್ಸವದ ಮೋಡಿಯ ನೋಡಿ
ನಾಡದೇವಿಯ ಹಾಡನು ಹಾಡಿ

ಒಂದೇ ದಿನದ ವೈಭವ ಸಾಕೆ
ಅನು ದಿನ ಪ್ರೇಮ ಬಾರದು ಏಕೆ
ಅನ್ಯ ಭಾಷೆಯ ಮೋಹವು ಬೇಕೆ
ಅಸಡ್ಡೆ ಅಲಕ್ಷ್ಯ ಸಲ್ಲದು ಜೋಕೆ

ಸಂಸ್ಕೃತಿ ಸಹನೆ ನಮ್ಮಯ ಗುರುತು
ಕನ್ನಡ ಪಠಿಸುವ ಭೇದವ ಮರೆತು
ಕನ್ನಡೇತರರು ಕನ್ನಡ ಕಲಿತು
ರಾಜ್ಯೋತ್ಸವವು ಸಾರ್ಥಕವಾಯ್ತು

ಡಾ.ನಿತ್ಯಾನಂದ ಸುಂಡವಾಳು

It was time for some food. They brought a bottle of milk. The smell was very appetizing. Believe me, as I was priming my taste buds, they shoved a tube down my nostril and down the milk went without any of it touching my lips and tongue. This is height of cruelty. That too, the amount given was few spoonful! Stingy stinkers. I looked around the room. There were quite a few in these glass cabinets. OK. I am a small fellow, but there were one or two chubby, sumo wrestlers' type. Why didn't they fight this imprisonment?

There were a few who were quite shriveled. The veteran across was appearing to say "You fella, if you think that being a neonate is all breastmilk and honey, wait till you see everything. The fun has just begun."

During the last three days there have been some interesting moments, and some not so pleasant ones. Every morning there is this group of doctors and nurses, all trying to look smart and intelligent, but making a fool of themselves when they start talking! Wait, until I get my hands on these people who bang things on my cabinet. Do they know, that it is like living through an explosion or earthquake when they do that? Hey, we are not wearing ear muffs, you know. I am determined to teach them a lesson when they come to change my nappies. Wish me success. I have been listening to mumblings and statements that I may have to stay here for at least three weeks before I am released. I just can't live in this hell with daily prodding and poking and food in a minute ration poured down a tube. Do I have a choice?

Dr Ranjan Kumar Pejaver

MBBS, DCH, FRCPI, FRCPCH(UK), FIAP, FNNF
Chief Neonatologist, People tree Meenakshi hospitals.
Honorary Professor of Neonatology
Kempegowda Institute of Medical Sciences,
Bangalore.

PHOTO GALLERY



Adolescent Week, Teenage Day celebration at North Hill School, Bangalore



Healthy Lifestyle Day celebration at Sukrupa school, Bangalore



South Zone IAP PG Quiz



Teenage Day & Daughter's Day celebration at Aurobindo Vidya Mandir, Bangalore



Workshop on Vitamin D Deficiency



World Pneumonia Day celebration at BMCRI

UPCOMING EVENTS

- **Symposium on Pediatric Bioethics 2019**
Date: 1st December, 2019, Venue: Bangalore International Center, Domlur, Bengaluru
- **National Conference of IAP Intensive Care Chapter**
Date: 5-8th December 2019, Venue: The Capitol Hotel, Bengaluru
Contact: www.ncpic2019.com, info@ncpic2019.com
- **Valedictory Program**
Date: 22nd December, 2019
Venue: The Capitol Hotel, Bengaluru