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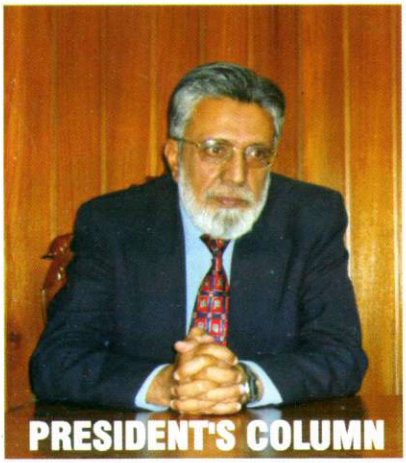
Pakistan Society of Haematology



Two years have almost passed and I shall be soon handing over the office to Professor Khalid Hassan for the next term. When I look back I feel that the objectives that I had laid down for my tenure have hardly been achieved. But I also feel satisfied that the office will be handed over to a very competent person who has been my close associate during the formative phase of the Society and he can accomplish what has been left over. I am sure he will enjoy cooperation from all of us in discharging his duties as the President. May Allah bless him with strength, courage and wisdom to achieve objectives of the Pakistan Society of Haematology.

In recent few days I have received few queries regarding forthcoming conference in Peshawar. Thanks to our free media, some of colleagues are worried about the security situation in Peshawar. I discussed the matter with a number of colleagues from different provinces and cities. We think that the situation in Peshawar and risks involved are the same as in any other big city. We often complain to foreign colleagues for not coming to Pakistan. What if we our-selves succumb to the circumstances and change the venue of the conference? We believe that as Pakistanis we should not do that because it carries a wrong message to the international community. As Muslim we believe that death comes once and that also on pre-determined place and time in pre-determined mode, which we don't know!

The situation in Peshawar University, which is the venue of the conference, is much better than in many other places. Every effort will be made to make transportation to and from the venue as safe as possible. Let us make this conference more successful than ever to alley the fears from other's hearts. Insha-Allah it will be a successful conference.

This is perhaps my last column and I take this opportunity to thank all the members for their close cooperation. I also take this opportunity to say good-bye as President and assure you that you will always find me on your side. I am grateful to Brig. Parvez Ahmed, who in spite of his very busy schedule has always managed to take care of the things well in time. Regularity of the Newsletter and launching of web site are examples of his dedication.

I wish you and the society a very successful future.

With regards,

Masood Anwar

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Upcoming Events

11th Annual Conference Pakistan Society of Haematology

11th Annual Conference of Pakistan Society of Haematology will be held from 13-15 February 2009. Further details and schedule of the conference are being announced by the organizers and will also be availabe on PSH website in the near future. For further details please contact Dr Mussarat Niazi Secretary Conference at PSH Conference Secretariat Pathology Department Khyber Medical College Peshawar.

Elections of PSH office bearers

Elections for PSH office bearers are due and nomination papers with relevant records are being dispatched with this newsletter.

Third FCPS Haematology Intensive Course

Department of Paediatric Haematology and Transfusion Medicine, Children's Hospital and the Institute of Child Health Lahore has organized 6 days intensive course in Haematlogy from 26 January 2009 to 31 January 2009. The course will be especially useful for final year residents in FCPS Haematology. Eminent Haematologists and experts in various fields will conduct the course thus enabling the participants to have an extensive review of the subject. The programme will consist of lectures followed by practicals and case discussions with experts. For registration and further details please contact Dr Nisar Ahmed the chief organizer of the course at Children's Hospital Lahore.

Congenital Malaria

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Congenital malaria has been documented for many years but it was previously thought to be uncommon but recent studies suggest that incidence has increased in both endemic and non-endemic areas [1]. We report here a case of congenital malaria.

A 6 days old male neonate was hospitalized with a 2-days history of intermittent fever and breathing difficulty. The infant had been born at full term in an uncomplicated vaginal delivery at home by a 23 year old primipara. On examination, he was pale, febrile and tachypneic. Laboratory testing indicated haemoglobin 6.2 g/dL, white blood cell count 8.6×10^9/L and platelet 86×10^{12}/L. Peripheral smears revealed Plasmodium falciparum malarial parasites (parasitemia 4% of red blood cells). Rest of the investigations were normal. He was given oral quinine (10 mg/Kg body weight x TDS) for one week and he had negative smears for malarial parasites on 4th day. Infant was transfused with 50 mL (15 mL/kg of patient body weight) of packed red blood cells before discharge. On follow-up 10 days after discharge, the infant had no symptoms or signs of illness. History revealed that the

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mother had intermittent fever during last week of pregnancy and got some treatment. On examination, she was having hepatosplenomegaly. Her peripheral blood film also revealed Plasmodium falciparum (Malarial index 7%) and she received treatment for malaria during her stay in the hospital.

Congenital malaria is defined as the presence of malaria parasites in the newborn within seven days of birth, or later if there is no possibility of postpartum infection by either mosquito bite or blood transfusion. Congenital malaria can be acquired by transmission of parasites from mother to child during pregnancy or perinataly during labour [2].

A hallmark of malaria during pregnancy is the sequestration of malaria-infected red blood cells containing late developmental stages in the intervillous spaces of the placenta. This is usually accompanied by the infiltration of maternal leukocytes, especially monocytes, in the intervillous spaces and haemozoin deposition. The sequestration of infected red blood cells in the placenta is thought to be mediated in large part by the cytoadherence of infected red blood cells to placental receptors expressed in the intervillous spaces and on the syncytiotrophoblast. Currently, it is believed that the glycosaminoglycan chondroitin sulfate A (CSA) is the principal placental infected RBC receptor. Parasite-encoded surface ligands expressed on the membrane of infected RBCs are thought to facilitate this adherence. To date, the only well-studied cytoadherence parasite protein is the *P. falciparum* erythrocyte membrane protein-1 (PfEMP1) encoded by the highly polymorphic members of the *var* gene family. The most well characterized PfEMP1 variant identified to mediate infected RBC binding to the placenta is VAR2CSA [3]. Because of placental sequestration, peripheral blood film microscopy grossly underestimates the prevalence of placental malaria.

Majority of neonates with congenital malaria are born to primiparous mothers probably this could be explained by the increase with each pregnancy in levels of antibodies to variant surface antigen/chondroitin sulfate A, which inhibit the adherence of the parasite to placenta, thus decreasing its transplacental transmission with successive pregnancies. The prevalence of congenital malaria is nearly three times higher among babies born preterm as compared to those born at term. Placental malaria poses substantial risks to the mother and fetus, including risks for maternal anaemia, spontaneous abortion, perinatal mortality, low birth weight, and prematurity. It has been reported that clinical symptoms are rarer in younger infants and absence of febrile episodes has been described. This has been attributed to transplacentally acquired antibodies (IgG), which confer transient protection to infant and thus manifestations are mild. Although IgG and IgM antimalarial antibodies can be detected in maternal blood, only IgG is normally found in the infant's blood. Children with congenital malaria can present with fever, irritability, feeding problems, hepatosplenomegaly, anaemia and jaundice [4].

Due to non-specific clinical presentation of this disease, practitioners often fail to consider malaria in their initial differential diagnoses in neonates. It is recommended that congenital malaria should be considered in the differential diagnosis of ill neonates and young infants in Pakistan.

References

1- Velema JP, Alihonou EM, Chippaux JP, van Boxel Y, Gbedji E, Anegbini R. Malaria in pregnant women and infants. Ann Trop Med Parasitol 2001; 95:19-29.

2- Mockenhaupt FP, Ulmen U, von Gaertner C, Bedu-Addo G, Bienzle U. Diagnosis of placental malaria. J Clin Microbiol 2002, 40:306-308.

3- Salanti A, Staalsoe T, Lavstsen T, Jensen AT, Sowa MP, Arnot DE, Hviid L, Theander TG. Selective upregulation of a single distinctly structured var gene in chondroitin sulphate A-adhering *Plasmodium falciparum* involved in pregnancy-associated malaria. Mol Microbiol 2003; 49:179-191

4- van Geertruyden JP, Thomas F, Erhart A, D'Alessandro U. The contribution of malaria in pregnancy to perinatal mortality. Am J Trop Med Hyg 2004; 71:35-40.

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Your views and news

Dear Colleagues : Your contributions to PSH newsletter are backbone to its success. The response so far has been lukewarm. Please send short communications, case reports, scientific activities and developments in your departments and issues of common interest. Photographs of scientific events/meetings are also welcome.

Update Address

Please update your addresses in case there is any change in it.
All members are requested to email us their mobile/phone contact and email address.

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