news LETTER
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President's Column


Professor Khalid Hassan

It is a pleasure for me to remind you that **the year 2010 is the ELECTION YEAR** for Pakistan Society of Haematology. In this context Dr Nadeem Ikram has already dispatched a letter to all the members requesting for clearance of dues, if any, by 7th October 2010. After this date the list of members of good standing will be finalized and sent to all the members with nomination papers for various posts along with rules relating elections. The election will be completed and the new office bearers will take over their responsibilities in the general body meeting during the forthcoming PSH annual conference being held at Karachi.

The **PSH annual conference 2011** is fast approaching. The conference will be held at the EXPO CENTRE, Karachi from 13th to 15th January 2011, and will be preceded and followed by workshops on almost all the aspects of haematology. I am sure that the conference will be a great success. I would request all the members to extend full support to the organizing committee, especially in the financial drive and the scientific programme.

Haematology and Blood Transfusion Division of the Children's Hospital and Institute of Child Health , Lahore in collaboration with College of Physicians and Surgeons Pakistan and Pakistan Society of Haematology has arranged **4th Haematology intensive course** from October 20 to 23 , 2010 for FCPS Part II trainees. Previously AFIP initiated these courses, but then Children Hospital Lahore took the initiative. It is highly required that other centres should come forward to arrange these courses.

I am glad that the first issue of **"PSH Haematology Updates"** was appreciated by most of the members. The second issue **"PSH Haematology Updates 2010"** is under preparation, and the last date for submission of review articles is 15th October 2010. Kindly send your articles by the due date, so that the issue is published within the stipulated time.

This year PSH is introducing **another education series**. This will consist of Haematology Images with brief description of the relevant subjects. The book will be titled **"PSH Haematology Images Volume 1"**, and I would recommend that this series is published once in every two years. Hopefully, you will have his book in your hands before PSH conference.

I deeply appreciate Dr Tahir Shamsi for holding a **course on Haemostais and a two-day seminar on bone marrow transplantation** at NIBD Karachi, in collaboration with PSH. In the end I would like to request all the postgraduate residents at various institutions to become junior members of the society.

My Best Regards,

With regards,
Professor Khalid Hassan

Academics

Management of Myelodysplastic Syndrome

Maj Nighat Shahbaz,
Haematologist Armed Forces Bone Marrow Transplant Centre, Rawalpindi.

Introduction: Myelodysplastic syndromes (MDS) are a heterogeneous group of disorders characterized by peripheral cytopenias, dysplastic hematopoietic precursors, a hypercelluler bone marrow and a high risk of conversion to acute leukaemia. [1] Etiology is often unknown but there is increased risk with benzene exposure, radiation and hemotherapeutic agents particularly those involving alkylating agents and epipodophyllatoxins. Symptoms are due to specific cell lines most affected and include fatigue, weakness and pallor (secondary to anaemia), increased infections and fever (secondary to neutropenia) and increased bruising and bleeding (secondary to thrombocytopenia).

The goals of therapy are to control symptoms, improve quality of life, improve overall survival, and decrease progression to acute myelogenous leukaemia. The IPSS scoring system can help triage patients for more aggressive treatment, as well as help determining best timing of this therapy.

Various treatment options based on scoring system in MDS are:

a. Supportive Care

Blood product support: Guidelines for transfusion in patients with MDS are as follows:

- Decrease transfusion related complications by using leukocyte depleted blood products
- Slow or small volume packed red cell transfusions with judicious use of diuretics in patients with congestive cardiac failure.
- Current guidelines recommend starting iron chelation therapy in patients who have received 20 or more units of packed red cells or who have a serum ferritin level of >1000ug/l.
- Avoid repeated and frequent platelet transfusions in clinically non bleeding patients because of low platelet counts (<20,000/ul)
- Administer oral antithrombolytic agents such as prophylactic oral tranexamic acid to prevent skin and mucosal bleeding and to avoid alloimmunization.

Antibiotics: Life threatening infections require timely use of appropriate antibiotics and antifungals.

Growth factors:

- Hematopoietic growth factors such as erythropoietin (EPO) have been shown to improve anaemia in 20-25% of unselected patients with MDS[2].
- 75% of patients with MDS respond at least transiently to granulocyte colony stimulating factor (Neupogen)
- Several studies have shown that addition of low doses of G-CSF synergistically enhances the erythroid response to erythropoietin particularly in patients with RARS (75%) than in RCMD-RS (9%)[3].

b. Prevention of Transition to Acute Leukaemia: Chemotherapy with hypomethylating agents has been shown to decrease blood transfusion requirements and to retard the progression of MDS to acute myeloid leukaemia[4]. Commonly used demethylating agents are:

- **Azacitidine (Vedaza):** Vedaza is a pyrimidine nucleoside analogue of cytidine. It interferes with nucleic acid metabolism. Exerts antineoplastic effects by DNA hypomethylation and direct cytotoxicity on abnormal hematopoietic bone marrow cells. Adult dose is 75mg/m^2 SC qd for seven days initially, repeat cycle q4wk, may increase to 100mg/m if there is no beneficial effect after two cycles[5].
- **Decitabne (Dacogen):** Exerts antineoplastic effect by incorporating into DNA and inhibiting methyltransferase, resulting in hypomethylation. Dose is 15mg/m^2 IV q8h, over 3 hours, repeat q6wk for at least 4 cycles and as long as continued benefit is observed.

c. Immunoglobulins: Immunomodulators elicit immunomodulatory, antiangiogenic properties, and inhibit pro inflammatory cytokines. Lenalidomide is indicated for transfusion dependent MDS subtype of deletion 5q cytogenestic abnormality, in dose of 10mg PO qd initially. Dose adjustment is required in renal impairement, thrombocytopenia and neutropenia[6].

d. Stem Cell Transplantation: Stem cell transplantation ,particularly in younger patients (less than 40 years of age) , more severely affected patients, offers the potential of curative therapy. Success of bone marrow transplantation has been found to correlate with severity of MDS as determined by the IPSS score, with patients having more favorable IPSS score tending to have a more favorable outcome with transplantation. In a clinical trial conducted in Europe, patients with MDS and acute myeloid leukaemia transformed from MDS were first treated with moderate dose chemotherapy followed by high dose chemotherapy. After this patient underwent allogeneic or autologous BMT depending upon availability of matched donor. Approximately one third of patients lived four years or more after HSCT and same number had no evidence of cancer at four years after treatment[7].

Experience at Stem Cell transplant in MDS at AFBMTC, Rawalpindi:

Two patients with MDS have been treated with allogeneic stem cell transplant at our centre.

Case 1: Our first patient was 33 years old male diagnosed as a case of hypoplastic MDS in January 2006. His bone marrow trephine biopsy showed granulomas, therefore he was put on ATT for nine months. He had an HLA matched sibling donor. Patient was managed with blood components, antibiotics and antifungals till the completion of pretransplant assessment. Conditioning was given with ATG 11.25mg/kg, inj Fludarabine 150mg/m^2 and cyclophosphamide 200mg/kg/bw. He received cyclosporin and methotrexate for GVHD prophylaxis. Peripheral blood mononuclear cells and bone marrow harvest were insfused in May 2007 in a dose of 4.4 x 10^6/kg . He had neutrophil recovery on day+11 and was discharged on day+15. Patient dropped his haemoglobin in June 2007. His bone marrow examination showed pure red cell aplasia. He was managed with two courses of Rituximab. His haemoglobin improved in August 2007 and since then he is in complete remission with normal blood counts, mild oral GVHD and chronic obstructive airway disease.

Case 2: Our second patient was 26 years old male diagnosed patient of MDS (RAEB 2) on bone marrow examination and cytogenetics. Previously he was managed only with blood component support and antibiotics. He was referred to AFBMTC on 12 December 2009 to evaluate the possibility of BMT. He had an HLA matched sibling donor. Pretransplant assessment revealed HBsAg positivity but due to potentially fatal nature of the disease it was decided to proceed with allogeneic stem cell transplant with lemividine cover. Conditioning was given with Busulphan 16mg/kg, Etoposide 30mg/kg, cyclophosphamide 200mg/kg and ATG 11.25mg/kg . Peripheral blood mononuclear cells were transfused on July 2010 in a dose of $5.3x10^6$/kg. GVHD prophylaxis was given with cyclosporine and methotrexate. Patient developed neutropenic fever on day 0 till day +13, mild skin rash and grade III mucositis. G-CSF was started on day +8 at a dose of 300ug/day. He had neutrophil engraftment on day +14 and was discharged on day +22. Patient is in complete remission with WBC: 9.9×10^9/l, HB: 11.7g/dl, platelets: 105×10^9/l with normal differential and absolute neutrophil count of 7.3×10^9/l

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PSH News

4th Haematology Intensive Course for FCPS at Children Hospital Lahore

Haematology & Blood Transfusion Division of the Children's Hospital Lahore, in collaboration with College of Physicians and Surgeons Pakistan and Pakistan Society of Haematology has arranged intensive course from October 20th to 23rd, 2010 for FCPS Part II trainees. This will be the fourth time in which residents as well as resource persons will participate from all over the country

Programme of 4th FCPS Haematology Intensive Course

Day 1: Transfusion Medicine
Day 2: Coagulation Medicine
Day 3: Blood and Bone Marrow
Day 4: Haematological Malignancies

Examination modules, lectures, case scenarios, slide sessions, interactive sessions and similar other activities will be the outstanding features of the course .

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Our mission is to cure patients with severe diseases: Dr Lawrence Faulkner

In Pakistan Institute of Medical Sciences , Prof Lawrence Faulkner shared his experience of transplant in Pakistan . During a session on "Haematological disorders and bone marrow transplant " , he was of the view that results are better in Pakistan as compared to Italy, which can be ascribed to genetic homogeneity and better tissue matching. He expressed that the mission of C2C (care to children) is to cure children with severe haematological disease . According to Dr Tahir Shamsi , director National Institute of Blood Diseases (NIBD) Karachi, in thalassaemics the survival rates are directly proportional to better chelation rates. He elaborated on management of thalassaemia .

Regarding fetal haemoglobin induction strategies he mentioned that the results are better in thalassaemics who have IVS 1 mutation, usually seen in southern part of Pakistan .Other speakers were Dr Qasim Butter ,Dr Atifa Shoaib, Brig Pervaiz, Prof Tahira Zafar and Prof Khalid Hassan

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PSH Elections for the Next Tenure

The year 2010 is the election year of PSH.According to the constitution, the members of good standing (Life members; Life associate members; and members and associate members who have cleared their dues till 2010) are eligible to contest and vote. In this context, it is requested that the regular members and associate members who have not cleared their dues should do so by the 7th October 2010. After this date, a list of members of good standing with nomination papers for various posts, along with the relevant clauses of constitution pertaining to elections will be circulated amongst the members of good standing. After the receipt of nomination papers, if elections are required, postal ballot papers will be dispatched. The members present during the general body meeting held during the forthcoming PSH conference to be held at Karachi can cast their vote during the meeting. Votes will be counted and the results will be announced on the same date.

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Karachi chapter is in preparation for upcoming PSH Conference

PSH Karachi chapter is gathering strength to hold 13th PSH national conference. In a letter Prof Khalid Zafar Hashmi, Chairmen organizing committee reaffirms the commitment and invites for this mega event by saying that, "The conference will focus on various aspects of Haematology. There will be update lectures on new developments as well as updating of established concepts. Workshops for small group discussions are useful learning tools for trainees and for brushing-up of established practices. The scientific committee is planning workshops on haemostasis, haemoglobinopathies, transfusion medicine, blood cell morphology, flow-cytometry and quality assurance. Scientific sessions will cover topics in diagnostic haematology haemostasis, malignant haematology, bone marrow transplantation and blood transfusion services. We hope to have special sessions covering haematology related issues in obstetrics and paediatric practices. We are looking forwards to a state-of-art scientific exhibition where our friends in Pakistan Diagnostic Association will put on display and live performance new diagnostic tools, which are now integral part of modern diagnostic haematology. Pakistan is at the moment facing its worst flood disaster. The effects of this catastrophe have been felt in every city of Pakistan. Karachi has, as always, led the challenge from the front. We do not plan exorbitant social evenings but relaxation will be available for tired eyes ;members of the organizing committee will look after the participants in the most appropriate ay. I look forwards to welcoming all of you to this event and to the friendly city of Karachi".

Programme of 13th National Conference and Scientific Exhibition of Pakistan Society of Haematology 12th -15th January 2011

Venue: Expo Centre, Near Civic Center; Main University Road Karachi
Pre-Conference Workshop Jan 12-13, 2011
Conference and Scientific Exhibition: Jan 14-15, 2011:
Contact Numbers for Registration: 021-34821502-3, 021-34228522 Fax: 021-34821504
Registration Fee: Consultants: Rs.1500/- Residents & Technologists: Rs.1000/-
Pay order/demand draft in favor of "PSH". Postal address: National Institute of Blood Disease, ST 2/A, Block 17, Gulshan-e-Iqbal, KDA scheme 24, Karachi, Pakistan
Patrons: Dr. Mohsin Anvery, Dr. Moinuddin, Dr. Muhammad Khurshid
Chairman: Dr. Khalid Zafar Hashmi
Secretary: Dr. Muhammad Nadeem TI(M)
Scientific Committee : Dr. Waseem Iqbal, Dr. Bushra Moiz, Dr. Rehan Sajid, Dr. Saba Jamal
Finance / Exhibition Committee: Dr. Tahir Shamsi, Dr. Salman Adil
Registration Committee: Dr. Munira Borhany, Miss Arshi Naz, Mr. Akif Ali Atif
Award Committee : Dr. Erum Mazhar, Dr. Hina Qureshi, Dr. Shaheen Kausar, Dr. Naila Rahman
Last Date of Abstract Submission: November 15th, 2010
Contact Numbers for Registration: 021-34821502-3, 021-34228522 Fax: 021-34821504
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Programme Haemcon 2011

WEDNESDAY, JAN 12

Pre-Conference Workshops & Inaugural Ceremony

Workshop-1: Flow Cytometry & Cytogenetics: Vennue: The Aga Khan University; Time: 0800-1300 hrs

Lunch& Prayers(1300-1400 hrs)

Workshop-2: Morphology
Venue: Liaquat National Hospital
Time: 1400 - 1700 hrs

Registration Fee for each workshop: Rs.2000/-; Only first 25 registered participants in each workshop will be accommodated

THURSDAY, JAN 13

Workshop-3: Blood Banking
Venue: Ziauddin University;0900 -1300hrs

Lunch& Prayers(1300-1400 hrs)

Workshop-4: Haemostasis
Venue: National Institute of Blood disease:Time: 1400 - 1700 hrs

Executive Council Meeting (1700-1800 hrs)
Inaugural Ceremony
1830 - 2100 hrs; Vennue: Expo Centre,

Friday, JAN 14

Scientific Sessions & Exhibition

REGISTRATION:0800-0900 hrs

Benign Haematology
Invited talk & Free papers
0900-1230 hrs

Leukaemia, Lymphoma & Myeloma
Invited talk & Free papers
0900-1230 hrs

LUNCH & PRAYERS (1300-1400 hrs)

Poster review (1400-1500 hrs)

Haemostasis
Invited talks/ Free papers 1500-1700 hrs

Paeds Haemotology
Invited talks/Free papers 1500-1700 hrs

General Body Meeting (1700-1900 hrs)
Banquet Dinner (2100 hrs)

SATURDAY , JAN 15

Transfusion Medicine
Invited talks & Free papers
0900-1300 hrs

Stem Cell Transplatation
Invited talks/Free papers
1500-1700 hrs

Closing Ceremony & Award Distribution
1700-1730 hrs

Haemostasis Course at National Institute of Blood Diseases and Bone Marrow Transplantation, Karachi

Patients with bleeding disorders like Haemophilia and Von Willebrand Diseases are under diagnosed and poorly managed through out the country in both public and private sector health facilities barring a few. The onus of this deficiency lies in the training institutes where theoretical part is covered adequately but due to exorbitant cost involved in accurate diagnosis of these disorders, practical aspect is either skipped or only basic techniques are taught and that too half heartedly due to financial constraints or lack of expertise. Due to this reason many a times patients with bleeding disorders are miss diagnosed and labeled as "Haemophilics" whereas actually suffering from Von Willebrand disease.

At NIBD a large number of patients with haemostatic disorders come for diagnosis and management. Recently with help of "Bait ul Maal" free of cost recombinant factor VIII and IX were provided to these needy patients. Since 2005 Dr. Tahir Shamsi was in constant touch with World Haemophilia Foundation and Novo Nortis Haemophila Foundation to arrange a capacity building course in diagnosis of haemostatic disorder in Pakistan. Finally one month long course on "Capacity Building in Diagnosing Haemostatic Disorders" was arranged, in collaboration with "Novo Nortis Haemophilia Foundation" from 3rd July 2010 to 30th July 2010 at NIBD. The objectives of course were delineated as follows:

1. To increase awareness, update knowledge, and skills amongst haemophilia healthcare professionals.
2. Trainee should be able to perform specific tests to screen suspected patients of bleeding disorders at tertiary care centers.
3. The trainee after the capacity building course should be able act as master trainer and impart training to other healthcare providers at primary and secondary care centers.
4. Trainee should also able to document, create a data base and submit the data to Haemophilia registry programme at Pakistan Medical Council and Ministry of health.

Institutes through out the Pakistan were invited to participate by sending one pathologist, preferably senior haematology resident, and one senior technologist to attend the course. Delegates from Hyatabad Medical Complex Peshawar,Fatimid Foundation Peshawar,Pakistan Institute of Medical Sciences Islamabad,Pakistan Atomic Energy Commission Hospital Islamabad, Children Hospital Lahore, Chaughtai Laboratoy Lahore, Children Hospital Multan,Bolan Medical College Quetta,Fatimid Foundation Karachi attended the course. Total 15 delegates attended the course and as a goodwill gesture the course fee was waived off and boarding and lodging facilities were also provided to participants, coming outside from Karachi, without any charge. The emphasis through out the course was on practical aspect. During the first week basic techniques like preparation of normal pool plasma, adsorb plasma, aged serum and performing BT, PT, APTT and mixing studies were mastered. Training on Factor assays, inhibitor screening and inhibitor assays were repeatedly performed by each participant during the second week. Automation in coagulation procedures, instrument calibration & maintenance and platelet aggregation studies were demonstrated during the third week. Fourth week was exclusively reserved for revision and assessment. Through out the course theoretical part was covered by daily presentations and lectures in the afternoon sessions. These lectures were delivered by speakers like Prof Khalid Zafar Hashmi, Dr Tahir Shamsi, Dr. M Nadeem, Dr Hina Quereshi, Dr Shaheen, Dr Nazli, Dr Fatima Meraj, Dr Tasneem Farzana, Dr Saqib Ansari, Dr Munira Borhany, Dr Kashif and Dr Zain. Out door activities were also arranged during the weekends especially for those from outside the Karachi to alleviate home sickness, including visits to Karachi beach, Quaid-e-Azam Moslem and shopping malls (for ladies). On 30th of July Director Bait ul Maal Sindh, Mr Noor-ul Arafeen distributed certificates to successful participants. Best performance award was given to Dr. Sumera and out standing performance awards were distributed to Dr Salwa Paracha, Mr Mumtaz Malik and Mr Irfan Ali. In the evening of last day this memorable and highly successful course was concluded on fare well dinner arranged by the management of NIBD, in Lal Qilla Karachi.

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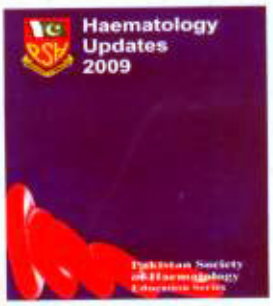
Hematology Updates 2010



PSH is committed to promote academic activities at all levels. In this context Haematology Updates 2009 was launched. It was decided to make this venture a regular annual event. A request was floated amongst all the members to contribute for the upcoming issue, i.e., "Haematology Updates 2010". The response was enormous and more than 30 members show interest for submitting their review articles. The last date for submission of the articles is 15th of October 2010. It is hoped that this endeavour will contribute significantly in continued medical education in the faculty during the coming years.

Your views and news

Dear Colleagues : Your contributions to PSH newsletter are backbone to its success. 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. Members are requested to visit PSH website and post in their contributions.

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

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