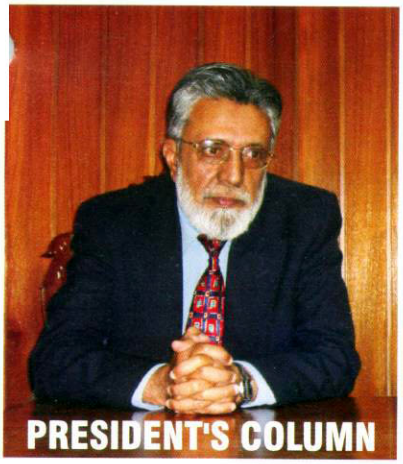
Newsletter

Volume 2 No 3, October-December 2007

Pakistan Society of Haematology



Dear Colleagues:

Happy New Year and happy New Islamic Year to all of you. May Allah bless this young professional body (PSH) with strength and capability to meet its professional obligations. May Allah also bless all of you and your families with health and prosperity.

As you are aware that elections have been postponed and the new dates exactly coincide with dates of our forth coming conference. We had no choice other than to postpone the Annual Conference. New dates for the conference are 14-16 March 2008. Please amend your appointments accordingly.

A recent development had been detection of first ever human cases of bird flu (H5N1 infection). This has posed a new hazard to health workers. You are all aware and in these days of emerging and re-emerging infections issues related to biosafety and biosecurity have gained tremendous importance. We the haematologists are constantly dealing with blood samples in the laboratory and need to take utmost precautions in safe handling and disposal of these samples. This also has some relevance to blood transfusion as well. We should add one more question to our pre-donation questionnaire about the involvement in poultry business and state of poultry being handled over last five days. There is 3-8 days incubation period for H5N1 infection and significant viremia occurs before the patient become symptomatic.

Some of us are also involved in management of patients who are immunocmpromised (leukemias, transplant etc.). Their isolation has gained increased importance. I will suggest that (particularly) half boiled or half fried eggs and perhaps chicken should be excluded from the diet of these patients. (Some Airlines have stopped serving these items on flight originating from affected areas).

I am sure you have visited the new website of the society (www.psh.org) and must have found it useful. Your comments and suggestions to improve the website further are most welcome. Time has come to build picture bank of academic nature that is available on the website. Please think about it.

With regards,

MASOOD ANWAR

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PSH WEBSITE

Pakistan Society of Haematology website had been revamped but still underutilized. Please visit http://www.psh.org.pk and give your suggestions to make it more useful.

Upcoming Events

CHANGE OF DATES FOR 10TH ANNUAL CONFERENCE PAKISTAN SOCIETY OF HAEMATOLOGY

10th Annual Conference of Pakistan Society of Haematology will now be held from 14-16 March 2008 at Pakistan Institue of Medical Sciences Islamabad (PIMS). Further communiqué will follow from PSH 2008 Conference secretariat. For further details please contact Dr Hasan Abbas Zaheer Secretary Organizing Committee Department of Hematology and Blood Transfusion Services Pakistan Institute of Medical Sciences Islamabad.

SECOND FCPS HAEMATOLOGY INTENSIVE COURSE

2nd FCPS Haematology Intensive Course has been organized in Children Hospital Lahore from 5-11 May 2008. The course will cover all the aspects of FCPS Haematology curriculum and oriented to pre-examination preparation for the FCPS trainees. For registration and further details please contact Dr Nisar Ahmed Department of Haematology Children Hospital Lahore at telephone numbers: 9230901-23/Ext 4106, 2206, 03004330196

PSH CONFERENCE 2008 PROGRAMME

14-03-2008 Thursday	**Pre-Conference Workshop:** Diagnosis of Genetic Hemoglobin Disorders08.30 am 12.30 pm, PIMS, Islamabad			**Pre-Conference Workshop:** Bleeding & Coagulation Disorders Investigations 02.00 pm 05.00 pm, PIMS, Islamabad		
14-03-2008 Friday	**Pre-Conference Workshop:** BB Laboratory Techniques- Blood Grouping, X-Matching, Ab Detection & Identification PIMS, Islamabad 09 am 03.00 pm			**Registration / Inauguration Ceremony:** PIMS, Islamabad 05.00 pm 06.00 pm		
15-03-2008 Saturday	**Registration / Poster Session**					
	STATE-OF-THE-ART LECTURE 09.00 am-10.00 am	**PARALLEL SESSIONS** **SEMINAR / FREE PAPERS** 10-00 am to 12.00 noon	**PARALLEL SESSIONS** **SEMINAR / FREE PAPERS** 10-00 am to 12.00 noon	**LUNCH** 2-00 to 3-00 pm	**PARALLEL SESSIONS** 3-00 5-00 pm	**BANQUET** 08.00 pm
16-03-2008 Sunday	**Poster Session**					
	SEMINAR / EDUCATIONAL SESSION 09.00 10-30 am	**SEMINAR / EDUCATIONAL SESSION** 10-30 am to 12-00 noon	**PARALLEL SESSIONS** **SEMINAR / FREE PAPERS** 12-00 noon to 2-00 pm	**LUNCH & CLOSING CEREMONY** **Daman-e-Koh, Margalla Hills** 01.00-03.00 pm		
17-03-2008 Monday	**Post Conference Workshop**					
	POST-CONFERENCE WORKSHOP: Advanced BB Laboratory Techniques Adsorption, Elution 08.30 am 12.00 am, PIMS Islamabad					
	POST-CONFERENCE WORKSHOP: Blood and Bone Marrow Cell Morphology 01.00 pm 05.00 pm, PIMS Islamabad					

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Malaria in Coastal Belt of Sindh–An Alarming Tide

Lt. Col Chahudry Altaf Hussain, Consultant Haematologist, *(Combined Military Hospital, Hydereabad)*

It was Hypocrites in the 5th century BC who first described the clinical picture of malaria and observed the relationship between the disease and the seasons of the year. At present malaria is seen in 100 countriesof the world, affecting 40% of world's population with over one million annual deaths. In Pakistan it will continue to pose threat to the health of millions especially in holoendemic areas of Sindh /coastal belt of Pakistan. Sindh is geographically and climatically varied area comprising fertile plains of the Indus River, the Thar Desert and the coastal areas of the Arabian Sea. Rainfall is mostly in the months of July and August and temperature ranges from18°C to 45°C and even higher. P.vivax is the predominant species during the early transmission season (July, August) while P.falciparum causes most infections in late September to November. During April and May both species are equally detected.

Laveran, a French Army physician, in 1878 first detected the malaria parasite in human blood, and since then no diagnostic procedure has superseded microscopy and till date it remains the gold standard. It is a sensitive technique and is able to detect parasitaemia as low as 10 parasites /uL. The thick film is more sensitive than a thin film in detection of Plasmodium. Non-microscopic diagnostic methods are being introduced and are based on detection of either malarial antigens or antibodies. The antibodies based serological techniques like indirect immunofluorescent antibody tests (IFA), enzyme linked immunosorbent assay (ELISA), and quantitative buffy coat technique ***are not suited to endemic countries like Pakistan***. Antigen based ELISA is under process of development and is available at limited centers. The available antigen based serological techniques (Rapid Chromatographic methods) make use of Histidine Rich Protein II (HRP II) and Plasmodium lactate dehydrogenase (pLDH). Polymerase chain reaction (PCR) is of value in screening of blood donors in transfusion services but is costly.

To assess the magnitude of malaria in coastal areas of Sindh, we reviewed the records of indoor cases of laboratory confirmed malaria, managed at CMH Hyderabad in years 2002-06. The Health Deptt Govt of Sindh was kind enough to provide the data of malaria from five districts, (Karachi, Hyderabad, Thatta, Badin, and Nawab Shah) for the same period. The data were analyzed for type of malaria, distribution according to season and spread over twelve months of the year. The data was split in two equal halves. Summer centered months (Apr Sep) were taken as Malaria season while winter centered months (Oct-Mar) were taken as non malaria season. Table I shows the distribution of laboratory confirmed cases of malaria into benign tertian (BT) & malignant tertian (MT) malaria and according to season of the years. The graph I shows the month wise distribution of malaria cases for years 2002 -06.

Malaria is a huge problem faced by primary and secondary medical care centers in coastal districts of Sindh. The cases are seen round the year and there is no relaxing period. This is supported by the results in table I that shows that 191634 (52.3%) cases occurred in malaria season while almost equal number (47.7%) cases reported in non malaria season. *Falciparum malaria is now a common entity* and the proportion of falciparum malaria is on the rise. This is supported by the data from coastal districts and CMH Hyderabad. The range of percentages of these cases is 22.1 - 48.8%. The alarming situation is that it had increased from 22% to 48 %. This observation needs the attention of all concerned agencies in malaria roll back program, especially in the backdrop of high resistance of falciparum malaria to chloroquine.

In 1960 Pakistan joined the global campaign of malaria eradication. In 1963 mass campaign of spraying houses and mosquito breeding sites along with all other preventive and curative measures were adopted. As the time passed, the vector developed resistance to DDT and P.falciparum to chloroquine, malaria again resurged. Malaria eradication program faced the challenge of intensification and spread of parasite resistance to anti malarial drugs, thus posing an increasing problem for the provision of suitable treatment. Since then the malaria control programme and later "Roll Back Malaria " are still far beyond the desired success. In Pakistan resistance to chloroquine in P.falciparum was first documented in 1984. At that time a drug failure rate of 15 % was reported, mostly R1 type. In 1997, Rowland in Western Pakistan detected a resistance rate of up to 62 %, so a 3-fold increase had been recorded. This development of resistance to chloroquine is not completely understood. Indiscriminate use of drugs, extensive use of sub-therapeutic doses, migration, and increased virulence of the resistant parasites and multi drug resistant gene (mdr) are the postulated mechanisms for the development of drug resistance. Other factors which play an important role in the therapeutic response of the drug and severity of the disease are variation between human hosts in terms of drug absorption and red cell susceptibility to parasite invasion. The coastal areas of Sindh are holoendemic areas for malaria and anti- malaria precautions should be observed throughout the year. The falciparum malaria is showing an alarmingly high tide, demanding urgent attention by all concerned agencies. More research should be conducted in areas

TABLE : I	DETAILS OF LAB CONFIRMED CASES			
	Coastal Districts (n=35342)		CMH Hyderabad (n=(805)	
	2002-05	2006	2002-05	2006
Total	29,641	5701	561	244
BT Malaria	17,506(59.1%)	3153(55.3%)	438(77.9%)	125(51.2%)
MT Malaria	12,315(40.9%)	2548(44.7%)	123 (22.1%)	119(48.8%)
Malaria Season	19163 (52.3%)		475 (59.0%)	
Non Malaria Season	16179 (47.7%)		330 (41 %)	

Month wise Distribution of Cases in Years 2002-06 (n-803)

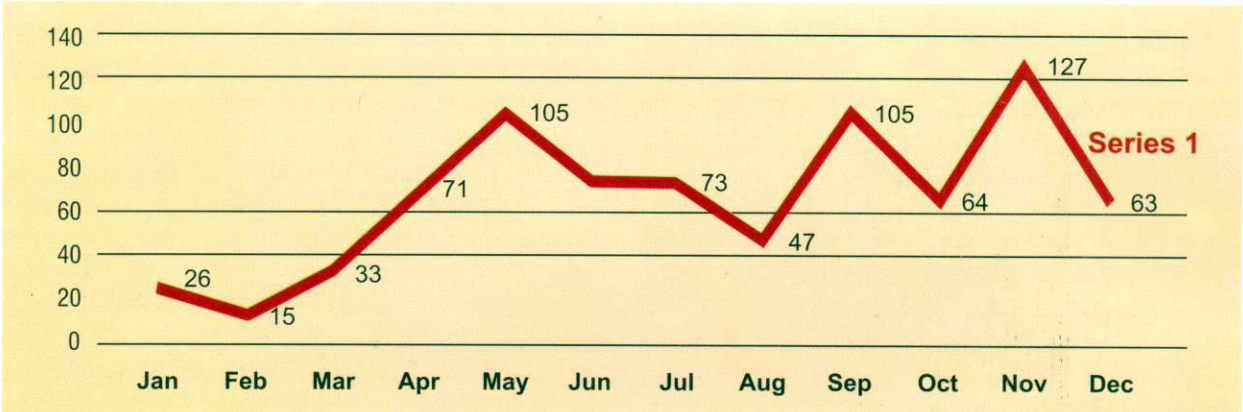

Table II: Malaria Zones in Pakistan

NAME OF ZONE	DEFINITION	MAIN AREAS
HOLOENDEMIC	Malaria is transmitted throughout the year and cases are seen in all the 12 months of the year	Costal cities of (Karachi,Thata, Badin, Hyderabad, Nawab Shah
HYPERENDEMIC	In these areas there is intense malaria transmission in 6 months of the year	Includes low lying plains of Punjab & upper Sind
MESOENDEMIC	Malaria transmission in three months (Jun Aug)	North Baluchistan & NWFP
HYPOENDEMIC	Malaria transmission is far less than 3months	Northern Areas,AJK, Ziarat, Kalat, in Balochistan

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BEST OF ASH

Following abstract was among one of the best of ASH in recently concluded 49th annual meeting of American Society of Hematology held in Atlanta from 8-11 December 2008. It is being reproduced due to its practical implications in the management of adult ALL.

IMPROVED OUTCOME OF ADULT ACUTE LYMPHOBLASTIC LEUKEMIA TREATED WITH A PEDIATRIC PROTOCOL: RESULTS OF A PILOT STUDY.

Authors: Stephanie Haiat, Anne Vekhoff, Christophe Marzac, OrsAnton Calendini, Simona Lapusan, Zora Marjanovic, Bernard Rio, Jean-Pierre Marie, Ollivier Legrand

Adult ALL still have poor outcome compared with childhood ALL, with an expected OS of <40%. Recent retrospective studies have shown that adolescents and young adults (<30 yo) treated with pediatric protocol have a better prognosis than those treated with adult protocols. The aim of this pilot study was to assess the feasibility and efficacy of French pediatric protocol FRALLE 2000 to treat 28 oldest adult ALL aged from 16 to 57 years. **Methods:** 28 consecutive Philadelphia negative ALL aged form 16 to 57 years, with a median follow up of alive patients of 35 months, received treatment courses according to FRALLE 2000 from 2001 to 2007. After a prednisone prephase and four-drug induction (prednisone, daunorubicin, vincristine and 9 infusions of L asparaginase), patients in CR received a consolidation course, two delayed intensifications with L asparaginase separated by an interphase and a maintenance chemotherapy during two years. Results were compared with the outcome from 20 consecutive patients treated in our institution with the historic EORTC ALL-4 adult protocol from 1998 to 2001. **Results:** All the clinical (age, WHO performance status, gender) and biological (WBC, phenotype, cytogenetic) parameters of patients treated with FRALLE protocol were statistically similar with those of patients treated in ALL-4 adult protocol. CR rate was achieved in 82% of patients after FRALLE induction and 100% after a salvage therapy with high dose cytarabine. The good early response was evaluated by cortico-sensitivity and chemosensitivity (after 14 days of chemotherapy). All patients who achived cortico and chemo-sensitivity were alive in persistent CR, with a better survival than other patients (p= 0.008). When we compared patients treated by FRALLE or ALL-4 protocol, the 4-year DFS and OS are 90% +/- 6% vs 47% +/-12% (p= 0.01) and 83% +/- 9% vs 35% +/- 16% (p= 0.05) respectively. This better outcome is not explained by significant differences in patients characteristics nor by a better CR rate but rather by a lower relapse rate in the pediatric treatment group. This indicates a major role of the dose intensity, especially for L asparaginase, corticosteroids, methotrexate, and purinethol. No treatment related mortality and no severe side effect, except one pulmonary embolism, were observed during the treatment with supportive cares including parenteral nutrition, granular growth factors, infectious prophylaxis, and antithrombin III infusions. This pilot study shows that adults up to 57 years of age with Ph negative-ALL have a dramatically better outcome when these are treated with childhood ALL protocol without any major side effect. This therapeutic strategy has to be confirmed by the current prospective study performed by the EORTC/HOVON group.

Blood 2007; 110 (11): 830A.

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.

UPDATING 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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