Clinical presentation and outcome of severe falciparum malaria in Eastern Nepal

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Background: Malaria is endemic in 65 out of 75 districts of Nepal and > 70% of the total population are at risk of the disease. The clinical presentations of severe and complicated malaria vary.

Methods: Clinical profile, biochemical parameters and outcome in 138 adult patients of malaria requiring hospital admission in BP Koirala Institute of Health Sciences hospital, a tertiary care hospital in eastern Nepal during April 2002 to April 2005 were studied.

Results: Mean age of the patients was 33 ± 16 yrs with majority (n = 88) being in age group of 15 to 34 years. 67% of the patients were from terai belt (southern plain area). Mean duration of febrile illness was 13 ± 9 days at the time of presentation and 54% patients had recent history of travel to India. Hepatic dysfunction (39%), anemia (30%), hypotension (18%), metabolic acidosis (16%), convulsion (11%), hypoglycemia (8%) and 22% (n = 30) had acute renal failure according to WHO criteria. Three or more complication was present in 32%. Apart from antimalarial therapy, dialysis support and mechanical ventilation was provided to 22 and 25 patients respectively. All the patients who died (23%) had ≥ 3 complications.

Conclusion: Death from complicated malaria is high. Delayed in diagnosis leading to multiple complications might have contributed to high mortality.

29.005

APACHE III score as a prognostic marker in severe malaria in a tertiary care hospital from south India

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Background: Malaria is a most common parasitic infection with transmission in 103 countries affecting > 1 billion people and causing between 1 and 3 million deaths each year. Falciparum malaria causing severe malaria is one of the commonest infections with high mortality in India in spite of potent chemotherapy. APACHE III is the most recent version of the scoring system developed by Knaus and colleagues. So far no studies are available using APACHE III in severe malaria in Indian setting

Aims: Prospective clinical study of APACHE III score as a predictor of mortality in patients with severe Malaria.

Methods: 41 patients with diagnosis of severe Malaria admitted in Kasturba Hospital Manipal, tertiary care hospital during the period of May 2006 to June 2008 Statstics:SPSS 15.3 was used to perform statistics, depending on the normalcy of distribution curve and skew deviation mean or median was compared using Independent T test or Non parametric t test such as Mann Whitney's were used respectively.

ent ICUs of Kasturba Hospital, of whom6 were females and 35 were males.11 patients succumbed to their illness and 30 survived. There was no significant difference in age and parasite index in patients who survived and succumbed to illness. Clinical parameters like tachycardia, hypotension and hypoxia were significantly seen in patients who succumbed to illness. Neurological obtundation was seen in all 11 dead patients at presentation is another independent variable predictive of severe malaria Among lab parameters thrombocytopenia, raised BUN, Creatinine, low blood sugars were significant predictive factors for mortality. Most patients 10 out of 11 had lung involvement with ARDS required ventilation. Mean APACHE III scoring among alive patients was 50.94 ± 17.25 and among dead patients was 100.18 ± 26.86. The scores were compared by using Independent T test and the scores were highly statistically significant (p < 0.005)

Conclusion:

1. APACHE III is very good prognostic marker in predicting mortality in severe malaria
2. Among individual clinical parameters tachycardia, hypotension, hypoxia oliguria, altered sensorium were associated with significant mortality
3. Among lab parameters raised BUN, Serum creatinine, Hypoglycemia thrombocytopenia and chest X ray shadows (ARDS) predict independently high mortality and need for ICU monitoring and aggressive treatment.

29.006

Poor impact of the primary health care (PHC) on malaria control in rural communities of Southeast Nigeria

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Background: Malaria is a disease of poverty and low socioeconomic status and these conditions abound in developing countries. This means that the successful implementation of malaria control programmes requires a certain level of basic health services. In countries where malaria is a serious impediment to socio-economic progress, emphasis should be on malaria control rather tan eradication. This will reduce the burden of the disease and pave the way for the speeding up of socio-economic development which may in the long run contribute to a future eradication of malaria. The resurgence of malaria is a global phenomenon. Most studies on malaria have dealt with clinical, laboratorial and entomological aspects. Few studies have dealt with human factors.

Methods: 2400 volunteers from all age- groups from selected endemic rural communities of southeast Nigeria were screened for malaria parasitaemia from June 2008 to August 2009, using the thin and thick smear microscopy. Following this, 16 close-ended questionnaire items were generated and administered on 600 adults, mainly heads of households to assess their knowledge, attitudes,and practices on the various aspects of malaria transmission, management and control, thus evaluate the impact of the