

INJECTION ARTESUNATE HAS BEEN FOUND TO BE SUPERIOR TO QUININE IN THE TREATMENT OF SEVERE MALARIA IN AFRICAN CHILDREN

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Control of malaria in recent years has got renewed momentum due to availability of effective interventions and increased financial support by Global Fund against Tuberculosis, Aids, and Malaria. Some malaria endemic countries are now considering even elimination of malaria. An expert group of guiding malaria elimination has been formed and their views are published in the Lancet in 6 November, 2010. Examples of such interventions are : vector control by effective insecticide, insecticide impregnated long lasting nets (LLN), rapid diagnostic tests (RDT), combination antimalarial treatments (ACT), pre referral treatment by rectal artesunate in the community and artesunate injection for the treatment of severe malaria.

In contemporary period the control and management of any illness has been advocated based on evidence. For malaria control and treatment the recent WHO Guidelines 2010 recommends vector control, use of LLN, ACT, pre referral treatment of rectal artesunate and injection artesunate for severe malaria in adults. All these interventions have been found to reduce the malaria incidence and death with the expectation to achieve the malaria related millennium development goal (MDG) for 50% reduction of malaria death by 2015. The pivotal trials were conducted in several countries in Asia and Africa, and Bangladesh is proud participant of such evidence generation-superiority of rectal artesunate and injection artesunate in the initiation and treatment of severe malaria. Both the studies were published earlier in the world famous medical journal "The Lancet".

The early evidence of 35% superiority of injection artesunate over quinine in the treatment of severe malaria was generated in Asia mostly among adults. Recently by the same group of Oxford-Wellcome Trust unit a very big study was completed and published in 08 November 2010 issue of the Lancet by using 5425 cases of childhood severe malaria in 11 sites in 9 countries in Africa, AQUAMAT study.

The study found 22.5% superiority of injection artesunate in comparison with quinine in reducing death in children. There is important difference in this study in comparison with SEAQUAMAT study- efficacy in prevention of death has been observed as early as within few hours. It is to note that most death in severe malaria happens within 24 hours. Almost at the same time injection artesunate used from Guilin Pharmaceuticals of China has been pre qualified by WHO.

A trend of artemisinin resistance has been found in Thai-Cambodia border, initiatives to contain and monitor such resistance has been taken. It is right time to use artesunate whole heartedly before further resistance is developed. According to the AQUAMAT authors "parenteral artesunate should replace quinine everywhere in the world as the first line treatment of severe falciparum malaria. With an annual 8,000,000 cases of severe paediatric malaria causing 777,000 deaths, a potential 195,000 lives can be saved per year. But only if parenteral artesunate can reach these patients and treatment can be started promptly after admission in a health facility."

Most deaths in malaria happens in children. The result of the biggest study in the treatment of severe malaria should be utilized, the sooner the better. Bangladesh has achieved significant progress in malaria control by using Global Fund through public-private partnership. Cases and death are found to be reduced significantly. Utilizing the new evidence of superiority of injection artesunate in childhood malaria there is possibility of further consolidating malaria with renewed attention in Bangladesh.

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