**CLINICAL PRACTICE GUIDELINE ON DENGUE**

**Clinical Diagnosis**

A history or presence of fever of 2-7 days duration with the following: skin flushing or rash, headache, retro-orbital pain, myalgia/arthralgia, hemorrhagic manifestation (petechiae and positive tourniquet test) suggest dengue fever. A probable case of dengue fever and hemorrhagic tendency which includes one or more of the ff. manifestations: positive tourniquet test, petechiae, ecchymosis or purpura, bleeding from mucosa (epistaxis or bleeding from gums) hematemesis or melena suggest dengue hemorrhagic fever.

**Diagnostic tests**

Complete blood count, blood typing and partial thromboplastin time are recommended. Platelet count 100,000/ cu. mm or less is seen in dengue hemorrhagic.

**Hospital Admission**

Patients with suspected dengue fever are can be managed on an out-patient basis and advised to come once afebrile or immediately if there is any danger sign such as: spontaneous bleeding, persistent abdominal pain, persistent vomiting, listlessness, changes in mental status, restlessness, weak rapid pulse, cold clammy skin, circumoral cyanosis, difficulty of breathing, seizures, hypotension or narrowing of pulse pressure.

Patients with any of the above mentioned danger sign, or any of the ff. laboratory findings: platelet count < 100,000 cell/cu. Mm, hemoconcentration (rise in > 20% above average) should be admitted.

**Management**

Symptomatic care is done. High fever should be controlled with paracetamol and simple measures tepid sponging. Oral fluids should be encouraged.

Patients must be observed closely, including regular pulse and blood pressure monitoring, until they have been afebrile for at least 24 hours without antipyretics. Detailed fluid intake and output should be documented. Initially the haematocrit should be checked daily or twice daily, but if it starts to rise or the patient’s clinical condition deteriorates, more frequent estimations

are required. A platelet count should be measured on admission and every one to two days, but if the patient develops significant mucosal bleeding or severe thrombocytopenia is documented (platelet count < 30,000 mm3), more frequent checks are advisable.

Intravenous fluid therapy is done using isotonic crystalloid solution. The minimum volume of fluid possible to maintain cardiovascular stability and good urine output should be prescribed. Changes in the haematocrit are helpful in guiding fluid therapy but it is important to recognise that it is the clinical response that matters, rather than normalisation of the haematocrit. If the patient is warm, well perfused and has a good urine output, then a relatively high but stable haematocrit is acceptable.

Transfusion is very rarely necessary, but if so, fresh blood must be used, since such patients commonly have profound thrombocytopenia. In these circumstances platelet concentrates and/or fresh frozen plasma may be helpful. However, platelet concentrates are of no value for the treatment of thrombocytopenia in the absence of major bleeding and may be harmful; thrombocytopenia improves spontaneously within a few days, the half-life of transfused platelets is markedly reduced such that they are effective only for a few hours, and the patient may develop fluid overload. Finally, the patient may be exposed unnecessarily to the risks of transmissible agents in blood products.

**Hospital Discharge**

Patients with stable vital signs for 24 hours, with good appetite, visible clinical improvement, good urine output, no respiratory distress from pleural effusion and no ascites, with platelet count of more than 50,000/ cu. mm. may be discharged.

Reference

“Consensus Guideline on Dengue Case Management”, Department of Health Philippines.

“Guidelines for Treatment of Dengue Fever/Dengue Haemorrhagic Fever in Small Hospitals”,WHO, New Delhi, India, 1999.