



DO'S AND DON'T'S FOR MANAGING DENGUE FEVER/DENGUE HAEMORRHAGIC FEVER CASES



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HOW TO RECOGNIZE DENGUE FEVER/DENGUE HAEMORRHAGIC FEVER

Dengue Fever (DF) is an acute febrile illness of 2-7 days duration (sometimes with two peaks) with **two or more** of the following manifestations:

- Headache
- Retro-orbital pain
- Myalgia/arthralgia
- Rash
- Haemorrhagic manifestation (petechiae and positive tourniquet test) and
- Leucopenia

In children, DF is usually mild. In some adults, DF may be the classic incapacitating disease with severe bone pain and recovery may be associated with prolonged fatigue and depression.

Dengue Haemorrhagic Fever (DHF) is a probable case of dengue and haemorrhagic tendency evidenced by one or more of the following:

- Positive tourniquet test
- Petechiae, ecchymosis or purpura
- Bleeding from mucosa (mostly epistaxis or bleeding from gums), injection sites or other sites
- Haematemesis or melena
- Thrombocytopenia (platelets 100,000/cu.mm or less) and
- Evidence of plasma leakage due to increased capillary permeability manifested by **one or more** of the following:
 - A > 20% rise in haematocrit for age and sex
 - A > 20% drop in haematocrit following treatment with fluids as compared to baseline
 - Signs of plasma leakage (pleural effusion, ascites or hypoproteinaemia)

Dengue Shock Syndrome (DSS) All the above criteria of DHF plus signs of circulatory failure manifested by rapid and weak pulse, narrow pulse pressure (< or equal to 20 mm Hg); hypotension for age, cold and clammy skin and restlessness.

The above descriptions of DF/DHF/DSS are adequate for guiding doctors to treat the disease. However, for reporting of the disease, cases should be classified as suspected DF/DHF/DSS on the basis of above the criteria. Added serological evidence would categorize them into probable and confirmed cases.

DO'S AND DON'TS FOR DOCTORS

WHAT TO DO:

- Cases of Dengue fever/Dengue Haemorrhagic Fever (DF/DHF) should be observed every hour.
- Serial platelet and haematocrit determinations, drop in platelets and rise in haematocrits are essential for early diagnosis of DHF.
- Timely intravenous therapy – isotonic crystalloid solution can prevent shock and/or lessen its severity.
- If the patient's condition becomes worse despite giving 20ml/kg/hr for one hour, replace crystalloid solution with colloid solution such as Dextran or plasma. As soon as improvement occurs, replace with crystalloid.
- If improvement occurs, reduce the speed from 20 ml to 10 ml, then to 6 ml, and finally to 3 ml/kg.
- If haematocrit falls, give blood transfusion 10 ml/kg and then give crystalloid IV fluids at the rate of 10ml/kg/hr.
- In case of severe bleeding, give fresh blood transfusion about 20 ml/kg for two hours. Then give crystalloid at 10 ml/kg/hr for a short time (30-60 minutes) and later reduce the speed.
- In case of shock, give oxygen.
- For correction of acidosis (sign: deep breathing), use sodium bicarbonate.

WHAT NOT TO DO:

- Do not give Aspirin or Brufen for treatment of fever.
- Avoid giving intravenous therapy before there is evidence of haemorrhage and bleeding.
- Avoid giving blood transfusion unless indicated, reduction in haematocrit or severe bleeding.
- Avoid giving steroids. They do not show any benefit.
- Do not use antibiotics.
- Do not change the speed of fluid rapidly, i.e., avoid rapidly increasing or rapidly slowing the speed of fluids.
- Insertion of nasogastric tube to determine concealed bleeding or to stop bleeding (by cold lavage) is not recommended since it is hazardous.

SIGNS OF RECOVERY:

- Stable pulse, blood pressure and breathing rate
- Normal temperature
- No evidence of external or internal bleeding
- Return of appetite
- No vomiting
- Good urine output
- Stable haematocrit
- Convalescent confluent petechiae rash

CRITERIA FOR DISCHARGING PATIENTS:

- Absence of fever for at least 24 hours without the use of anti-fever therapy
- Return of appetite
- Visible clinical improvement
- Good urine output
- Minimum of three days after recovery from shock
- No respiratory distress from pleural effusion and no ascites
- Platelet count of more than 50,000/mm³

DO'S AND DON'TS FOR PATIENTS

If you or any family member is suffering from suspected dengue fever, it is important to carefully watch yourself or relative for the next few days, since this disease can rapidly become very serious and lead to a medical emergency.

The complications associated with Dengue Fever/Dengue Haemorrhagic Fever usually appear between the third and fifth day of illness. You should therefore watch the patient for two days even after fever disappears.

WHAT TO DO:

- Keep body temperature below 39°C. Give the patient paracetamol (not more than four times in 24 hours) as per the dose prescribed below:

Age	Dose (tablet 250 mg)	Mg/dose
<1 year	¼ tablet	60
1-4 years	½ tablet	60-120
5 and above	1 tablet	240

- Give large amounts of fluids (water, soup, milk, juice) along with the patient's normal diet.
- The patient should take complete rest.
- Immediately consult a doctor if any of the following manifestations appear:
 - Red spots or points on the skin;
 - bleeding from the nose or gums;
 - frequent vomiting;
 - vomiting with blood;
 - black stools;
 - sleepiness;
 - constant crying;
 - abdominal pain;
 - excessive thirst (dry mouth);
 - pale, cold or clammy skin;
 - difficulty in breathing.

WHAT NOT TO DO:

- ***Do not wait in case the above symptoms appear. Immediately consult a doctor. It is crucial to quickly get treatment in case of these complications.***
- **Do not take *Aspirin* or *Brufen* or *Ibuprofen*.**