Revised Criteria for Diagnosis of Dengue Fever (Applicable In Non Epidemic Setting From Feb 2012 Onwards Until Further Revision)

The revised criteria is being introduced by DEAG to supersede the previous diagnostic criteria during dengue epidemic (used in dengue epidemic, 2011). Issuance of revised criteria was considered essential in view of following points.

1. According to unpublished data approximately 30%, population of Lahore was infected with dengue virus during the 2011 epidemic. This population will continue to have raised immunoglobins (IgG, IgM) for variable period of time. Therefore, presence of IgM alone would not indicate ongoing infection; it might be markers of previous infection.

2. The immune response during second dengue infection is significantly different from primary infection. IgM response is much smaller than in primary infection. Therefore rise in IgG titers over time is much more significant.

The diagnostic criteria would be divided into 3 categories;

1. Suspected case of Dengue Fever
2. Probable case of Dengue Fever
3. Confirmed case of Dengue Fever

Following is the revised criteria for each segment.

1. **Suspected Case - Presence of 3 or more Clinical Criteria**

   **Clinical Criteria**
   - Fever > 2 and < 10 days (essential criterion)
   - Headache
   - Retro orbital pain
   - Myalgia
   - Arthralgia/ severe backache/ bone pains
   - Rash
   - Bleeding manifestations (epistaxis, hematemesis, bloody stools, menorrhagia, hemoptysis)
   - Abdominal pain
   - Decreased urinary output despite adequate fluid intake
   - Irritability in infants
2. **Probable Case – Suspected Case with both Supportive Lab Evidence**

*Supportive Lab Evidence*

- Thrombocytopenia
- Leukopenia

3. **Confirmed Case – Probable case with any one of the three Confirmatory Evidence**

*Confirmatory Evidence*

- Positive NS1 antigen
- Viral detection by PCR
- Seroconversion from negative to positive for serum IgM OR ≥ 4-fold rise in titre of IgG

Confirmatory evidence of viral infection would therefore, be based on:

- Detection of viral antigen (NS1 antigen in blood)
  - OR
- Detection of virus by PCR
  - OR
- Seroconversion from negative for dengue virus specific Ig M antibody in acute phase (≤ 5 days after onset of symptoms) to positive for dengue virus specific IgM antibody in convalescent phase specimen collected ≥ 5 days after onset of symptoms
  - OR
- Demonstration of ≥ 4 fold rise in reciprocal Ig G antibody titre in paired acute and convalescent serum sample

*Issued by Dengue Expert Advisory Group (Punjab)*

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