Tourniquet Test

The tourniquet test is part of the new World Health Organization case definition for dengue. The test is a marker of capillary fragility and it can be used as a triage tool to differentiate patients with acute gastroenteritis, for example, from those with dengue. Even if a tourniquet test was previously done, it should be repeated if

- It was previously negative
- There is no bleeding manifestation

How To Do a Tourniquet Test

1. Take the patient's blood pressure and record it, for example, 100/70.

2. Inflate the cuff to a point midway between SBP and DBP, and maintain for 5 minutes, \((100 + 70) ÷ 2 = 85\) mm Hg

3. Reduce and wait 2 minutes.

4. Count petechiae below antecubital fossa.
   - A positive test is 10 or more petechiae per 1 square inch.

The tourniquet test has variable sensitivity and specificity.\(^1\)\(^-\)\(^5\) Using a cut off of \(\geq 20\) petechiae/square inch increases specificity, but loses sensitivity.\(^1\)\(^,\)^\(^2\) The tourniquet is

- More likely to be positive near time of defervescence\(^1\)
- Less likely to be positive in patients with shock

SBP: systolic blood pressure

DBP: diastolic blood pressure

References