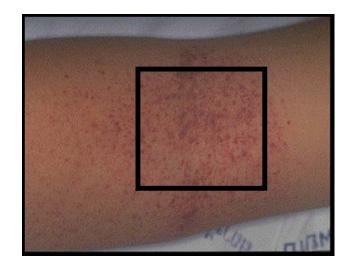
## **Tourniquet Test**

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.
- 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. <sup>1-5</sup> Using a cut off of  $\geq 20$  petechiae/square inch increases specificity, but loses sensitivity. <sup>1,2</sup> The tourniquet is

- More likely to be positive near time of defervescence<sup>1</sup>
- Less likely to be positive in patients with shock

SBP: systolic blood pressure

DBP: diastolic blood pressure

## References

- 1. Kalayanarooj et al, J Infect Dis, 1997; 176:313-321.
- 2. Phuong et al, Trop Med Intl Health, 2002; 7: 125-132.
- 3. Lucas et al, Indian J of Peds, 2000; 67:503-504.
- 4. Pushpa et al, Annals of Trop Peds, 1998; 18:289-293.
- 5. Thaung et al, SE Asian J. Trop Med, 1975; 6(4): 580-591.

