Hand, Foot and Mouth Disease in Odisha

The recent article on Hand, Foot, and Mouth disease by Kar, et al. [1] found laboratory confirmation of the suspected viral etiology in about 10% of the cases of Hand foot and mouth disease (HFMD) in serum samples. Studies have shown that the viral yield from sterile sites such as CSF (0-5%), in patients with neurological complications, and serum is low [2] and yield can be increased by taking samples from other sites such as throat, rectum, ulcer swab and fluid from vesicles. The sensitivity, specificity, as well as usefulness of findings vary according to the sample [3]. Studies, particularly from south East Asia, have shown that viral isolation from vesicular fluid is more useful, if a proper method of collection is used. One study showed the most efficient approach was to examine throat swabs for all patients, plus swabs from at least two vesicles or from the rectum for patients with no vesicles [3]. Another report of 175 patients with HFMD during the 2000 outbreak in Singapore found that rectal swabs most often yielded virus, followed by stool samples, vesicle swabs, and then throat swabs [4]. They found about 50% positive vesicles in 62 patients with HFMD.

As viral shedding from the gastrointestinal tract may continue even after complete resolution of the symptoms, the isolates from the sterile and non sterile sites may differ. One report have shown that when an enterovirus is detected in non sterile site it differs from that isolated in sterile sites in 10% of throat swabs and 20% of rectal swabs [2]. Vesicle swab which was earlier neglected is now being widely used, as the viral yield is almost comparable to throat swab with extra advantage of being sterile.

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References

- 1. Kar BR, Dwibedi B, Kar SK. Outbreak of hand, foot and mouth disease in Bhubaneswar, Odisha: Epidemiology and clinical features. Indian Pediatr. 2012. [Epub ahead of print].
- Ooi MH, Wong SC, Podin Y, Akin W, del Sel S, Mohan A, et al. Human enterovirus 71 disease in Sarawak, Malaysia: a prospective clinical, virological, and molecular epidemiological study. Clin Infect Dis. 2007;44:646–56.
- Ooi MH, Solomon T, Podin Y, Mohan A, Akin W, Yusuf MA, *et al.* Evaluation of different clinical sample types in diagnosis of human enterovirus 71-associated hand-footand-mouth disease. J Clin Microbiol. 2007;45:1858–66.
- 4. Chan, KP, Goh KT, Chong CY, Teo ES, Lau G, Ling AE. Epidemic hand, foot and mouth disease caused by human enterovirus 71, Singapore. Emerg Infect Dis. 2003;9: 78-85.