Re: Dengue Haemorrhagic Fever presenting as Acute Abdomen

رد على: البطن الحادة كعرض لحمى الدنك النزفية

Sir,

I read the recent on acute abdomen in dengue with great interest.¹ I would like to share with your readers experience on this specific issue of dengue. Indeed, the classical manifestation of dengue is high fever with haemorrhagic diathesis. The common laboratory triad of testing for thrombocytopenia and haemoconcentration and atypical lymphocytosis can be helpful in presumptive diagnosis;² however, sometimes unusual clinical manifestations can be seen.³ Gastrointestinal manifestations of dengue are not a rare manifestation, and cannot be overlooked. In a recent report from Mexico, Ramos-De La Medina et al. noted that "close to 67% of patients with dengue fever have abdominal and gastrointestinal symptoms."³ This rate is very high. Any organs in the gastrointestinal tract can be involved in the infection. There are various gastrointestinal manifestations in dengue. Bleeding in the gastrointestinal tract can also be seen although it is not common.⁴ Thrombocytopenia is the main predisposing factor for gastrointestinal bleeding in dengue.⁵ If we now focus on hepatic involvement, hepatitis due to dengue is also a possibility and abnormal liver function tests are not uncommon.³ Based on the author's experience, about one-third of dengue cases have hepatitis and 8% of these cases can end up with severe complications such as hepatic encephalopathy.⁶ Abdominal pain can also be the manifestation in dengue and this is classified as an atypical manifestation.⁷ Indeed, abdominal pain is not uncommon and is accepted as an important warning sign in dengue.⁸⁹ The severity of dengue is strongly relating to the presence of abdominal pain.¹⁰ In a recent article from India, it was reported as being seen in up to 70% of the paediatric cases.8 Conclusively, acute abdomen can be a first presentation of dengue and conservative management can be used similar to general dengue cases. However, it should be noted that co-morbidity of the disorder that needs surgical management is possible. Abdominal pain is an important warning sign that can be seen in either dengue or other acute febrile illness.¹¹ Nevertheless, Mustafa et al. reported that abdominal pain is a more common presentation in dengue compared to other tropical acute febrile illness.¹²

In a recent report by Shamim, many conditions can co-present with dengue. Some co-morbidities can be serious and require surgical management. These include, for example, acute cholecystitis and acute appendicitis.¹³ It is suggested that dengue must be the differential diagnosis of any cases from the endemic area, South and Southeast Asia, which present with unexplained high fever.² Also, abdominal pain might be the main complaint and, if vital sign monitoring is not done adequately to detect the fever, the case of dengue can be missed. Furthermore, although dengue infection can be confirmed in the case with acute abdomen, it is still necessary to rule out any possible co-morbidity. The use of abdominal ultrasonography can help determine the intrabdominal abnormalities in dengue and rule out other causes of abdominal pain.¹⁴

Viroj Wiwanitkit Wiwanitkit House, Bangkhae, Bangkok, Thailand E-mail: wviroj@yahoo.com

References

- 1. Al-Araimi H, Al-Jabri A, Mehmoud A, Al-Abri S. Dengue haemorrhagic fever presenting as acute abdomen. Sultan Qaboos Univ Med J 2011; 11:265–8.
- Ramos-De La Medina A, Remes-Troche JM, González-Medina MF, Anitúa-Valdovinos Mdel M, Cerón T, Zamudio C, et al. Abdominal and gastrointestinal symptoms of Dengue fever. Analysis of a cohort of 8559 patients. Gastroenterol Hepatol 2011; 34:243–7.
- 3. Wiwanitkit V. Dengue fever: diagnosis and treatment. Expert Rev Anti Infect Ther 2010; 8:841-5.
- 4. Wiwanitkit V. Bleeding and other presentations in Thai patients with dengue infection. Clin Appl Thromb Hemost 2004; 10:397–8.
- 5. Wang JY, Tseng CC, Lee CS, Cheng KP. Clinical and upper gastroendoscopic features of patients with dengue virus infection. J Gastroenterol Hepatol 1990; 5:664–8.
- 6. Wiwanitkit V. Liver dysfunction in Dengue infection: an analysis of the previously published Thai cases. J Ayub Med Coll Abbottabad 2007; 19:10–12.
- 7. Gulati S, Maheshwari A. Atypical manifestations of dengue. Trop Med Int Health 2007; 12:1087–95.
- 8. Mittal H, Faridi MM, Arora SK, Patil R. Clinicohematological profile and platelet trends in children with dengue during 2010 epidemic in North India. Indian J Pediatr 2011 Oct 29. Epub ahead of print.
- 9. Narvaez F, Gutierrez G, Pérez MA, Elizondo D, Nuñez A, Balmaseda A, et al. Evaluation of the traditional and revised WHO classifications of dengue disease severity. PLoS Negl Trop Dis 2011; 5:e1397.
- 10. Giraldo D, Sant'Anna C, Périssé AR, March Mde F, Souza AP, Mendes A, et al. Characteristics of children hospitalized with dengue fever in an outbreak in Rio de Janeiro, Brazil. Trans R Soc Trop Med Hyg 2011; 105:601–3.
- 11. Kalayanarooj S. Dengue classification: current WHO vs. the newly suggested classification for better clinical application? J Med Assoc Thai 2011; 94:S74–84.
- 12. Mustafa B, Hani AW, Chem YK, Mariam M, Khairul AH, Abdul Rasid K, et al. Epidemiological and clinical features of dengue versus other acute febrile illnesses amongst patients seen at government polyclinics. Med J Malaysia 2010; 65:291–6.
- 13. Shamim M. Frequency, pattern and management of acute abdomen in dengue fever in Karachi, Pakistan. Asian J Surg 2010; 33:107–13.
- 14. Wu KL, Changchien CS, Kuo CH, Chiu KW, Lu SN, Kuo CM, et al. Early abdominal sonographic findings in patients with dengue fever. J Clin Ultrasound 2004; 32:386–8.