

## Intrathoracic gastric volvulus

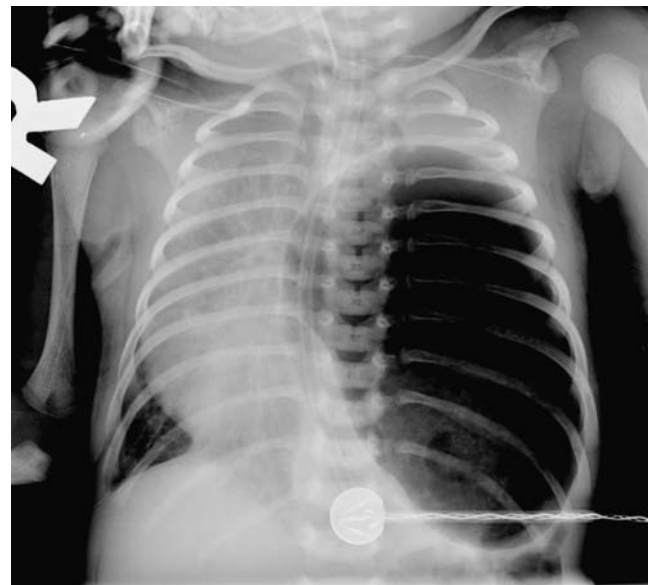
Panee Visrutaratna · Jesda Singhavejsakul

Received: 1 June 2009 / Revised: 28 June 2009 / Accepted: 10 July 2009 / Published online: 11 August 2009  
© Springer-Verlag 2009

A 10-day-old boy was referred for repair of left-side diaphragmatic hernia (Fig. 1). The following day he developed worsening respiratory distress. A follow-up chest radiograph showed a large, oval-shaped radiolucency suggesting massive intrathoracic gastric dilatation, presumably through the diaphragmatic hernia (Fig. 2). At surgery, an organoaxial gastric volvulus through a Bochdalek hernia was found. There were multiple decompressed bowel loops posterior to the gastric volvulus.



**Fig. 1** Chest radiograph, admission



**Fig. 2** Chest radiograph, day 2

Acute gastric volvulus associated with congenital diaphragmatic hernia is rare. It can be organoaxial, mesenteroaxial, or combined type [1]. It can be associated with Bochdalek, Morgagni, hiatal, or paraesophageal hernia. Sometimes, it is misdiagnosed as tension pneumothorax [2]. Congenital diaphragmatic hernia predisposes to gastric volvulus because the gastrophrenic and gastrosplenic ligaments are deficient or absent [1]. In gastric volvulus, the stomach is prone to ischemia and perforation, with increased morbidity and mortality.

P. Visrutaratna (✉)  
Department of Radiology, Faculty of Medicine,  
Chiang Mai University,  
Chiang Mai 50200, Thailand  
e-mail: pvisruta@gmail.com

J. Singhavejsakul  
Department of Surgery, Faculty of Medicine,  
Chiang Mai University,  
Chiang Mai, Thailand

### References

1. Ayala JA, Naik-Mathuria B, Olutoye OO (2008) Delayed presentation of congenital diaphragmatic hernia manifesting as combined-type acute gastric volvulus: a case report and review of the literature. *J Pediatr Surg* 43:E35–E39
2. Zedan M, El-Ghazaly M, Fouda A et al (2008) Tension gastrothorax: a case report and review of literature. *J Pediatr Surg* 43:740–743