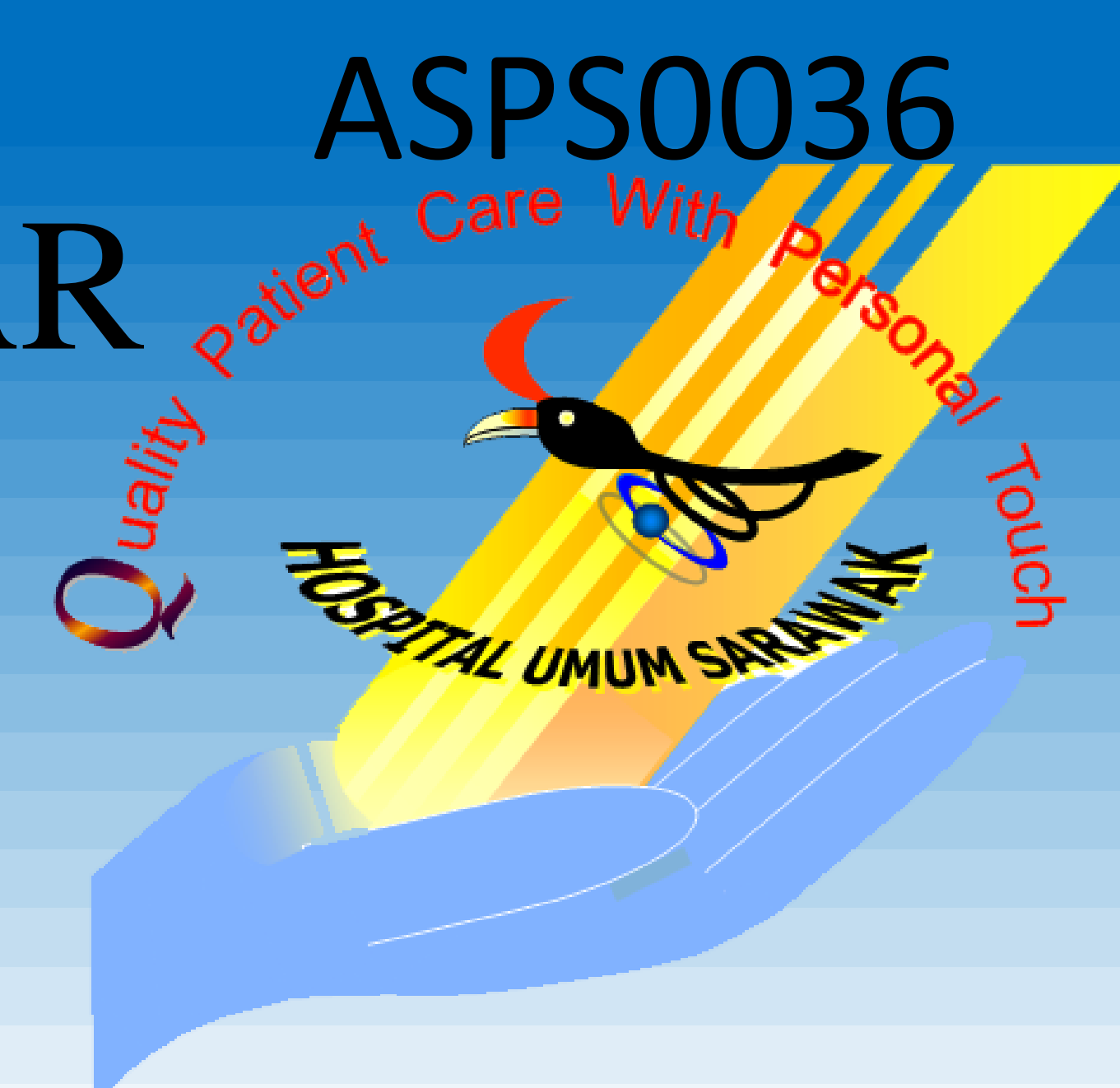




PERFORATED STOMACH POST HANDLEBAR INJURY IN PAEDIATRIC: A CASE REPORT AND REVIEW OF LITERATURE

Ibrahim, M.F., Poh Z., John, A. R.
Paediatric Surgery, Sarawak General Hospital



Introduction

Handlebar injury is a common cause of abdominal injury in paediatric trauma and commonly results in solid organ injuries such as liver, pancreas, splenic and renal injuries. Rarely do we see gastric injury or perforation in a handle bar injury.

Case Description

We describe a case of a 9 year old child presenting with an acute abdomen following a handlebar injury after a full meal. Examination revealed bruises over the epigastric region in conjunction with a tense and tender abdomen. The child was afebrile and elevated blood pressure. Initial FAST scan was negative. However, in view of worsening abdominal pain, tachycardia and abdominal guarding, a repeated FAST scan was done, where free fluid at Morrison pouch and suprapubic region was detected. CT scan showed gross pneumoperitoneum and ascites, and a suspicious perforation site at splenic flexure of the colon. The patient was resuscitated and underwent laparotomy which showed a lacerated stomach extending along the greater curvature from the body to the fundus. Single layer primary repair of the gastric laceration with peritoneal washout was performed. The post-operative recovery was uneventful and the child was discharge well after 10 days.

Discussion/Conclusion

In blunt abdominal trauma, rarely do we see a case of stomach injury. From a study done by G. Begossi et al., 6763 paediatric blunt abdominal injuries between January 1989 till December 2005, only 3 patients had stomach injuries. Stomach laceration caused by a blunt trauma is a rare injury in the paediatric population. The rapid and forceful compression of the stomach against the spine especially in the context of a full stomach is more likely to cause perforation along the anterior wall of the greater curvature, as we have seen in this case report. It is clinically and radiologically difficult to diagnose gastric perforation in a paediatric trauma setting. Therefore we would advocate adopting a high-index of suspicion, and a low threshold to conducting and repeating imaging, no matter how trivial the handlebar injury may seem. If a perforated viscus is found, adequate resuscitation in the pre and post-operative period, as well as early surgical intervention, is imperative.



Figure 1: pocket of air over the splenic flexure of the colon (arrow)

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