Closed gastroschisis

Aly Shalaby · Mark Davenport

Accepted: 3 November 2010 / Published online: 27 November 2010
© Springer-Verlag 2010

Sir,

We read with great interest the article by Holland et al. [1] titled “Gastroschisis: an update”. However, we feel that there is an aspect of this subject which was given insufficient attention and is the leading cause of catastrophe in gastroschisis and, more to the point, is potentially remedial. In utero, the eviscerated midgut is most at risk from the fascial ring through which it protrudes—a state which has been termed “closed” [2] or “closing” [3] gastroschisis. This initially pinches the entry and exit bowel leading to jejunal and colon atresia and then impedes the venous return from the excluded midgut leading to ischaemia, necrosis and ultimately “vanishing bowel” [4, 5]. This is the leading cause of extreme short bowel and as a consequence, mortality in gastroschisis series [6]. The key point about it is that this scenario may be circumvented by astute antenatal ultrasonography. It is recognizable on the antenatal ultrasound and the process can be interrupted before the midgut is lost. The early sign of jejunal atresia is manifested as dilated intra-abdominal loops, and it is the one situation which should then mandate early delivery of these infants to try and save viable bowel.

References

1. Holland A, Walker K (2010) Gastroschisis: an update. *Pediatr Surg Int* 26:871–878
2. Davenport M, Haugen S, Greenough A et al (2001) Closed gastroschisis: antenatal and post natal features. *J Pediatr Surg* 36:1834–1837
3. Houben C, Davenport M, Ade-Ajayi N, Flack N et al (2009) Closing gastroschisis: diagnosis, management and outcomes. *J Pediatr Surg* 44:343–347
4. Johnson N, Lilford R, Irving H et al (1991) The vanishing bowel. Case report of bowel atresia following gastroschisis. *Br J Obstet Gynaecol* 98:214–215
5. Winter L, Giuseppetti M (2005) A case report of midgut atresia and spontaneous closure of gastroschisis. *Pediatr Surg Int* 21:415–416
6. Vogler S, Fenton S, Scaife E et al (2008) Closed gastroschisis: total parenteral nutrition-free survival with aggressive attempts at bowel preservation and intestinal adaptation. *J Pediatr Surg* 43:1006–1010

A. Shalaby (✉) · M. Davenport
NHS Foundation Trust, King’s College Hospital,
Denmark Hill, London SE5 9RS, UK
e-mail: alyshalaby@nhs.net
URL: www.kch.nhs.uk