

Interloop fluid in intussusception

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Sir,

We read with interest the recent article by Gartner et al. [1] in the June edition of this journal titled “Interloop fluid in intussusception: what is its significance?” The authors report an association between the presence of interloop fluid, particularly if its maximum dimension measured more than 9 mm, and an increase in the failure rate of pneumatic reduction. Their success rate was 87.6% in children without trapped fluid and 58.3% in those with trapped fluid.

We have also reviewed the ultrasound examinations performed on 135 children with a total of 143 intussusceptions in our hospital over a period of 5 years. The results were presented at the ESPR meeting in 2004. The mean patient age was 11 months and 68% of infants were younger than 1 year of age. Two experienced paediatric radiologists reviewed all sonographic studies performed prior to the reduction, blinded to its outcome. Trapped fluid was present inside the intussusception at ultrasound in 33 children (23%), similar to the paper sample. The two-

dimensional size of the fluid ranged from 5×2 mm (10 mm sq) to 12×10 mm (120 mm sq). Results were analysed using a two-tailed Fisher exact test.

The overall success rate of air enema in our group was 91% (130 intussusceptions) compared with 81% in Gartner’s paper. Of the 33 children with trapped fluid, 27 (82%) intussusceptions were reducible, compared with 58% in his paper. We did not find any association between the presence of trapped fluid or its dimensions and reducibility ($P = 0.14$).

The pneumatic reduction was complicated by bowel perforation in 2 patients, one without trapped fluid and one with trapped fluid measuring 18×4 mm (72 mm sq) and a clinical history of symptoms for 3 days.

Our study is also a retrospective study but has the advantage of being limited to one institution. An additional advantage is that all ultrasound examinations and pneumatic intussusception reductions were performed by one of three experienced paediatric radiologists.

We agree with the conclusion of the authors of this paper that the presence of interloop fluid is not a contraindication to attempting pneumatic reduction, but we do not alter our approach or technique when performing the reduction in young children. We attempt air enema reduction of intussusception in every patient unless there is evidence of perforation.

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Reference

1. Gartner RD, Levin TL, Borenstein SH et al (2011) Interloop fluid in intussusception: what is its significance? *Pediatr Radiol* 41:727–731