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EDITORIAL

Tempered enthusiasm

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One senior SPR member told me that he could not remember a presentation from the SPR meeting that had generated as much interest and discussion as Dr. David Yousefzadeh's talk on malrotation at last year's meeting. Dr. Yousefzadeh [1] had great passion and enthusiasm for his topic. I admire this. To be fair, the original submission of this manuscript bore much the same enthusiasm. It has been much tempered by the review and editorial process.

But, he has a point. When surgeons look at the duodenum in the operating room, they look for its position in the retroperitoneum and whether it is appropriately fixed. On an upper GI examination, we are inferring the position of the duodenum based on how it projects on our imaging. On US, as Dr. Yousefzadeh correctly states, we can actually see the duodenum in the retroperitoneum and verify its position. This is more analogous to the surgeons' analysis than the upper GI exam.

I urge everyone to try Dr. Yousefzadeh's US technique for evaluating the duodenum. How often can you find the duodenum? How certain are you that the bowel you see is the duodenum? Personally, I am a little leery of calling a bowel loop the duodenum without convincingly tracing it from the stomach. Theoretically, however, no other bowel should live behind the superior mesenteric artery.

So why aren't we all racing to embrace US to evaluate for malrotation? First, Dr. Yousefzadeh's comments aside, most of us do trust the upper GI examination in the evaluation for malrotation and malrotation with volvulus. Second, US examination of the duodenum is not straightforward—it requires skill and diligence. Third, missing a malrotation can be a fatal error. It is this last point that is most tempering.

Dr. Yousefzadeh's study is limited—patients were all newborns, many premature and small in size, and all were scanned by one radiologist. Presumably, all of the infants had normal duodenal anatomy. In order for this technique to gain wide acceptance, its validity needs to be proved (1) in a broader population of patients, including those with disease; (2) by comparison to other modalities and/or surgical results; and (3) by other observers. Dr. Yousefzadeh has simply shown us that it is feasible to see the retromesenteric duodenum with US. This is useful, but further study is needed to assess the clinical utility.

References

1. Yousefzadeh DK, Kang L, Tessicini L (2010) Assessment of retromesenteric position of the third portion of the duodenum: a US feasibility study in 33 newborns. Pediatr Radiol 40. doi:10.1007/s00247-010-1709-4

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