Ultrasound as a first-line investigation to diagnose malrotation in children

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Dear Editors,

We commend the work done by the Texas Children's Hospital on the use of US in the diagnosis and management of intestinal malrotation [1, 2]. A recent systematic review and meta-analysis further supports the use of US as the first line of investigation in the diagnosis of malrotation [3].

At our institution, we have been using US as the first line of imaging for malrotation since 2008 with the added modification of instilling normal saline via a nasogastric tube to delineate the entire course of the duodenum, and we first published the results in 2014 [4]. We have now published a further study with a much larger cohort of 539 patients with this technique and demonstrated a very high sensitivity and specificity and therefore a high degree of safety and efficacy in diagnosing malrotation in children [5]. We support the use of US in diagnosing malrotation but would strongly advocate the additional step of using saline to delineate the course of the duodenum, which is de facto a contrast study of the entire duodenal course to beyond the duodeno-jejunal flexure, but without exposure to ionizing radiation.

Strouse's [6] editorial posed the rhetorical question: Ultrasound for malrotation and volvulus — has the time come? Our response is: Yes it has; the time has come!

Declarations

Conflicts of interest None

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