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Letter to the Editor

Time to stop upper gastrointestinal studies for pyloric stenosis

Sir,

We refer to the case series on pyloric stenosis.[1] The authors selected 25 of IHPS patient prospectively with data regarding history, examination, operation and full follow up with time. In the study, 48% of patients had no signs of dehydration, 36 % had no electrolyte abnormalities, and none had urinary pH abnormality. With widespread availability of health care, late presentation of pyloric stenosis is less common. More babies present early with one or fewer days of vomiting with no evidence of dehydration, electrolyte abnormalities or urinary paradoxical aciduria. However, sensitivity of presence of palpable pyloric mass whose sensitivity was reported to be up to 85% has reduced to 15.5% probably due to early presentation, decreasing clinical skill and increased use of imaging.[2,3] In the above mentioned study, ultrasonography was used to confirm pyloric stenosis in all suspected cases. Studies have clearly shown the superiority of ultrasonography (USG) over upper gastrointestinal studies (UGI) with sensitivity and specificity of USG approaching 100%.[4] We report a 28 day old male neonate, who presented with one day history of recurrent vomiting. However, USG showed that the pyloric length was 15mm and muscular thickness was 3mm. After 48 hour, repeat USG showed that the pyloric length had increased to 20mm and muscle thickness was 4mm. In doubtful and borderline cases, USG may be therefore repeated. It is to be noted that the criteria for diagnosing pyloric stenosis has been liberalized. European Society of Radiology recommends pyloric canal length more than 12mm as one of the criteria.[5] However the most reliable criteria is thickness of muscular layer more than 3mm. Upper gastrointestinal barium study has lower sensitivity (75%) than USG and has low specificity.[6] Therefore UGI should be done only if the suspicion of pyloric stenosis is low or other pathologies like gastro-oesophageal reflux or mal-rotation is suspected. Child with mal-rotation will be sicker, may have bilious vomiting and there would not be a palpable olive. Unnecessary UGI study should be avoided as it will lead to unnecessary radiation exposure, cost of treatment and increased hospital stay due to delayed treatment.

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