Infantile hypertrophic pyloric stenosis in a six day old baby

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A six-day-old baby developed non-bilious vomiting on the second day of life while he was exclusively receiving on-demand breast-feeding. Infrequent vomiting gradually became forceful and after each breastfeed. He was active and sucking well. He was born at term after an uneventful pregnancy weighing 2.98kg.

On examination, he was mildly dehydrated but otherwise well. There was no palpable abdominal mass. An ultrasound scan of abdomen detected pyloric wall thickness of 4 mm and pyloric channel length of 17 mm suggesting infantile hypertrophic pyloric stenosis (Figure 1).



Figure 1: Pyloric wall thickness and pyloric channel length

In view of the atypical age, an upper gastrointestinal contrast study was performed and confirmed pyloric stenosis. After correction of fluid and electrolyte deficits, Ramstedt pyloromyotomy was performed. Breast-feeding was recommenced and he was sent home.

Discussion

The usual age of presentation of infantile hypertrophic pyloric stenosis (IHPS) is between 2 to 8 weeks^{1,2}. Presentation in the first week of life is very rare. In a series of 84 patients with IHPS seen in Rajshahi from November 2000 to October 2004

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there were no cases below 1 week of age^2 . A Medline literary search revealed only 2 reported instances where the age of presentation was less than one week^{3,4}. Males have four times the risk of females¹.

Ultrasound scan finding of pyloric wall thickness more than 4 mm and pyloric canal length of 16 mm confirms the diagnosis⁵. In our baby, due to the atypical age, despite these ultrasound scan findings, an upper gastro-intestinal contrast study was performed for further confirmation^{5,6}.

On performing laparotomy, pyloric stenosis was confirmed. Ramstedt pyloromyotomy corrected the symptoms and he had an uneventful recovery.

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