

Letter to the Editor

A rare case report of infantile hypertrophic pyloric stenosis in dizygotic twins

Sir,

The occurrence of infantile hypertrophic pyloric stenosis (IHPS) in twins offers significant insight into the interplay of genetic and environmental factors in the etiology of the condition. IHPS is characterized by hypertrophy and hyperplasia of the pyloric muscle, leading to gastric outlet obstruction. Studies have shown that the concordance rate of IHPS is higher among monozygotic twins (0.25–0.44) compared to dizygotic twins (0.05–0.10), suggesting a stronger genetic component in identical twins.¹ However, cases in dizygotic twins, although rare, are clinically significant and underscore the possible influence of shared environmental or perinatal risk factors.

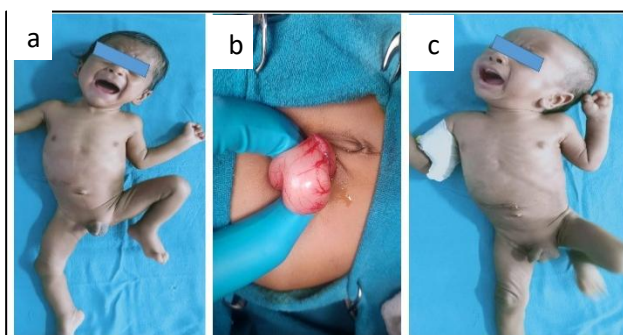


Figure 1: (a) Clinical postoperative photograph of Twin A; (b) intraoperative image of twin A; (c) clinical photograph of twin B.

We report a rare and noteworthy case of same-sex dizygotic male twins both diagnosed with IHPS. The twins, born at term (39 weeks) via spontaneous vaginal delivery to a primigravida mother, presented on the 40th day of life to the pediatric emergency department. Both had a 20-day history of progressive, non-bilious projectile vomiting occurring after each feed, a classic presentation of IHPS. Following initial assessment and fluid resuscitation, both infants underwent Ramstedt's pyloromyotomy, a definitive surgical treatment involving longitudinal splitting of the hypertrophied pyloric muscle. The procedure was successful, and their postoperative course was uneventful, with both infants recovering well

and resuming normal feeding shortly thereafter (Figure 1). Although the precise etiology of IHPS remains unknown, the presence of the condition in both dizygotic twins raises important clinical and etiological considerations. Monozygotic twins are known to share identical genetic material, which likely accounts for their higher concordance rates. In contrast, dizygotic twins, who are genetically similar to ordinary siblings, may develop IHPS due to shared intrauterine or early-life environmental factors. These could include maternal smoking, bottle feeding, or certain medications taken during pregnancy.

Given the complex interplay of genetic susceptibility and environmental exposures, clinicians should maintain a high index of suspicion for IHPS in the asymptomatic twin once a diagnosis is confirmed in the other. Early recognition and timely surgical intervention can significantly improve outcomes. This case reinforces the importance of a thorough evaluation of both twins when IHPS is diagnosed in one, regardless of zygosity.^{1,2}

**Keerthana Bachala*, Amit Kumar Sinha,
Shreyas Dudhani, Sourav Jana**

Department of Paediatric Surgery, AIIMS, Patna, India

***Correspondence to**

Dr. Keerthana Bachala,

E-mail: keerthana.bachala@gmail.com

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