

Clinical Experience of Midgut Volvulus

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Purpose: This study was performed to recognize the importance of early diagnosis and early operation for midgut volvulus in newborn babies and infants.

Methods: A retrospective review of the medical records for 21 patients operated on for midgut volvulus at Asan Medical Center from April 1991 to May 2001 was done. The cases of malrotation without volvulus were excluded.

Results: There were 15 males and 6 females. Neonates comprised 76% of the total and all others were less than 7 months of age. The most common symptom was bilious vomiting of sudden onset. Fetal volvulus occurred in one. Simple X-rays showed nonspecific findings except in 4 cases with proximal bowel dilation and 1 case with free air. Ultrasonography was diagnostic in all 18 cases. Surgery was performed on the same day of admission in 11 cases and on the next day in 5. All showed clockwise volvulus from 180 to 900 degrees. Gastric perforation was accompanied in one case. One death was recorded in fetal volvulus. Two cases were complicated by adhesive obstruction.

Conclusion: Midgut volvulus should be considered in healthy babies, especially in newborns, presenting with bilious vomiting. Ultrasonography is an effective, noninvasive diagnostic tool. Early diagnosis and operation of midgut volvulus are vitally important to decrease mortality and to prevent severe complication. (J Korean Surg Soc 2002;63:333-336)

Key Words: Intestinal obstruction, Vomiting, Infant

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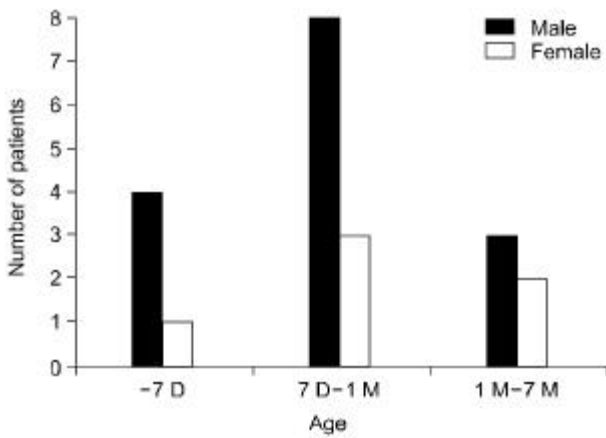


Fig. 1. Age and sex distribution.

Table 1. Symptoms

Symptoms	Number
Bilious vomiting	20
Abdominal distension	3
Bloody stool	2
Fever	5
Others*	2

*Constipation, abdominal pain.

, 10 . 18

(“whirlpool sign”)

(Fig. 2).

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 , 95

(Fig. 3).

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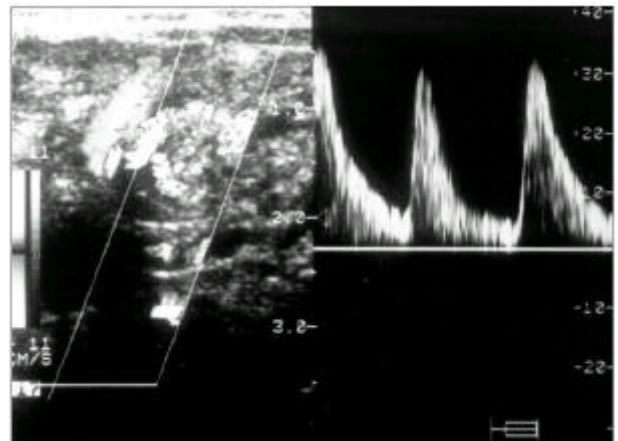


Fig. 2. Ultrasonogram: “Whirlpool sign” characteristic of midgut volvulus with preservation of superior mesenteric blood flow.

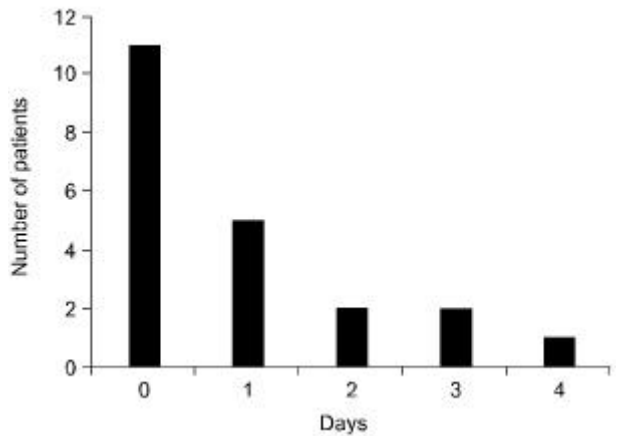


Fig. 3. Lapsed time from admission to operation.

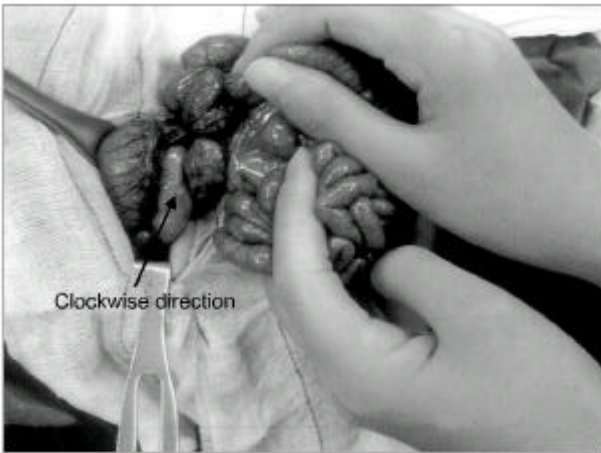


Fig. 4. Operative finding: Clockwised rotation of midgut around the axis of superior mesenteric vessels.

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