

Prenatal diagnosis of fetal intestinal malrotation with midgut volvulus: report of a case and systematic review of literature

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Objectives: The aim of this study is to present a case of fetal intestinal malrotation with midgut volvulus and perform a systematic review of the literature.

Methods: We reported the prenatal diagnosis and perinatal outcome of a case of malrotation with volvulus. A search of published cases was carried out for description as a systematic review. We searched in MEDLINE, PUBMED and Scielo. All series and case reports were included. The clinical features are described.

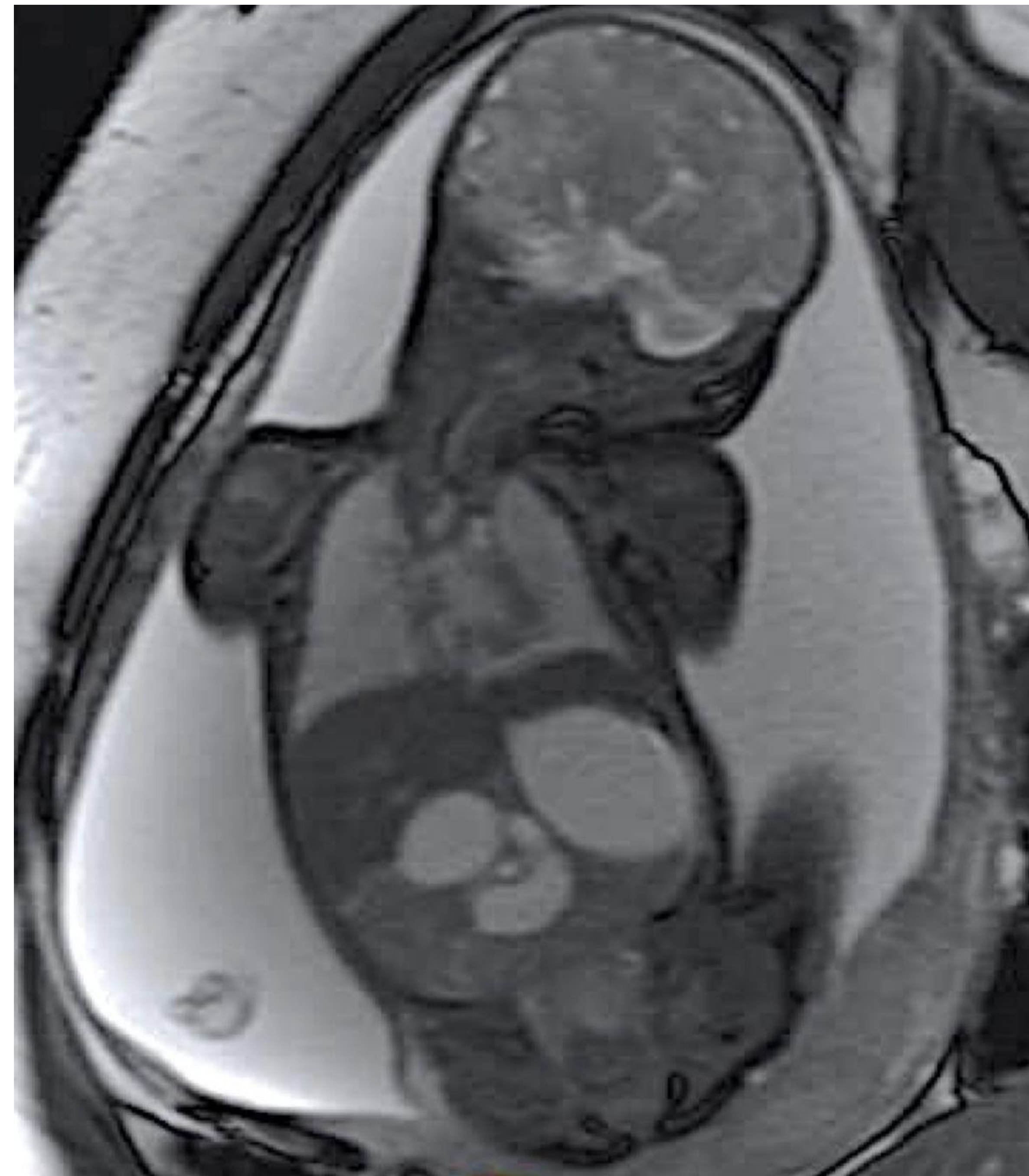


Figure 1. Fetal MRI showing bowel dilatation

Results: In our case a primigravid was referred to maternal fetal medicine at 28 weeks for dilated bowel loops. A fetal MRI at 34 weeks highly suspected midgut volvulus. Laparotomy at 48 h after birth confirmed midgut volvulus with intestinal malrotation. Five articles were reviewed, and our case was included in the analysis. A total of 14 cases of were included. 92,85% of the cases were diagnosed after 24 weeks of gestation. The rate of preterm birth was 50%, mainly because of increased bowel dilatation. All the newborns require surgery promptly after birth.

Conclusions: Fetal intestinal malrotation with midgut volvulus is a rare anomaly. It has characteristic ultrasound findings, and the fetal diagnosis is essential to guide the perinatal management and early neonatal surgery.