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# GASTROSCHISIS – AN OLD, NOT A NEW PROBLEM

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**Background:** Gastroschisis is a full-thickness paraumbilical abdominal wall defect with evisceration of bowel and no covering membrane. Its birth prevalence is approximately 2 to 4 per 10,000 births. After decades of steady increase, recent United States data show a significant decline from 2.86 to 1.55 per 10,000 live births between 2014 and 2022, largely explained by fewer births in the highest-risk maternal groups.

**Aim:** To summarize current evidence on the modern management and treatment of gastroschisis, including epidemiology, prenatal care, surgical techniques, and outcomes.

**Methods:** A narrative review of an evidence-based clinical reference (UpToDate, updated June 2026), together with systematic reviews, meta-analyses, and population-based studies published in peer-reviewed journals.

**Results:** Prenatal ultrasound detects more than 90% of cases. Delivery in a tertiary center with neonatal surgical capability is recommended, whereas the optimal timing of delivery remains debated and cesarean section is reserved for obstetric indications. Primary closure succeeds in about 70% of cases; staged silo closure and sutureless closure are the main alternatives. In a meta-analysis of 20 studies, primary closure appeared superior overall, whereas silo placement performed better in the studies with the least selection bias. A recent meta-analysis found that sutureless closure offers perioperative advantages but carries a higher risk of umbilical hernia. Survival of liveborn infants reaches 97.8% in a large North American cohort; however, survival to discharge was reported as 10%, 68%, and 98.6% in low-, middle-, and high-income countries, respectively. Complex gastroschisis (intestinal atresia, necrosis, perforation, or volvulus) affects up to 25% of patients, and its mortality was significantly higher than that of simple gastroschisis (16.67% versus 2.18%). Long-term intellectual outcomes are generally within the normal range, although adhesion-related problems and the absence of an umbilicus may affect survivors.

**Conclusions:** Modern management of gastroschisis is based on early prenatal diagnosis, planned delivery in a specialized center, an individualized surgical strategy, and multidisciplinary follow-up. Survival is excellent where quality neonatal surgical care is available, but the optimal timing

of delivery and closure technique remain unresolved, and complex gastroschisis continues to carry substantial morbidity.

**Keywords:** gastroschisis; abdominal wall defect; complex gastroschisis; closure techniques; pediatric surgery