

Fetal megacystis: a comprehensive analysis of associated conditions and underlying causes

Cortés B, Perdomo L, Rodríguez I, Montero C, Caminal J, Vilà-Casas J, Prats P, Albaigés G, Sánchez-Prieto M Instituto Universitario Dexeus, Barcelona, Spain

Objective

The aim of this study was to examine obstetrical outcomes, ultrasonographic characteristics, and underlying etiologies associated with fetal megacystis (FM).

Methods

This retrospective study evaluated cases of FM detected between 2000 and 2021. Obstetrical outcomes and associated structural abnormalities were assessed.

Results

16 cases of FM were identified. Most cases (15/16, 93.8%) were early megacystis. Of the diagnosed FM cases, 14/16 (87.5%) of pregnancies were terminated, 1/16 (6.25%) resulted in intrauterine death, and 1/16 (6.25%) survived. FM was associated with 13 other sonographic abnormalities in 12/16 (75%) of cases, most commonly umbilical cord cyst (3/16, 18.75%). Recognized etiologies included posterior urethral valves (2), trisomy 18 (2), trisomy 13 (1), Prune Belly syndrome (1), and Megacystis-Microcolon-Hypoperistalsis syndrome (1).

Conclusion

Most cases are early megacystis and result in elective termination. FM is often associated with other ultrasonic abnormalities, with the most common being umbilical cord cyst. 44% of cases involve an identifiable etiology, with posterior urethral valves and chromosomal abnormalities being the most commonly recognized.