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Hypospadias from Prenatal Ultrasound Diagnosis to Postnatal Management

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ABSTRACT

Hypospadias is the abnormal location of the urinary meatus and is the most frequently diagnosed malformation of the external genitalia. Prenatal diagnosis is possible through systematic ultrasound from week 20 of gestation, with diagnosis being easier in the third trimester. Mild forms are usually isolated, familial or associated with placental dysfunction or intrauterine growth restriction, while more severe forms present up to 30% association with fetal defects, chromosomal/genetic anomalies or sexual development anomalies. The triad for prenatal ultrasound diagnosis consists of ventral penile curvature, dorsal foreskin anomaly, and blunt penile tip. Assessment of the urethra during urination and the appearance of the urinary stream are very useful to classify the defect. When penile or scrotal hypospadias is diagnosed, it is advisable to perform an amniocentesis for fetal genetic study and assess other signs of adequate virilization, such as testicular descent starting at week 27. Follow-up after delivery should be multidisciplinary, including a urologist and a child endocrinologist. In mild hypospadias the prognosis is good with surgical repair in the first year of life, but severe forms may present a greater challenge for functional and aesthetic correction.

Keywords: *Hypospadias; Prenatal diagnosis; Fetal external genitalia; Anomalies of sexual development*