Fetal hypospadias: association of its severity and prenatal diagnosis

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Introduction

Hypospadias is classified into three types; anterior, middle and posterior type according to the location the urethral meatus. The aim of our study was to clarify the relationship between the types of hypospadias and fetal and maternal complication, prenatal diagnosis of hypospadias and fetal sex determination using ultrasound.

Methods:

We retrospectively studied 25 consecutive cases that were born in our center and diagnosed with hypospadias after birth between January 2008 and August 2017. The relationship between the types of hypospadias and FGR, HDP, complicated anomalies, prenatal diagnosis of hypospadias and fetal gender determination using ultrasound.

Result:

Among 25 cases, 8, 11 and 6 were anterior, middle, posterior type, respectively. (Fig. 1)

FGR was complicated in 1/8 anterior types, 5/11 types and 6/6 posterior types. HDP was complicated in 2/8 anterior types, 2/11 types and 2/6 posterior types. Anomalies except hypospadias were complicated in 2/8 anterior types, 7/11 types and 3/6 posterior types. (Fig. 2-4)

Hypospadias was prenatally detected in 0/8 anterior types, 3/11 types and 5/6 posterior types. (Fig. 5)

Conclusion

The types of hypospadias was related with FGR, prenatal diagnosis and fetal sex determination. Posterior-type hypospadias was closely related with FGR. In anterior-type hypospadias prenatal diagnosis of hypospadias was still rare. In contrast most of the posterior-type hypospadias were prenatally detected. However, fetal gender determination can be difficult in posterior-types hypospadias.