Open Access
Scientific Reports

Open Access Scientific Reports

Ke/ ● d : Posterior urethral valve; Fetal MRI urography; Antenatal hydronephrosis

Ca e Re ●

The pregnant who was 23 years old with her first pregnancy, according to her last menstrual period she was 19 weeks pregnant and admitted to our hospital with the diagnosis of cystic mass in the fetal abdomen according to the ultrasound which was performed in another institution. Clinical and laboratory examinations of the pregnant had no prominent feature. According to the USG examination which was performed in our clinic using a Siemens Antares 0.5 device, the age of fetus was same with the calculated gestational age according to last menstrual period of mother and the male fetus was at 19 weeks of gestation. The amount of amniotic fluid revealed normal. Pelvicalyceal ectasia of kidneys and distension of bladder were observed (Figure 1). Preliminary diagnosis was considered as a PUV. Because of the bladder distention and the fetal position we had difficulties in detailed visualization of the fetal abdomen and a fetal MR urography examination was planned. We used Philips Achieva 1.5 tesla, XL-torso coil and in T2-weighted single-shot TSE SPIR sequence of the investigation bilateral pelvicalyceal ectasia and bladder distention with bilateral dilatation and tortuosity of ureters and dilatation and elongation of the proximal urethra (keyhole sign) were observed (Figure 2 and Figure 3). Infravesical obstruction was diagnosed secondary to PUV.

I ●d c i●

Posterior urethral valve is the most common cause of lower urinary tract obstruction A PUV is a congenital obstruction caused by a malformation of the posterior urethra. The significance of this obstruction depends on the secondary effects on the bladder, ureters, and kidneys. It may cause irreversible pathologies both on kidney and bladder function.

PUV has an estimated incidence of one in 5000 to 8000 in the community, among the only male fetuses [1]. PUV is divided into three types by Young as type 1, type 2 and type 3. Type 1 is the most common seen, as 90 % [2].

As embryologically, PUV is thought to occur as a result of the abnormal insertion of mesonephric duct into fetal cloaca. Valve consists at the level of verumontanum in posterior urethra that prevents urine

***Corresponding author:** Vefk Arica, M.D., Medical Faculty of the Mustafa Kemal University, 31100, Serinyol, Antakya, Hatay, Turkey, Tel: +90 326 2291000; Fax: +90 326 2455654; Mobile: +90 505 6797877; E-mail: vefkarica@hotmail.com

Received March 12, 2012; **Published** June 26, 2012

Citation: Bayaroğulları H, Arıca V, Türkay A, Arıca S, Beyoğlu Y, et al. (2012) Fetal MRI Urography and Antenatal Diagnosis of Posterior Urethral Valve. 1: 113. doi:10.4172/scientifcreports.113

Citation: