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Letter to the Editor

Fetal Hydronephrosis in the Second and Third Trimester of Pregnancy and Six Months Follow-up after Birth: Letter to the Editor

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Dear Editor-in-Chief

We read with great interest the above original article by Zahra Shafizadeh et al. published in the IJN about antenatal hydronephrosis. We think it is very valuable, and the investigation is appropriate and convincing.

The causes of fetal hydronephrosis include idiopathic, VUR, UPJO, UVJO, PUV, and ureterocele, and 5%–15% of infants with antenatal hydronephrosis have VUR (1).

Infant follow-up is usually recommended only if the diameter of the pelvis of the fetal kidney is greater than a certain cutoff (e.g., 7 or 10 mm) at or beyond 34 weeks. If the measurement is less, most of them are considered physiologic or normal (2).

There are some points worth discussing in this study.

First: In this study, the causes of hydronephrosis were reported as idiopathic, polycystic kidney disease, PUV, VUR, and UVJO (3). It seems that polycystic kidney disease (PCKD) is not a cause of fetal hydronephrosis, and there is a weak possibility of the two co-occurring. On the other hand, autosomal dominant polycystic kidney disease occurs in 1 in 800 live births, and autosomal recessive PCKD is much rarer, with an incidence of 1 in 20,000 live births. Therefore, the possibility that we have two patients with PCKD and hydronephrosis in this study is weak (4).

Second: In this study, adverse outcomes from fetal hydronephrosis included the need for surgery, initiation of antibiotic prophylaxis, failure to improve hydronephrosis after 6 months, and death (3). It is not known whether the death was related to hydronephrosis because mortality from hydronephrosis is rare, except in cases of Potter syndrome. It is normal for moderate and severe hydronephrosis to last more than 6 months and to decrease with age and especially with the height of children, and this is not considered an adverse outcome.

Third: In this study, the reasons for the difference in spontaneous recovery rates of fetal hydronephrosis included inclusion and exclusion criteria, sample classification, and the infants' follow-up time (3). However, it seems that the duration of follow-up and differences in the causes of secondary hydronephrosis, including VUR, PUV, and UPJO, could be the reason for this difference in various studies.

Fourth: One of the main symptoms of severe kidney diseases is oligohydramnios, which is seen in cases of severe PUV, bilateral kidney dysplasia, and Potter syndrome. The combination of fetal hydronephrosis with oligohydramnios indicates a poor prognosis.

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