



Outcome of Antenatal Hydronephrosis in Srinagarind Hospital

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Background and Objective: Antenatal hydronephrosis (ANH) is a condition of fetal renal pelvic dilatation during pregnancy. It is detected in 1-5% of all pregnancies. Most of ANH are physiologic but some are pathologic and can cause morbidities. The aim of this study is to determine the causes of ANH and factors correlated to complications and surgical requirement in patients with ANH.

Method: We reviewed the medical records of infants who were diagnosed with ANH, defined by renal pelvic antero-posterior diameter ≥ 5 mm. from antenatal ultrasonography, and followed up in Srinagarind hospital.

Result: Forty-six infants (32 males and 14 females) with ANH were identified. 56.5% of patients were inborn. The two most common causes of ANH were uteropelvic junction obstruction (34.8%) and transient hydronephrosis

(23.9%). Of those 64 kidneys, 53.1% needed surgical intervention. Twenty-two patients (47.8%) had urinary tract infections and most of them occurred more than 1 episode. None of patients had chronic renal failure but one died due to lung hypoplasia. Severity of ANH and time of first postnatal ultrasonography were related to complications and surgical requirement. Comparing between transient and non-transient hydronephrosis, more severe ANH was significantly correlated with non-transient hydronephrosis.

Conclusion: Most of ANH are pathologic and half of them required surgical treatment. Severe ANH and delayed investigation were associated with poor outcomes.

Keyword: Antenatal hydronephrosis, complication, surgery, cause