

Renal Duplex Anomalies in the Childhood. The Problems of the Ultrasound Diagnostic

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Abstract

Renal duplex anomalies are not rare in the childhood. During a 9-year period, a total of 956 children (1038 duplex kidney) were underwent the ultrasound investigations (USI). The 21 (2 %) case of missed or misinterpreted ultrasound diagnostic of the renal duplex anomalies were identified. The coses of the mistakes are analised. The literature rewiew and US-imaging findings of this disease are presented. Based on kidney morphology and founds in USI, the general variants of the diagnostic mistakes were pick out:

1. The severe hydronephrotic upper moiety (UM) duplex kidney (DK) was as a cose of 2 variants of the diagnostic mistakes:
 - the severe hydronephrotic UM of the DK was misinterpreted as a kidneys kista (6 cases);
 - the severe hydronephrotic UM of the DK was misinterpreted as a another organs kista, for exempl hepar kista (4 cases);
2. The severely dilated and circuitous upper ureter fragments was also as a cose of two variants of the diagnostic mistakes:
 - the severely dilated and circuitous ureters fragments was misinterpreted as a intestinal loops (6 cases). This variant was often observe with the pyelonephritis assotiation, when the ureters contents acquire a ultrasound consistency as a dispersed suspension and the ureter misinterpreted as a intestinal loops;
 - the severely dilated and circuitous ureters fragments masquerading as a abdominal lymphangioma.
3. The scarred and hypoplastic nonfunctioned UM of the DK is nonvisualiser absolutety (4 cases), although it is a case of a persistetns urinary tract infection.

The cases of the missed or misinterpreted are analised, the technical peculiarity of the USI are discussed. The results of the echography and the short review of the literature is present.

Key words: Ultrasonography, Children, Renal Duplex.

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