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Short Communication

Left Hydronephrosis on the Diaphragm of the Ureteral Pyelojunction About a Case

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Ureteral valves represent a rare etiology of upper tract obstruction and can be discovered at any age [1]. The diaphragm is an anatomical form of the valves that occupies the entire circumference of the excretory tract. We report the first case described in the literature of syndrome of the pyelo-ureteral junction on the diaphragm.

This was an 11-year-old girl with no notable pathological history, having consulted for diffuse abdominal pain and vomiting. Renal function is correct. The urinary tree without preparation does not show radiopaque images.

Intravenous urography shows a chubby appearance of the pyelon with moderate dilation of the left pyelo-calicielles cavities. This is a moderate left ureteral pyelojunction syndrome.

Renal scintigraphy with DMSA showed a poorly functional left kidney (at 7%).

The child had a left nephrectomy with simple postoperative course.

The anatomopathological examination concluded to focal chronic interstitial nephritis lesions on an anomaly of the ureteral pyelojunction related to a total diaphragm.

There does not seem to be a predominance of sex or side over the other. Ureteral valves were first described in 1887 by Wolfler [2] on autopsies of fetuses and newborns.

Rabinowitz [1] divided the valves into two types: type 1 with the presence of smooth muscle fibers throughout the entire valve, and type 2 with the presence of muscle fibers only at the level of the base of the valve.

The etiology of ureteral valves is still debated. Two main theories have been advanced to explain their formation. The first is that of the incomplete rupture of the Chwalla membrane put forward by Wall and Wachter [3]. The second advanced theory incriminates the persistence of the mucous folds of the fetal ureter [6].

Ureteral valves are associated with other anomalies of the urinary tract in 41% of cases [1,2]: the anomalies encountered are multiple such as renal duplicity, renal agenesis, horseshoe kidneys or reflux. vesicourethral. The frequency of these associations is not explained by the two etiological theories proposed and suggests an anomaly of ureteral embryogenesis.

Nearly half of the valves are located at the level of the lumbar ureter, 17% at the level of the iliac ureter and 33% at the level of the pelvic ureter [7]. Its location at the level of the pyelo-ureteral junction, as in our patient, it is exceptional.

The symptomatology of the valves of the ureter is variable: low back pain, hematuria, pyuria, pyelonephritis, lithiasis or even hypertension.

The assessment includes an IVU which shows dilation of the pyelocalicielles cavities, or even an evocative image in the form of an endoluminal imprint [5]. Preoperative diagnosis is 24% of cases [4].

The scintigraphy will make it possible to assess the functional impact of the obstacle as well as its obstructive nature.

According to Sant., *et al*. only surgery and pathology can confirm the diagnosis [9].

Anastomotic resection is the treatment of choice.

When the kidney upstream of the valves is destroyed, nephrectomy is necessary.

The functional prognosis depends on the degree of impact of the obstruction on the kidney [1,9].

Figure 1: Urographic aspect of a left ureteral pyelojunction syndrome; absence of opacification of the left ureter.

Figure 2: Deformed nephrectomy kidney with irregular contours measuring 6.5/4/3 cm long axis.

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