

## Urinary Retention Revealing Sacrococcygeal Teratoma in a Child

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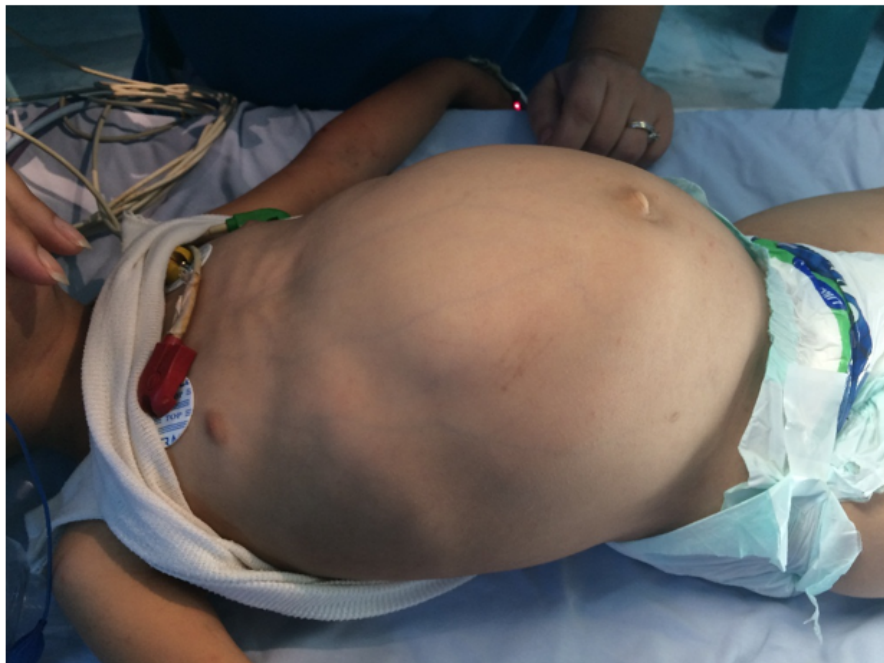
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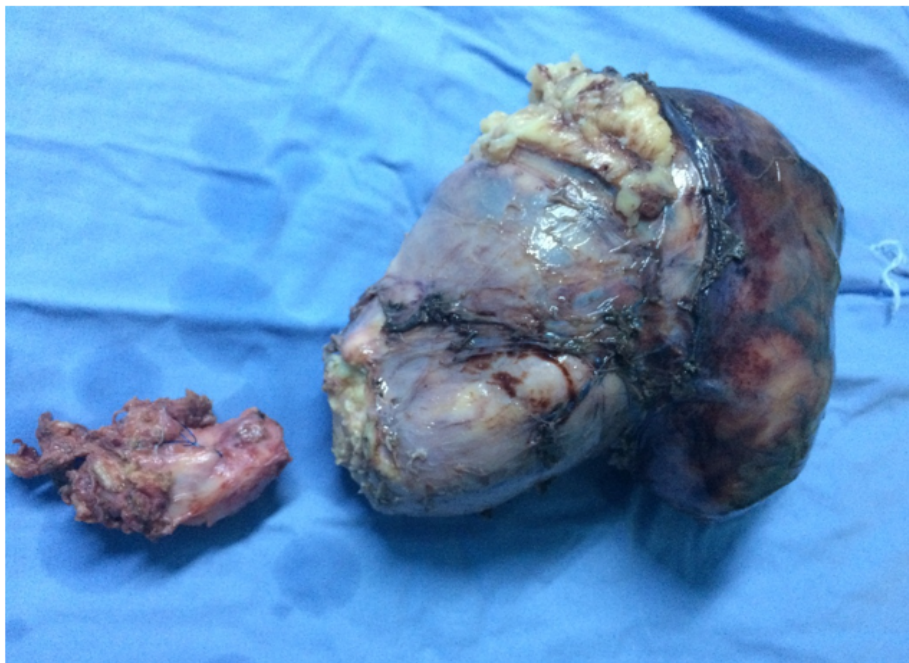
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Of all human teratomas 46% originate in the gonad (91% are ovarian). The most common extragonadal site of origin is the sacrococcygeal region (41% of all childhood teratomas) [1]. Sacrococcygeal teratomas have an incidence of 1 in 35,000 to 40,000 live births and are typically diagnosed either via prenatal ultrasound, or during a postnatal physical examination [2]. Most tumors are benign with an increasing number of lesions diagnosed in the antenatal period [3]. We report a case of a type IV sacrococcygeal teratoma revealed by a urinary retention in a 2-year-old girl.

A 2-year-old girl was admitted for 72-hour urinary retention with important abdominal distention (Figure 1). The biological assessment was correct and the tumor markers (BHCG and AFP) were negative. Abdominal ultrasonography and CT showed a mass of 140 \* 63 mm pre-sacral extended in intra-abdominal, with double cystic and solid component, with multiple calcifications. This mass compressed the bladder and the 2 ureters. Renal ultrasonography demonstrated moderate bilateral hydronephrosis. After placement of a bladder catheter, a guided echo biopsy of this tumor was performed concluding an immature malignant teratoma. Neo-adjuvant chemotherapy was then instituted, followed by resection of the tumor by double abdominal and pre-sacral route (Figure 2), followed by adjuvant chemotherapy. Currently, with a follow-up of 12 months, the patient has normal urinary and anal continence, with no tumor recurrence or metastases.



**Figure 1:** Important abdominal distention in a 2-year-old girl.



**Figure 2:** The resected sacrococcygeal teratoma.

Sacrococcygeal teratoma patients frequently exhibit urological signs and symptoms [1]. A retrospective study was done of 29 patients, 6 (21%) of whom presented with total urinary retention. All cases of urinary retention appeared to be due to extrinsic compression of the bladder outlet, which occurred in male as well as female patients [1]. In our patient the urinary retention was the symptom of revealing the sacrococcygeal teratoma.

Sacrococcygeal teratoma has a high risk of malignant transformation in the first few years after birth [4]. In the series of Dirix, *et al.* the actuarial risk of developing a malignancy was more than 60% after 3 years, which emphasizes the need for early and complete resection of sacrococcygeal teratoma to reduce the risk of cancer [4]. The optimal treatment for sacrococcygeal teratomas is en bloc surgical resection, including coccygectomy, within the first 2 months of life [5]. After 2 months, the rate of malignant transformation increases, dramatically complicating subsequent treatment [5]. Our patient sacrococcygeal teratoma was diagnosed at the age of 2 years which was a factor of his malignant transformation so chemotherapy was associated to the surgery.

**Conflict of Interest**

None.

**Source of Support**

Nil.

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