

## LETTER TO THE EDITOR

# IMPORTANCE OF DIGITAL RECTAL EXAMINATION IN DIAGNOSING SACROCOCCYGEAL TERATOMA

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A 6 years old girl presented with a recurrent discharging sinus in the natal cleft since the age of 6 months. The baby had first developed a small swelling between the buttocks at the age of 6 month which was surgically drained elsewhere. After 6 months the swelling recurred and later started discharging. Since then, she had gone through multiple surgical procedures at different hospitals of the city.

Inspection revealed discharging sinus at the level of coccyx just to the left of midline and scars of previous operation (Figure 1). Discharge was mucoperulent. Digital rectal examination revealed two cystic swellings behind the rectum with well defined margins. Upper limit was reachable with mobile overlying rectal mucosa. Pressure on the cyst led to mucoperulent discharge from the sinus. General examination was unremarkable.

Ultrasound examination and computed tomography of pelvis revealed two cystic masses behind the rectum (Figure 2). No intra-abdominal extension or lymphadenopathy was seen. Sinogram showed a pre sacral cyst filling with contrast which was draining through the sinus tract (Figure 3). Serum alpha fetoprotein level was within normal range. Provisional diagnosis of presacral teratoma was made. Excision of cystic swelling along with coccyx and sinus tract was performed through posterior sagittal approach. Postoperative recovery was uneventful. Histopathology revealed a benign teratoma containing salivary tissue.

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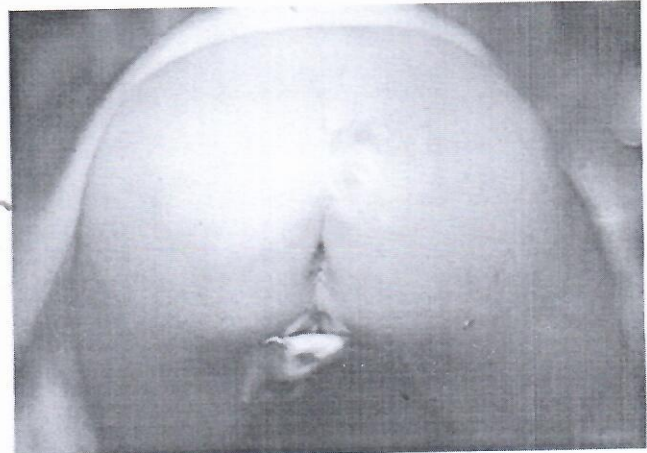


Figure 1: Photograph showing sinus and scars of previous surgery.

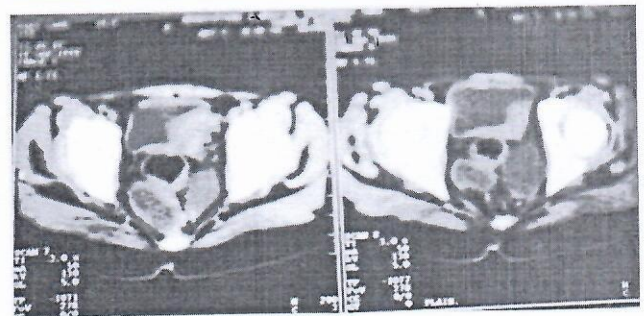


Figure 2: CT scan showing two retro-rectal cysts.

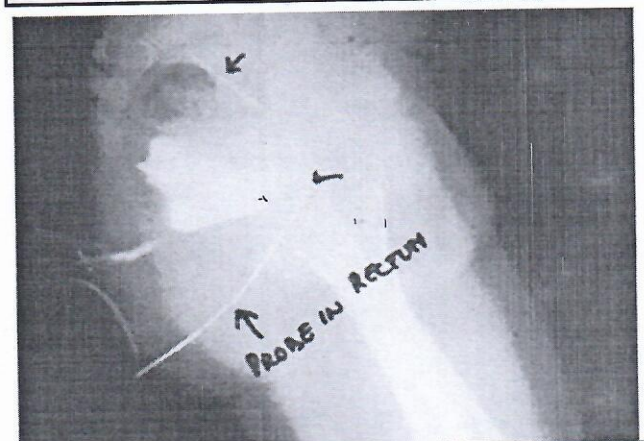


Figure 3: Sinogram showing the sinus communicating with retro rectal cyst.

Sacrococcygeal teratoma is the most common neonatal tumor.<sup>1</sup> The incidence of sacrococcygeal teratoma is 1 in 40,000 live births. It is more common in females (75 %) than the male child (25%).<sup>1,3</sup> It is important to recognize and treat it early to prevent complications particularly malignant transformation. The risk of malignant transformation increases with increasing age. In neonates the frequency of malignant transformation is 7% whereas above 2 years it rises to above 50%.<sup>3</sup>

Sacrococcygeal teratomas are of 4 types according to presentation. Type 1 is predominantly external with minimal presacral component (47%). Type 2 is external with significant but minimal intrapelvic extension (34%). Type 3 is predominantly intrapelvic with minimal external component (09%). Type 4 has no external component and there is a presacral component only (10%).<sup>2</sup>

Most of these can be diagnosed in the antenatal period by antenatal sonography.<sup>4</sup> Majority of sacrococcygeal teratomas (> 81%, types 1 and 2) present as bulging over the sacrococcygeal region, however types 3 and 4 are difficult to diagnose due to lack of external component and may present late usually with complications.<sup>5</sup> It is usually the constipation, abdominal mass or urinary symptoms that bring the infant to medical attention in such cases. Rectal examination shows retro rectal mass pushing the rectum forwards. Anterior meningocele, rectal duplication cysts, dermoid cysts, chordoma and haemangioma must be considered in differential diagnosis.<sup>6</sup>

Radiography of the lumbosacral region may demonstrate tumor calcification. Ultrasound, CT scan and MRI are useful in diagnosing and assessing the extent of sacrococcygeal teratoma.<sup>4</sup> Raised alpha fetoprotein level differentiates between benign and malignant tumor and is used as a prognostic factor as well as a sign of recurrence.<sup>3,6</sup>

Delay in diagnosis and surgical treatment may be associated with malignant transformation, pressure necrosis, infection or haemorrhage.<sup>1</sup> Omission of rectal examination in this case led to delayed diagnosis although she presented at the age of 6 months and was operated multiple times at different hospitals. It is therefore important to perform a thorough physical examination including digital rectal examination in every child who presents with a swelling or sinus in sacrococcygeal region.

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