Case Report: Huge Sacrococcygeal Teratoma

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Abstract: Sacrococcygeal teratomas are rare tumors that develop at the base of the spine by the tailbone ( coccyx) known as the sacrococcygeal region. These tumors may grow quite large and once diagnosed although, in many cases, they are not considered cancerous. Yet, always require surgical removal. A case of one month Saudi male that had a huge mass in the sacral area is reported. Such cases are always followed by discussion, diagnosis and management.

Keywords: Sacrococcygeal teratoma , mass in sacral area , germ cell tumor , neonates, 2 kg

I. INTRODUCTION

A sacrococcygeal teratoma (SCT) is a very common congenital germ cell tumor, with an incidence of 1 in 35,000-40,000 live births. It is a female predominance type of tumor (3:1-4:1 ratio) (1,2). The tumor arises from embryologically multipotent cells from the Hensen node. This node is located in the coccyx. (3,4) Most SCTs are now diagnosed prenatally because of the extensive use of routine obstetric ultrasonography. (5)

Patients in whom SCT is diagnosed normally do well after early surgical resection. Theoretically speaking, the main cause of mortality in these patients is attributed to malignancy. However, mortality associated with prenatally diagnosed SCT is attributed to tumor morphology and vascularity. This is in the range of 30-50% (6, 7, 8). In many cases, some fetuses are born without complications. However, others can develop high-output cardiac failure, nonimmune hydrops fetalis and, ultimately, fetal demise. (9)

II. CASE REPORT

A full term one month old, Saudi male diagnosed by ultrasound as a Sacrococcygeal teratoma at 36 weeks. The mass appeared at birth in the sacral area covered by skin no hair no redness with visible blood vessels (Fig.1) (Fig.2). It was 2 kg in weight with no history of fever. There was no skin rashes, confusion, weakness in his face/arms/legs and fits with no recent head trauma. In addition, there was no weight changes, no problems in breath and no pain. Delivered by caesarean section due to the huge mass, cried immediately after delivery and birth weight was 3.6 kg. He was admitted in PICU for 10 days and then discharged with his mother. The patient was fed through a bottle since birth and took the birth vaccines only (BCG, hepatitis B).

There was no allergy or side effects from vaccines and No history of similar condition in his family.

On physical examination, the patient was alert, well looking , lying on bed, not in distress. There is a big mass. He is connected to IV line. He had no oxygen mask or NGT. He was not cyanosed nor pale or jaundiced. BP 98/58 ,PR 130 b/min ,RR 36 ,temperature 36.2 °C ,O2 saturation 97% RA. Weight: 3.6 kg , Height: 45 cm, Occipital frontal circumference: 34 cm. The chest moves symmetrically with no obvious deformities or scars. He does not use his accessory muscles while breathing. Normal vesicular breathing is apparent along with equal bilateral breath sound. There was no added sounds , s1+s2 no murmur rhythm .gallop. The abdomen was soft and lax, there is no tenderness nor organomegaly . GCS: 15 , CN: grossly intact. The mass legion is in sacral area. There is normal labs. Nevertheless, elevation in PLT , K+ and decrease in Na+,Cl- , osmolarity .

(Fig.3) (Fig.4)

The patient was diagnosed as Sacrococcygeal teratoma.

The treatment plan was giving NS IV fluid to corrected the electrolytes. Then, surgical consultation took place followed by a complete surgical removal of the mass.
He has a huge soft motile mass protruding from the sacral area covered by skin no hair no redness with visible blood vessels.

### III. DISCUSSION

Sacrococcygeal teratomas (SCT) are rare tumors which are most likely present at birth (congenital) and most are discovered before birth by a routine prenatal ultrasound examination or an exam indicated for a uterus too large for dates. They signify slow growing tumors that are originated prenatally. The cause of sacrococcygeal teratomas is unidentified. SCTs are most likely to show up in females more often than males by a 4:1 ratio while malignancy is more common in males. SCT is the type of solid tumors which are common amongst newborn babies (neonates). In the case of infants, the sacrococcygeal region is the most common place to develop such tumors (10). It can be a malignant mass depending on the maturity of the contents. The majority of them tend to be benign (~80%). (11) There are different types (type I [47%]: Predominantly external, attached to the coccyx. No evidence of metastases. II [35%]: External mass and significant presacral pelvic extension, minimal metastases rate. III [8%]: Tumors visible externally, mass is pelvic and intrabdominal. 20% rate of metastases. IV [10%]: Tumors not visible externally, entirely presacral. Also, can be classified depending on the grades (Grade 0: Only mature tissue present, no immature

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<tr>
<th>GLU</th>
<th>3.39 (3.33-5.55) mmol/L</th>
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<tr>
<td>UREA</td>
<td>2.5 (2.5-6.4) mmol/L</td>
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<tr>
<td>Na</td>
<td>131 (135-145) mmol/L</td>
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<tr>
<td>K</td>
<td>7.1 (3.5-5.1) mmol/L</td>
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<td>CHORIDE</td>
<td>96 (98-107) mmol/L</td>
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<td>OSMOLARITY</td>
<td>249 (280-300) mosm/L</td>
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element seen, grade I: Mainly mature tissue present, immature element seen only in 1 LPF/slide, grade II: When immature tissue is seen in <4 LPF/slide, grade III: When immature tissue is present in >4 LPF/slide.(12) Those found in older infants incline to have a higher malignant potential. Those presenting in utero have a poor prognosis due to complications. Malignant change can be popular amongst males. A vascular steal syndrome can take place when the vascular supply to an SCT arises from the middle sacral artery. This can enlarge to the size of the common iliac artery. These large vascular tumors can lead to high-output cardiac failure as a consequence of arteriovenous shunting through the tumor. This can result in placentomegaly, hydrops and fetal demise. (13) Treatment is with surgical excision inclusive of coccycectomy with additional chemotherapy for malignant tumours. (14) Differential diagnoses are anterior meningeocele, rectal duplication cysts or anal gland cysts.(15)

IV. CONCLUSION

A one month Saudi male who had a huge mass in the sacral area. Sacrococcygeal teratomas is a rare type of tumors with unknown causes and less potential for malignancy. It can be diagnosed by prenatal ultrasound. Managed by surgical excision of the mass.

REFERENCES


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