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Sacrococcygeal Teratoma: A Case of Precious Pregnancy

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Abstract: ***Sacrococcygeal teratoma is a germ cell tumour frequently observed in neonates, with a birth prevalence of approximately 1 in 28, 000. This case report details a 28 - year - old Gravida 5 Para 4 woman at 37 weeks of gestation, presenting with gestational hypertension and a fetus diagnosed with SCT. After admission to Rajarajeshwari Medical College, an elective caesarean section was performed, resulting in the birth of a male infant with a noticeable sacrococcygeal mass. The infant underwent successful surgical resection of the tumour and both mother and child were discharged in stable condition. SCT management and prognosis are discussed, emphasizing the importance of early detection and surgical intervention to mitigate risks of malignancy and improve outcomes.***

Keywords: Sacrococcygeal teratoma, neonates, germ cell tumour, caesarean section, surgical resection

1. Introduction

Sacrococcygeal teratoma, a Germ cell tumour is one of the most common tumours in neonates, with a birth prevalence of approximately 1 in 28, 000. It is thought to arise from the totipotent cells along Hensen node, anterior to the coccyx. The perinatal mortality rate for cases of Sacrococcygeal teratoma diagnosed prenatally approximates 40 percent.1

2. Case Report

A 28 - year - old patient, Gravida 5 Para 4 Living 1 with 37 weeks period of gestation with cephalic presentation with previous 1 LSCS with Gestational Hypertension with Sacrococcygeal teratoma in foetus came to Rajarajeshwari medical college and hospital on 2/11/2022 with complaints of pain abdomen. Patient was admitted for further evaluation and management. As patient was not in labour, she was posted for Elective LSCS the next day

Obstetric History
Patient had 11 years of married life, non - consanguineous marriage. Patient had history of previous three term intrauterine foetal demises 10, 8 and 7 years back, cause for which was unknown. All delivered vaginally at home. Patient had one female child, 5 years of age, delivered via LSCS in view of precious pregnancy

History of Presenting Illness - Present pregnancy was a booked case, spontaneous conception with regular Antenatal checkups. All scans were done. A defect likely a Sacrococcygeal teratoma was detected on Anomaly scan and patient and attenders were counselled regarding the condition and prognosis. Hypertension was detected at 7 months period of gestation and started on oral antihypertensive medication. Blood pressure was controlled on treatment. Rest of the Antenatal period was uneventful.

Outcome - Patient was taken for Elective LSCS on 3/11/2022. A single, live, Male baby of birth weight 2.62 kgs was extracted at 12: 06 pm. Baby cried immediately after birth. Soft cystic mass measuring 15x8 centimetres with circumference of 30 centimetres was noted over Sacrococcygeal region. Baby was shifted to NICU for further monitoring and management. Patient withstood procedure well. Rest of the postnatal period was uneventful for the patient.

Baby's Course in the Hospital - Baby was shifted to NICU after birth and started on IV fluids. Palladai feeds started on day 2 and full feeds reached on day 5. All relevant investigations were sent and MRI was done which showed Type 1 Sacrococcygeal teratoma. Type 1 resection was done for baby on day 13. Secondary resuturing of wound was done on day 29 after birth. Baby withstood procedure well. Mother and baby were discharged on postnatal day 32.

3. Discussion

Sacrococcygeal teratoma a Germ cell tumour is one of the most common tumours in neonates with a birth prevalence of approximately 1 in 28, 000. It is thought to arise from the totipotent cells along Hensen node, anterior to the coccyx.1

Sonographically SCT appears as a solid and/or cystic mass that arises from the anterior sacrum and usually extends inferiorly and externally as it grows. Solid components often have varying echogenicity, appear disorganized, and may enlarge rapidly with advancing gestation[2]

Complications[1 - 2]
1) Polyhydramnios
2) Hydrops
3) High output cardiac failure in foetus
4) Preterm labour
5) Placentomegaly
6) Mirror syndrome
7) Dystocia leading to tumour rupture and haemorrhage
8) Need for Caesarean section
9) Stillbirth

Histological Classification
Sacrococcygeal teratoma is divided into Mature, Immature and Malignant types based on histopathological findings.2

Risk of Malignancy

Risk of malignancy is less than 10 percent at birth and increases to more than 75 percent after 1 year of age. Hence, Complete excision is planned as soon as neonate is stable to undergo procedure [2]

Management

Caesarean section is indicated if tumour size is more than 5cms or larger than the foetal Biparietal Diameter. Intrauterine endoscopic laser ablation to reduce high vascular flow has been attempted successfully in a few cases. Open foetal surgical excision for type 1 tumour has also been tried successfully[2]

Prognosis

Poor prognostic indicators include component comprising more than 50 percent of the tumour mass, Tumour volume to foetal weight ratio (tumour volume divided by estimated foetal weight) exceeding 12 percent prior to 24 weeks gestation and presence of hydrops or placentomegaly. The perinatal mortality rate for cases of SCT diagnosed prenatally approximates 40 percent.3

References

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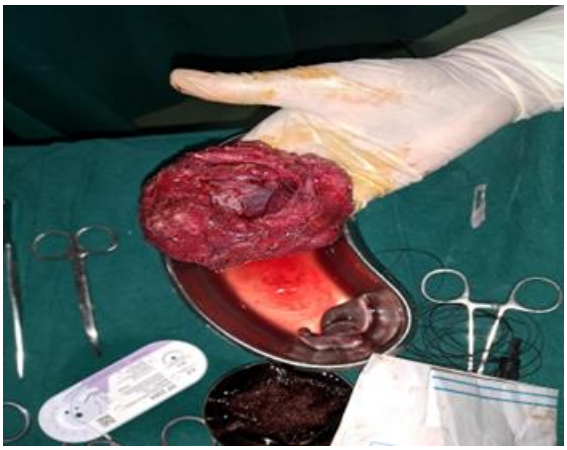
Baby at Birth

Baby on OT Table before Excision

Baby on OT Table after Excision



Sacrococcygeal Teratoma after Excision

Post Secondary Resuturing