ORIGINAL RESEARCH PAPER
Volume - 10 | Issue - 05 | May - 2021 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

SACROCOCCYGEAL TERATOMA : A RARE ENTITY

Surgery

Dr Manisha Albal Professor, Department Of Paediatric Surgery, NKPSIMS, Nagpur.

Dr Shriniket Sawarkar* Senior resident, Department of General Surgery, NKPSIMS, Nagpur. *Corresponding Author

ABSTRACT

Teratomas are composed of tissues derived from ectoderm, mesoderm, and endoderm. Sacrococcygeal teratomas are developed from the totipotential cells of primitive knot which is a remnant of the primitive streak in the coccygeal region. With the incidence of 1/35000–1/40000 live birth, sacrococcygeal teratoma is considered as the most common germ cell tumor in the neonatal period and infancy. Sacrococcygeal teratoma shows female preponderance with male to female ratio 1:4 .

AIMS AND OBJECTIVES: To study clinical presentation and management of sacrocoocygeal teratoma in paediatric age group.

CASE REPORT: A seven year old child presented to our tertiary care hospital with a swelling of size 20 x 10 cm in sacrococcygeal region Which was initially smaller in size about 6 X 3cm and have gradually progressed to the present size swelling was soft to firm in consistency, patient was subject to MRI pelvis which was suggestive of solid cystic swelling in sacrococcygeal region of size 20 X 15 cm with maintained fat planes with rectum and adjacent organs. Patients was subjected to surgery in which the teratoma was removed of size 20 x 15 cm along with coccygectomy was done intraoperatively there was no involvement of rectum or other organs or pelvic walls. Child recovered well post operatively and the histopathological report confirmed the diagnosis of sacrococcygeal teratomawith solid cytic compoments.

KEYWORDS

Sacrococcygeal, Teratoma, Histopathology, Benign, Malignant.

INTRODUCTION

Sacrococcygeal teratoma (SCT), though the most common germ cell tumor in children, is a rare entity occurring in 1 in every 35000 to 40000 births.(2) With the incidence of 1/35000–1/40000 live birth, sacrococcygeal teratoma is considered as the most common germ cell tumor in the neonatal period and infancy.[2] Sacrococcygeal teratoma shows female preponderance with male to female ratio 1:4.(3) Sacrococcygeal teratomas are classified according to the American Academy of Pediatrics Surgical Section: Type I – the tumor is predominantly external with a very minimal internal component. Type I is rarely associated with malignancy. Type II – the tumor is predominantly external but has some internal extension into the presacral space. Type III – the tumor is visible externally, but is predominantly located in the pelvic area with some extension into the abdomen. Type IV – the tumor is not visible externally and is located in the presacral space.

Type IV has the highest rate of malignancy(4). Sacrococcygeal teratoma may be diagnosed antenatally or later as a neonate, during infancy or early childhood. It could be benign or malignant. While benign lesions may be managed with simple excision of the mass with coccygectomy, the malignant ones need multimodality approach including surgery and cisplatin-based chemotherapy. Beyond tumor management and survival, these patients are vulnerable to unsightly scars, bladder-bowel dysfunction, and psychological implications in the long term.

CASE REPORT:

A seven year old child present to our tertiary care hospital with a swelling of size 20 x 10 cm in sacrococcygeal region which initially smaller in size about 6 X 3cm and have gradually progressed to the present size swelling was soft to firm in consistency, Non tender, non mobile in nature.

The swelling was not fixed to skin but was fixed to the underlying structures. After undergoing the entire routine blood investigations patient was subject to MRI pelvis which was suggestive of solid cystic swelling in sacrococcygeal region of size 20 X 15 cm with maintained fat planes with rectum and adjacent organs. Patient had no history of difficulty in defecation or urination, also had no history any restriction in locomotion.

Patients was subjected to surgery in which the teratoma was removed of size 20 x 15 cm along with coccygectomy was done intraoperatively there was no involvement of rectum or other organs or pelvic walls. Child recovered well post operatively and the histopathological report confirmed the diagnosis of sacrococcygeal teratoma with solid cytic compoments.

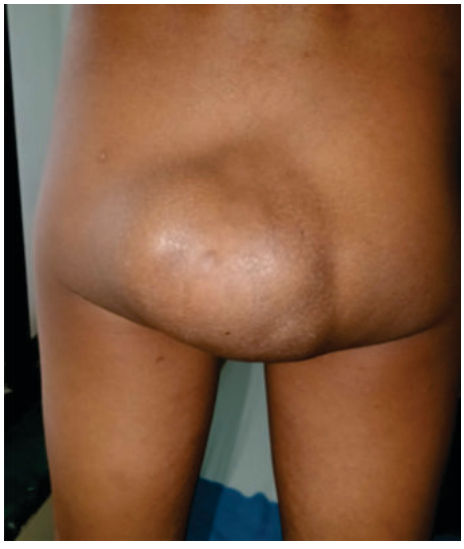

Figure :1- Showing Posterior View

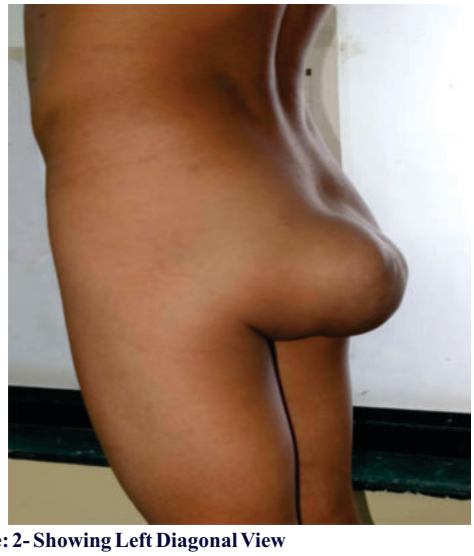

Figure: 2- Showing Left Diagonal View

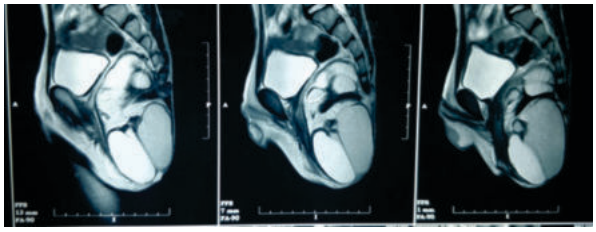

Figure 3 – Showing Magntic Resonace Of Sacrococcygeal Teratoma

DISCUSSION:

SCT is a common neonatal neoplasm. Awareness about this pathology among practitioners is essential, especially antenatal diagnosis is important (5). Early diagnosis and complete excision with removal of the coccyx is associated with good prognosis. In present case report the patient had a benign sacrococcygeal teratoma which was removed surgically, postoperatively patient recovered well was able control his bowel and bladder normally. Recurrence is related to tumor spillage in malingnant sacrococcygeal teratoma during excision and incomplete resection, while leaving the coccyx behind.(5) In the majority of cases, the teratoma is benign (non-cancerous) so no further treatment will be required. If any evidence of malignancy found, oncology team will be required in further management and follow up. In most cases, sacrococcygeal teratomas are diagnosed at birth. Many sacrococcygeal teratomas are found incidentally on routine prenatal ultrasounds. Magnetic resonance imaging is an excellent modality for precise anatomical diagnosis and surgical planning in SCTs.(2) But Surgery remains the mainstay treatment of all the sacrococcygeal teratomas in pediatric age group.

REFERENCES

1. Bedabrata M, Chhanda D, Moumita S, Kumar S, Madhumita M, Biswanath M. An epidemiological review of sacrococcygeal teratoma over five years in a tertiary care hospital. Indian J Med Paediatr Oncol. 2018;39(1):4–7.
2. Eftekharzadeh S, Keihani S, Fareghi M, Alamsahebpour A, Kajbafzadeh A-M. Type IV Sacrococcygeal Teratoma Displacing the Urinary Bladder: Unique Magnetic Resonance Imaging. Case Rep Urol. 2016;2016(Figure 1):1–3.
3. Rescorla FJ, Sawin RS, Coran AG, Dillon PW AR. Long-term outcome for infants and children with sacrococcygeal teratoma: A report from the childrens cancer group. J Pediatr Surg 1998;33171-6. 1998;33.:171-6.
4. (NORD NO for RD. Sacrococcygeal teratoma [Internet]. National Organization for Rare Disorders (NORD. 2007. Available from: https://rarediseases.org/rare-diseases/sacrococcygeal-teratoma/
5. Hassan HS, Elbatarny AM. Sacrococcygeal teratoma: Management and outcomes. Ann Pediatr Surg. 2014;10(3):72–7.