MALIGNANT SACROCOCCYGEAL TERATOMA IN AN INFANT-RARE CASE REPORT
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Abstract
Sacroccygceal teratoma (SCT) is a tumour located at the base of coccyx (tail bone) and thought to be derived from embryonic germ cell layers. The tumors present mostly in infancy. Modern imaging techniques may be helpful to detect the extent of mass. Here we report a case of 1 year old female baby who presented to the emergency department of MKCG with complains of anuria and constipation for last 4 days. The abdomen was distended. USG abdomen and pelvis and CECT abdomen showed mass in the sacro coccygeal area. FNAC confirmed the diagnosis as MALIGNANT GERM CELL SACROCOCCYGEAL TERATOMA. Most sacrococcygeal teratomas are not likely to be malignant and prognosis tends to be good after resection. But in our case the SCT was found to be malignant with poor prognosis.

Introduction
Sacroccygceal teratoma (SCT) is rare and happens in 1:35,000 to 40,000 live births[1]. It is more common in girls than boys. Girls to boys ratio of 3:1 to 4:1 have been reported[2]. Most SCT are found in neonates, infants and children below 4 yrs but have been reported in adult also. The tumor usually has both solid and cystic (fluid filled) parts. Fetal and neonatal teratomas mostly develop at sacroccygceal level. They are formed of various types of tissue derived from at least two, or the three embryonic layers [3]. These tumors may get enormous dimensions and contain large blood vessels that provoke blood depriving to the developing fetus. SCT may present in three categories—fetal, neonatal and children. Prenatal ultrasound can detect fetal tumors with or without maternal symptoms. Those presenting at birth are usually mature or immature teratomas. Large sacral mass that has been increasing progressively is the commonest type of presentation in children. Those presenting late have a poorer outcome than the early detected ones [4,5].

Case Report
A 1 year old female baby admitted to the emergency paediatric department of MKCG with complains of anuria and constipation since last 4 days. The abdomen was distended and tense. The baby was apparently alright 4 days back and there was no associated fever, burning micturition and the weight gain was adequate. She had attained all her developmental milestones as per age and had never been admitted in hospital previously. On physical examination a large (2cm) hard lymph node was palpable at the right inguinal region. After catheterization, there was 500ml urination, following which the abdomen distention subsided and a mass was felt just below the umbilicus which was firm 4 *4 cm well defined and had smooth surface and margins (Fig 1). The B/L kidneys were not ballotable. The USG showed a pre sacral mass causing bladder neck obstruction with distended urinary bladder and B/L hydrouretero nephrosis. Lower para aortic and iliac lymphadenopathy and CECT abdomen was done which showed well defined solid cystic lesion in the pre sacral region with solid areas showing herogeneous enhancement which is suggestive of SCT (Fig 2). FNAC of the mass confirmed the diagnosis as a MALIGNANT GERM CELL TERATOMA (Fig 3).

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The parents were counselled about the prognosis and were referred to a higher center for surgical intervention.

Discussion
SCT has a malignant potential which is parallel to the age of the patient at presentation. Complete resection of the tumor soon after birth provides an excellent prognosis. The incidence of malignancy at the neonatal period is approximately 10% against almost 100% at the age of 3 years. About 67% of SCT are diagnosed by the age of 1 year. Females are 4 times more likely to be affected than male. In childhood they normally occur as extragonadal mass, located along the midline. About 40-50% occurs in the sacrococcygeal region. Early detection and management are important. These tumors may be present with varying symptoms like bowel and bladder incontinence, backache, weakness of limb or fistula of the urogenital or gastrointestinal tract. Other congenital anomalies like defect in the cloacal and hind gut are associated in 10-24% of cases. 50% SCT exhibit calcification and ossification which is seen in CT scan, so CT scan is more sensitive modality of investigation. Magnetic resonance imaging is superior for evaluating the anatomical relationship to adjacent organs. Biochemical markers including alpha-feto-protein, carcinoembryonic antigen and HCG are helpful in malignant SCT while not in benign. Also be used to detect recurrence after surgery. Surgical excision is the treatment of choice. Mostly excised by posterior para sacrococcygeal approach and which extends in the pelvic cavity are by the combined

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abdominoperineal approach. For mature and immature teratoma the prognosis is good after surgical excision alone but malignant teratoma have a tendency to recur and metastasis so teratoma should be removed meticulously then regular follow-up required detecting early recurrence. Recurrence after resection varies from 2% to 35%. The recurrence is high in the first 3 years after surgery and therefore needs regular follow-up. Those tumors with malignant changes need further chemotherapy. Usually platinum based chemotherapy used as neoadjuvant or adjuvant.

Conclusion
Regarding neonatal SCT, a prenatal diagnosis is essential to avoid early mortality. Early diagnosis, early complete enblock resection of the tumor along with the coccyx and the avoidance of intraoperative spillage of the tumor are prognostic factor. Delayed presentation and the presence of malignant changes continued to be poor prognostic factors. Close follow-up of these patients is necessary to deal with the postoperative sequelae of surgery.

Contributors
Dr Nasreen Ali-conception and design.
Dr. Sunil Kumar Agarwalla-drafting and revising it critically for important intellectual content.

Conflict Of Interest
There was no conflict of interest and no funds received.

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References