# Rare Case of Sacro Coccygeal Teratomatous Cyst in Adult with Infertility

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#### Abstract

Pseudo aneurysms of visceral arteries which occur due to blunt abdominal trauma are rare. There are different modalities of blunt abdominal trauma which are seen in seat belt injuries secondary to motor vehicle accidents. We present the case of a 39 year old woman with history of abdominal pain and vomiting following a parachute jump. She was diagnosed with a pseudo aneurysm of superior mesenteric artery. She underwent open exploration and a vein interposition graft was used for the repair of the pseudo aneurysm. The pseudo aneurysm of superior mesenteric artery after a parachute jump has never been reported earlier. This case report highlights the possibility of pseudo aneurysm of superior mesenteric artery even in car seat belt injuries as the mechanism of injury is comparable in both

Key words: aneurysm.

## Introduction

Sacrococcygeal tumors are common in children than in adults. Here we present a case of sacrococcygeal tumor (Teratoma) in an adult female who was incidentally discovered to have that on work up for infertility.

### **Case Presentation**

24 year old female presented with history of inability to conceive pregnancy since 4 years after marriage. She has been evaluated elsewhere and all the other investigations are normal . MRI abdomen and pelvis report suggested pre sacral epidermoid cysts of 4\*3 cms. uterus, fallopian tubes

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are normal. She had no complaints of micturition, defecation, menstruation abnormalities .she was asymptomatic. Elective laprotomy is done by infra umbilical abdominal incision and pelvic cavity accessed through it, rectum and bladder displaced laterally to one side and packed .broad ligament is palpated, ureter course is identified and the cyst is approached through the broad ligament incision. Cyst identified and its margins made out and dissection continued surrounding the wall of the cyst and during dissection cyst wall ruptured and cyst wall and its contents are removed in piece meal. Abdomen closed in layers. Post operatively patient recovered well and was discharged on day.<sup>8</sup>

Histopathological report: Sections showed cyst wall lined by squamous epithelium and focally by ciliated columnar epithelium. cyst cavity containing glandular structures, adipose tissue, foamy macrophages with neutrophils, lymphocytes, cholesterol clefts and calcification, suggestive of benign teratoma.



Fig. 1: CT Shows pre-sacral mass.

Follow up: Follow up of 2 years did not reveal any complaints. She has conceived with 2 months gravida. The mass effect caused by teratoma might have prevented conception. Usually presence of pelvic mass is known to cause repeated abortions and rarely infertility.



Fig. 2: Teratoma operative pic.

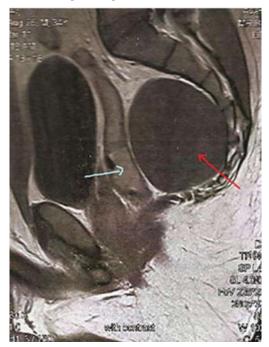


Fig. 3: MRI Imaging sacral mass.

## Discussion

Sacrococcygeal tumors present most frequently in infancy and childhood. Incidence in the newborn is 1 in 40000 with a female to male ratio of 10:1¹. It is rare in adults. Less than a hundred cases of teratoma in adults have been documented in literature.² Most of the sacrococcygeal tumors are cystic and benign and only 1–2% are malignant.

Serum markers such as alpha- fetoproteins and

human chorionic gonadotropins are not helpful in the diagnosis of Sacro coccygeal Teratoma.<sup>8,9</sup> The current standard includes computerized tomogram (CT) and Magnetic resonance imaging (MRI). The CT defines the mixed cystic-solid nature of the mass however MRI gives better tomographic evaluation and cyst evaluation which enables better preoperation staging and planning.<sup>10</sup>

Differential diagnoses are anterior meningocele, rectal duplication cysts or anal gland cysts. Complete surgical excision is the treatment of choice. Excision of the coccyx may be necessary because the bone may contain a nidus of pluripotent cells with a risk of recurrence. Access to the tumour could be by transabdominal approach or the transperineal route using the jack-knife position or a combined approach. If excision of the coccyx is considered the trans-sacral or the perineal route is more appropriate.

Pre-operative angiography may be utilized for embolisation to reduce intra-operative haemorrhage especially in large tumours. Complete excision has extremely good prognosis. Ovarian teratomas are well known to present with infertility in reproductive age group.

Most of the sacro coccygeal teratomas are benign .They present with urinary symptoms, constipation pelvis mass, deep seated pelvic pain.

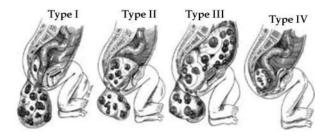
Complete surgical excision is needed to prevent recurrence.

Through histopathological examination is needed to look for any location of atypia.

The most common site of extra gonadal location is Coccyx.

 $\begin{tabular}{ll} \textbf{Table 1:} Altman classified Sacrococygeal teratoma in to 4 types. \\ Most common being III \& IV. \\ \end{tabular}$ 

Altman Type	Location	Incidence (%)	Malignant (%)
I	Entirely outside pelvis	46.5	8
II	Mostly outside pelvis	34.5	21
III	Mostly inside pelvis	8.75	34
IV	Entirely inside pelvis	12.75	38



## Conclusion

Sacro coccygeal teratoma are rare in adults and very uncommon to present with infertility . Complete excision results in good results .

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