CASE REPORT

WANDERING DERMOID CYST OF OVARY CAUSING OBSTRUCTED LABOUR - A CASE REPORT
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ABSTRACT: INTRODUCTION: Dermoid cyst are one of the most frequently occurring ovarian cysts but wandering dermoid cysts are extremely rare. The proposed etiologies of wandering dermoid, the most likely etiology is the torsion of the pre-existing dermoid leading to auto-amputation and subsequent re-implantation. CASE PRESENTATION: We report a rare case of wandering dermoid cyst in a 40 year old woman that was incidentally found attached to the urinary bladder, who was undergoing Cesarean Section for obstructed labor. To the best of our knowledge, no case of wandering dermoid of the ovary attached to the urinary bladder presenting as obstructed labor have been reported before this. CONCLUSION: The possibility of a dermoid cyst should always be considered as a differential diagnosis in a woman presenting with obstructed labor and a mass felt on per vaginal examination. When such a patient is undergoing Caesarean Section, the dermoid should be removed in the same sitting.

KEY WORDS: Dermoid Cyst, Wandering, Obstructed Labor, Urinary Bladder.

INTRODUCTION: Dermoid cyst is one of the most frequently occurring ovarian cysts but wandering dermoid cysts are extremely rare. Dermoid cysts constitutes 10-15% of the ovarian tumors. Wandering dermoid cysts are extremely rare; their incidence reported being 0.4% of all ovarian teratomas. The most common site of these wandering dermoid cysts is the omentum1. We report a rare case of wandering dermoid cyst that was incidentally found attached to the urinary bladder in a 40 year old woman, who was undergoing Lower Segment Cesarean Section for obstructed labor.

CASE PRESENTATION: A 40 year old woman, Gravida-4, Parity-3, Abortion-0 and Live issue-3, presented to the emergency with amenorrhea for nine months, pain in abdomen for four hours, loss of fetal movements since two hours. Patient was severely anemic and afebrile. Pulse rate was 104 per minute, Blood pressure was 150/90 mm of Hg and urine albumin was nil. On examination, abdomen was tense, uterine contour and position of the baby could not be made out and fetal heart sound was not localized. On per vaginal examination, cervical os was fully dilated and fully effaced, cervix was pulled up, presenting part was buttocks at ‘-2’ station, membrane was absent; a mass of approximately 6 x 6 cm was felt in the anterior fornix.

A provisional diagnosis of Full term pregnancy with suspected rupture uterus with severe anemia with intrauterine fetal death with breech presentation was made and patient was taken to operation theatre with consent of Obstetric hysterectomy/ Lower Segment Caesarean Section with Tubectomy. On opening the abdomen Couvalaire uterus was present, uterus was intact, right sided tubes and ovaries and left sided tubes were normal but left sided ovary was absent (Fig.1). A stillborn female of 2.5kg was delivered by Lower Segment Caesarean Section (Fig.2). A mass of 6 x 6cm was seen attached to the serosa of the urinary bladder (Fig.3) being the cause of the obstructed labor in
our patient. The mass was dissected out and removed intact carefully. Two units of blood were transfused postoperatively. Patient’s recovery was uneventful and was discharged from the Hospital on eighth post-operative day.

Cut section of the mass showed presence of matted hair, cartilage and cheesy material suggestive of dermoid cyst (Fig.4). Histopathology confirmed benign mature dermoid cyst.

**DISCUSSION:** Dermoid cyst is the most common germ-cell neoplasm of the ovary. It constitutes 10-15% of the ovarian tumors and tend to occur in young women in reproductive age-group, although presentations have been reported in pre-pubertal and elderly patients. They are usually unilateral, unilocular, smooth-surfaced lesions filled with fatty material, containing tissues from all three embryonic layers - endoderm, mesoderm and ectoderm.

They are slow growing tumours. Most of the dermoid cysts are asymptomatic and detected incidentally. Some patients may present with discomfort, non-specific pelvic pain, abdominal mass, abnormal uterine bleeding or pressure symptoms. Torsion is the most common complication occurring in approximately 3.5% of cases. Rupture with possible chemical peritonitis occurs in 2% of cases. A dermoid cyst may rupture into the bladder, presenting as recurrent urinary tract infections or as pilimiction. Rupture into the bowel with passage of dermoid structures per rectum has also been reported. Less than 1% dermoids are malignant.

Wandering dermoid cysts are extremely rare; their incidence reported being 0.4% of all ovarian teratomas. Most common site for this is omentum of which 27 cases have been reported, 4 cases of wandering dermoid of the pouch of Douglas have been reported as yet. Several theories exist to explain their occurrence. The first theory proposes dermoids developing in a supernumerary
ovary, the second theory proposes primary dermoids originating from displaced germ cells and the third theory as proposed by J.K. Thornton is autoamputation and re-implantation of an ovarian dermoid cyst as a result of torsion\textsuperscript{1-4}. If torsion of the tumor is subacute, an inflammatory response may occur which causes the tumor to become adherent to the surrounding structures with new collateral circulation. The tumor may then become completely detached from its original blood supply, thus resulting in a wandering dermoid cyst.

The left ovary of our patient was absent, therefore making it very likely that this might have been the origin of the dermoid cyst with autoamputation and re-implantation being the mechanism for its attachment to the urinary bladder and deriving its blood supply from it. It was not communicating with the bladder as there was no pilimiction. This dermoid prevented the descent of the baby resulting in obstructed labor in our patient. This woman had no symptoms of an ovarian cyst prior to her presentation with obstruction during labor. To the best of our knowledge, no case of wandering dermoid of the ovary attached to the urinary bladder presenting as obstructed labor have been reported before this.

**CONCLUSION:** The possibility of a dermoid cyst should always be kept as a differential diagnosis in a woman presenting with obstructed labor and a mass felt on per vaginal examination. When such a patient is undergoing Lower Segment Caesarean Section, the dermoid should be removed in the same sitting and it should be removed with caution to avoid spillage of sebaceous material to prevent subsequent chemical peritonitis.

**REFERENCES:**


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