

# Sinus tract formation in a post LSCS patient

Dr Janvi Josan, Dr Padmaja Samant

Third year resident, department of obstetrics and gynaecology, Seth G S medical college and KEM hospital Professor, department of obstetrics and gynaecology, Seth G S medical college and KEM hospital

Date of Submission: 15-04-2023

Date of Acceptance: 25-04-2023

**ABSTRACT:** With increase in Incidence of caesarean section is on rise along with incidence of its long term and rare complications. Sinus tract formation is one such complication. An excision of sinus tract in a post lower segment caesarean section patient has been reported here.

## I. INTRODUCTION:

Sinus tract is a blind tract leading from the surface down to the tissues, lined by granulation tissue which may be epithelialized <sup>(2)</sup>. Causative factors for sinus tract formation include presence of foreign body or necrotic tissue including suture material, absence of rest, non dependent drainage or inadequate drainage of abscess. Braided suture materials have a higher chance for wound infection <sup>(3)</sup>. Anaemia, inappropriate surgical antibiotic prophylaxis, intra operative blood transfusion, previous caesarean section and comorbid illness like heart disease , hypothyroidism, chronic liver and kidney disease increase risk of sinus tract formation <sup>(1)</sup>.

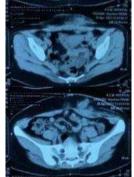
Case Report: A 27 year old, p2L2 with previous 2 lower segment caesarean section with tubal ligation done presented with complaints of purulent discharge from a point above the suture line for 17 days. The last lower segment caesarean section (LSCS) with bilateral tubal ligation was done 4 months back at another hospital ivo not willing for vaginal trial through a pfannenstiel incision. No history of past medical Chronic illness. She was discharged on day 5 postpartum. On day 15 of LSCS patient followed up at the hospital with a complaint of sokage of dressing, suture removal was done, full length wound gape till subcutaneous tissue was noted, rectus sheath intact. Alternative day dressing was done. Resuturing done after a month of dressing, suture removal done on 14 th day, suture line healthy noted.

4 months later, patient came to our hospital with a complaint of purulent discharge from a point above suture line. On examination a pus point was seen 3 cm medical to the right end of the suture line just above the LSCS scar, scar was healthy. The

discharge was intermittent and non foul smelling. A provisional diagnosis of sinus tract was made.

**Investigations:** A wound swab was sent which showed no growth, routine investigations were sent which were within normal limits.

An ultrasonography showed multiple pockets of heterogeneous hypoechoic collection in the pelvic region in subcutaneous plane predominantly, with few extending into the intramuscular pane, all the collections were intercommunicating. The largest pocket measured 20-25cc. No obvious intra abdominal collection seen. A computed tomography (CT) scan was done, suggestive of multiple small collections in anterior myometrium, anterior to left rectus abdominis muscle measuring 4.7\*2.4 cm (20cc), overlying subcutaneous plane and LSCS skin incision site. Usg guided aspiration was attempted but failed. A sinus tract excision was planned.



**Intra operative finding**: Vertical midline incision was taken. Anterior wall of the uterus was found to be adherent to the posterior wall of the bladder. Thick walled sinus tract found to be extending from abdominal cavity to anterior wall of abdomen through rectus sheath, rectus muscle up to the skin. Skeletonization of sinus tract done, clamp applied, tract removed and sent for histopath. Oval incision given around external opening of sinus tract, tract excised, sent for histopath. Post operative higher antibiotics were started. Post operative, the patient was discharged on day 5. On day 14 suture removal was done, the suture line was healthy. Histopath report showed tract line by granulation tissue.



### II. DISCUSSION:

Incidence of caesarean section has increased over the last few decades . Though antibiotic prophylaxis is recommended with every caesarean section there is risk of surgical site infection. This can be attributed to wound care, hygiene, nutrition, local factors of wound such as type of sutures used, sterility of the procedure, dead space with accumulation of secretions and lastly increased resistance of organisms. Sinus tract is one such surgical site infection that presents days to months after the surgery with features of fever, pain and discharge from sinus and vaginal discharge. Treatment of sinus tract is always surgical. Preoperative ultrasonography can be used to confirm the diagnosis. CT sinogram can be used to define the anatomical relationship of the sinus tract<sup>(1)</sup>. To reduce the recurrence, removal of causative factors and appropriate antibiotics (as per wound swab culture and sensitivity report) is of utmost importance.

#### **III.** CONCLUSION:

Sinus tract can recur if the causative factor is not treated. Therefore understanding the aetiology, proper evaluation and surgical removal of the tract is important.

#### **REFERENCES:**

- Gupta S, Manchanda V, Sachdev P, Saini R, Joy M. Study of incidence and risk factors of surgical site infections in lower segment Caesarean section cases of a tertiary care hospital of north India.
- [2]. Das S. Examination of a sinus or a fistula. A manual of clinical surgery. 10 th ed. 2013: 76-79.
- [3]. Fajobi OA, Bari N, Mekwan J, Harrison C, Myint F. Chronic abdominal wall sinus and recurrent abscesses caused by a foreign body after laparotomy. J Wound Care 2005;14(9):427–8.