# A Case Study of Umbilical Pilonidal Sinus - Conservative Vs Surgical Approach

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# I. Introduction

- A Pilonidal Sinus is a blind end tract lined with granulation tissue which leads to a cystic cavity lined with epithelial tissue .
- Pilus = Hair & Nidus = Nest
- It is basically a hair containing cavity presenting either as non healing and discharging sinus or recurrent abscess formation.
- Commonest site sacrococcygeal area.
- Unusual sites umbilicus ,interdigital clefts in barbers , axilla , pre sternal area , clitoris and mons pubis , shaft of penis ,nipple , ear lobe.
- It is an acquired disease caused by hair penetrating the skin resulting in a foreign body reaction, forming small cavities or pits, which go on to become sinuses lined with granulation tissue.
- Bacteria and debris enter this sterile area, producing local inflammation and formation of pus filled abscess.
- In chronic conditions, the sinus become an open cavity, constantly draining small amounts of fluid.

# II. Aim of the Study

• To study the efficacy of surgery over conservative approach in umbilical pilonidal sinus and to describe a simple surgical technique for treatment and prevention of recurrent disease.

## III. Patients & Methods

5 cases of umbilical pilonidal sinus were treated at our hospital during 2 year period of June 2017 to June 2019. Patients comprised of both sexes with age ranging from 20 - 50 years. All patients were symptomatic & duration of symptoms ranges from several days to years. Patients were initially treated conservatively with antibiotics & local hygienic measures ; patients were operated only after failure of conservative treatment .

#### **Surgical Technique**

- Transverse incision 2 cm below the umbilicus through subcutaneous fat towards the anterior sheath of rectus abdominis is given.
- Dissection of subcutaneous tissue around the umbilicus and its deep connection to pre-peritoneal fat through the lineaalba.
- Excision of umbilical complex involving sinus tract is done. Closure of umbilicus with subdermal interrupted absorbable sutures.
- Wound is closed in layers. The specimen including umbilical complex (skin and subcutaneous tissue) is sent for HPE.

AGE	GENDER	PAIN	DISCHARGE	BLEEDING	DURATION	ABSCESS	TREATMENT
27	F	Р	Р	А	1 Y	А	Excision
50	F	Р	Р	Р	9 Y	Recurrent	Excision
20	Μ	А	Р	А	2 M	А	Conservative
23	М	Р	Р	А	6 M	А	Excision
28	М	Р	А	А	6 M	А	Hair Extraction

# **IV. Results**

- Minor complications were encountered like mild peri incisional hyperemia of skin, seroma and serosanguinous discharge from surgical site which were treated conservatively at our OPD.
- Recurrence was not noted after surgical management.
- All patients were satisfied with the cosmetic results of the procedure.

## V. Discussion

- Umbilical pilonidal sinus is a rare disease compared to sacro-coccygeal pilonidal sinus. Incidence is 0.6%, as reported by Goodall et al.
- Contributory factors: Obesity, Male Gender, tight clothing, poor personal hygiene.
- Various methods of treatment: Simple hygienic measures along with antibiotics, hair removal and keeping umbilicus dry, Radical excision of Umbilicus and wound closure by secondary intention.
- D/D: Urachal Cyst can mimic umbilical pilonidal sinus as documented by Abdul Wahad et al.
- Umbilical pilonidal sinus is an acquired disease caused by hair penetrating skin, causing a foreign body reaction and development of a sinus lined by granulation tissue.
- Treatment is usually surgical. Sroujieh and Dawoud recommended umbilical excision and wound closure with secondary intention, the subsequent scar resembles a normal umbilicus. A hospital stay longer than 4 days may be necessary.

## **VI.** Conclusion

- The surgical technique proposed is simple, cost effective and prevents recurrence.
- Surgery is preferred over conservative approach because Umbilical pilonidal sinus usually tends to recur after conservative management.

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