



A RARE CASE OF RECURRENT PERIANAL SINUS WITH UNDERLYING DERMOID CYST

Surgery

**Dr Shiva
Baladaniya**

Assistant Professor, SMIMER, Surat.

**Dr Prashant
Nakrani**

Assistant Professor, SMIMER, Surat.

Dr Akash Kanago

Assistant Professor, SMIMER, Surat.

KEYWORDS

Perianal Dermoid, Recurrent Sinus, Anorectal Malformation, Rare Case.

INTRODUCTION

Dermoid cysts are benign tumors consisting of keratinizing squamous cells and contain adnexal structures including hair follicles, sweat glands, and sebaceous glands.¹. Perianal location is extremely rare and may present as recurrent abscesses or discharging sinuses, often misdiagnosed as fistula-in-ano or tubercular sinus. We report a rare case of a perianal dermoid cyst in a patient with prior anorectal malformation surgery.

Case Report

A 16-year-old male, with history of PSARP and anoplasty for low variety anorectal malformation on day 3 of life (2008), presented with a discharging sinus from the left gluteal region for few months. He had previously undergone incision and drainage of perianal abscess with laparotomy (16/08/2024). Intraop Findings: Left Pararectal Abscess With Ingrown Hair And Collection Identified, Wall Biopsy Taken., during which wall biopsy showed acute and chronic inflammation dermoid cyst. Patient presented to me On 23/01/2025 with H/o Discharging Sinus From Left Gluteal Region For 6 Months.

On examination, Having External Perianal Left Gluteal Sinus Opening At 5 O Clock, 7 Cm Away From Anal Verge. Scar Of Previous Surgery Present At Same Site, Seropurulent Fluid Discharge. No Surrounding Active Inflammation Or Abscess.

No Palpable Induration Or Internal Openings In Anus.

Normal Anal Tone.

PA:- Lower Midline Scar Healthy And Healed By Primary Intention.

MRI Pelvis:- Evidence Of Well Defined Irregularly Impregnated Hyperintense Tract Is Seen Extending From External Opening At Left Perianal Region. Collection (2*1.5 cm) Is Also Seen At Level Of External Opening

Tract Is Extending Superiorly In The Region Of Left Ischioanal Fossa. Tract Appears To Be Extending To Supralevator Region And Extending To Left Perirectal Region, Approximated Total Length Of Tract Is 9-10 Cm.

A Small Collection Is Seen In Left Ischioanal Fossa (1.8*2.4cm) Another Small Collection (2*2cm) Is Seen Adjacent To Wall Of Left Greater Sciatic Foramen

It Appears To Be Involving Left Levator Ani Muscle

All The Collections Are Intercommunicating post Construct Examination Reveal Heterogeneous Enhancement Of The Collection With Enhancement Of The Adjacent Inflamed Soft Tissue

Surgery (23/01/2025): There Was External Opening At 5 O'clock Region, 7 Cm Away From Anal Verge, Scar Present Around External Opening, No Palpable Induration At 6 O'clock Region, Metachrome Blue Dye Injection Done From EO, No Evidence Of Dye Coming Out Per Ano, Coring Started From EO, Sinus Tract Going Superior Deep Lateral To The Anal Sphincter And Region Upto Levator Ani Muscle, Excision Done Up To Levator Muscle Plane, there Was Small Part Around 1.5 Cm Tract Going Into Supralevator -scooping And Bipolar Cauterization Done

There Was Another Cystic Cavity Just Lateral To The Previous Sinus Tract Into Left Gluteal Muscle Area With Sebaceous Like Material

And Hair Present? Dermoid Cyst

Excision Of Cyst Done And All Cyst Content Was Removed Wound Is Kept Open For Drainage/ Wash

Tissue Send For HPE



Image 1: Pre Op Picture



Image 2: Coring of Sinus Tract



Image 3: Dermoid Cyst



Image 4: Post Op Picture

Histopathology (22/01/2025)

Cyst wall showed stratified squamous epithelium with adnexal structures, granulation tissue, and foreign body giant cells—consistent with dermoid cyst. No evidence of malignancy or teratoma.

Outcome

Postoperative recovery was uneventful. The patient underwent one

session of EUA with scooping. The wound healed completely within 4 months.

Sinuses, often misdiagnosed as fistula-in-ano or tubercular sinus. We report a rare case of a perianal dermoid cyst in a patient with prior anorectal malformation surgery.

DISCUSSION

Dermoid cysts, also known as mature cystic teratomas, are benign tumors commonly found at midline sites of embryonic fusion.²

Perianal dermoid cysts are exceptionally rare and often present as recurrent abscess or chronic sinus, leading to diagnostic delay.

An important point of clarification is the difference between epidermoid and dermoid cysts, the former being a simple dermal inclusion of stratified squamous epithelium that can often be found in the gluteal region, while the later includes adnexal structures related to embryonic remnants most often found in the midline.. MRI is essential for delineating tract anatomy. Differentials include fistula-in-ano, pilonidal sinus, and tubercular sinus. Complete excision of the cyst and associated sinus tracts is curative; recurrence is rare if excision is complete.

The aforementioned diagnoses are typically only made on pathological examination after surgical resection or biopsy, which allows for evaluation of the cyst lining, histological composition of its wall, and identification of aforementioned skin appendages.^{1,3}

Two similar cases of adults presenting with complex fistula-in-ano secondary to dermoid cysts have been reported, however these cysts were discretely located in the presacral/retrorectal space (4, 5).

CONCLUSION

This case highlights the importance of considering dermoid cyst in the differential diagnosis of recurrent perianal sinus, especially in patients with atypical presentation . Excision under anaesthesia followed by histopathological confirmation remains the gold standard treatment.

REFERENCES

1. Dahan H., Arrivé L., Wendum D., Docou le Pointe H., Djouhri H., Tubiana J.M. Retrorectal developmental cysts in adults: clinical and radiologic-histopathologic review, differential diagnosis, and treatment. *Radiographics*. 2001;21(3):575–584. doi: 10.1148/radiographics.21.3.g01ma13575. [DOI] [PubMed] [Google Scholar]
2. Chellamuthu S., Kakani N., Amarnath T., Rathinavel B. Large dermoid cyst in an adult male pelvis. *Eurorad*. 2012 <https://www.eurorad.org/case/9950> Case 9950. Accessed. [Google Scholar]
3. Woussen S., De Backer A., Banhoenacker F. Perineal dermoid cyst. *Eurorad*. 2015 <https://www.eurorad.org/case/12843> Case 12843. Accessed. [Google Scholar]
4. Karagjozov A., Milev I., Antovic S., Kadri E. Retrorectal dermoid cyst manifested as an extrasphincteric perianal fistula - case report. *Chirurgia* (2014) 109:850–4. PubMed Abstract | Google Scholar
5. Munteanu I., Badulescu A., Mastalier B., Munteanu ML., Diaconu E., Popescu C. Retrorectal dermoid cyst: a rare clinical entity. *Curr Health Sci J*. (2013) 39:179–83. PubMed Abstract | Google Scholar