Original Article ISSN (O):2395-2822; ISSN (P):2395-2814

Pilonidal Sinus, A Vexing Problem With Special Reference To Intermammary Sinus.

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Received: April 2017
Accepted: May 2017

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ABSTRACT

Background: Pilonidal sinus(PNS) is a vexing problem for an individual and it became more vexing when it is in the form of inter mammary sinus(IMS). PNS is blind ending track lined with granulation tissue leading to a cystic cavity containing bits and pieces of hair. Aim: To assess the risk factors and treatment options for pilonidal sinus at a tertiary care centre with special reference to management of inter mammary sinus. **Methods:** The patients presenting with PNS to the general surgery department at a tertiary care centre in north Malabar, Kerala from 2009 to 2016 were included in this study. All PNS without abscess formation were treated with Z plasty. Those with abscess formation, I&D were done primarily. Later after the abscess healed, wide local excision and healing with secondary intention was followed. **Results:** 49 cases of pionidal sinus (39 sacrococcygeal PNS and 10 intermammary)were included in this study. Karydakis and Bascom method methods were not used. There was single recurrence each after wide excision and Z plasty in sacrococcygeal pilonidal sinus and no recurrence in the inter mammary group. **Conclusion:** Pilonidal sinus especially intermammary sinus is a vexing problem. The changes in the hormonal balance during puberty is the triggering factor. Many treatment modalities are in the offering, suggesting that a complete cure may not be possible with any of those available. Wide local excision with primary closure or Z plasty are two viable options for this condition.

Keywords: Infection, Intermammary abscess, Inter mammary sinus, Pilonidal sinus.

INTRODUCTION

Pilonidal sinus(PNS) is a vexing problem for a individual and it became more vexing when it is in the form of inter mammary sinus(IMS). PNS is blind ending track lined with granulation tissue leading to a cystic cavity containing bits and pieces of hair.[1] They are commonly found in the sacro coccygeal area, axilla, inter digital clefts, umbilicus, penis, clitoris and in the inter mammary area.[2] These are usually seen in the age group of 15-40 years, with a male predominance.[3,4] The growth hormones after puberty, plays an important role in the development of this condition.[5] The congenital and acquired theories are in reckoning regarding the aetiology of this condition, with the later one has scientific backing. The hair follicle swells up due to keratin deposition and this leads to peri folliculitis which ruptures into the subcutaneous tissue in the midline or open up laterally leading to the formation of the PNS.[6] When the microorganisms harbour the area, abscess develop, thus making the situation more complex. The hair inside the PNS need not be from the perineal area alone, but can be broken ones from head and neck region or may be of non-human origin as in case of bird feather from feather bed. The movement of the buttocks causes a negative pressure in the internatal cleft which causes the entry of the hair or skin debris into the swollen hair follicle. The intermammary PNS is a vexing problem for a young female which presents as a recurrent discharging sinus and induration as they find it difficult to cope with it due to social stigma or ignorance.

Aim: To assess the risk factors and treatment options for pilonidal sinus at a tertiary care centre with special reference to management of intermammary sinus.

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MATERIALS & METHODS

The patients presenting with PNS to the general surgery department at a tertiary care centre in north Malabar, Kerala from 2009 2016 were included in this study. Main presenting complaint was mucopurulent discharge, swelling in the peri anal and intermammary region , with features of

inflammation and multiple openings in sacrococcygeal region. Sacrococcygeal PNS was mostly seen in males (30 males and 9 females). Those with abscess formation, incision and drainage were done. After the abscess healed, wide local excision was done under LA, and healing by secondary intention followed. All sacrococcygeal PNS without abscess formation were treated with Z plasty under local/ regional anaesthesia. All intermammary PNS was treated with wide local excision under general anaesthesia.

RESULTS

49 cases of pionidal sinus (39 sacrococcygeal PNS and 10 intermammary) were included in this study. Nineteen wide local excision and twenty Z plasty were done for the sacrococcygeal PNS. For the 10 cases of intermammary sinuses wide local excision was performed. There was only one recurrence for the Z plasty and wide excision in the sacrococcygeal group and no recurrence in the intermammary group.
Karidakis or Bascom methods were not used.

Type of PNS	Total Number	Surgery	Recurrence
Sacrococcygeal	39	Z Plasty 20	1
		Wide Excision 19	1
Inrermammary	10	Wide Excision	0

Figure 1: Sacrococcygeal pilonidal sinus with secondary abscess formation.

DISCUSSION

Intermammary PNS where seen in young females of 14-18 years, with recurrent discharging sinus. At the onset they were misdiagnosed as folliculitis and was trated with oral antibiotic . It subsided only to recur at regular intervals. Being a young females, they were finding it difficult to perform their regular activities due to inferiority complex setting in all of them, due to fear of issues like discharge, disfigurement and smell. On diagnosing the condition this was explained to the patient and relatives and wide local excision with primary closure was undertaken. After cleaning and draping the area with betadine, methylene blue was injected into the sinus track. Wide excision of the track was done after removing the subcutaneous tissue. The intermammary cleft was reconstructed and the wound was closed with 2-0 vicryl and subcuticular 3-0 prolene. A 12 F drain was kept which was removed after 1week. The wound was inspected on day 1,3,5 &7.The subcuticular sutures were removed after 14 days. The wound healed with minimal scarring. The word pilonidal was coined by Herbert Mayo.[7] Previously it was known as jeep bottom due to an increase in incidence of PNS in US army recruits at Vietnam who were using the jeep for travelling through the rough terrains.[8] The term pilonidal sinus was coined by Hodges, where pilus means hair and nidus is nest.[9] This condition is commonly seen in hirsuit males which has a blind ending track lined with granulation tissue. They contain many broken pieces of hair and may have side tracks. When abscess forms the side tacks may rupture away from the main opening on to the skin surface. In the presence of such a separate external opening, the treatment becomes complex.[10] [Figure 1] The intermammary sinus presents as a chronic discharging sinus with a linear indurated track towards the epigastric region, with local discoloration and tenderness. Wide excision and primary closure clearing al side tracks result in good healing with a better scar. Anil sunkari etal has described various options for the treatment of PNS.[11] Management of PNS is frequently unsatisfactory. Ideal treatment modality rarely exists. If early excision of the pilonidal pit at the time of treatment of pilonidal abscess is done, it reduces the risk of subsequent sinus to the tune of 40%.[12] In our series with wide local excision and primary closure the recurrence rate is only two cases in sacrococcygeal PNS and none in intermammary sinus . limberg flap is said to be a better option for sacrococcygeal PNS as per Osmanoglu G et al.[13] Yildiz MK etal shows that Karydakis flap treatment for sacrococcygeal PNS is associated with low complication rate, shorter hospital stay, faster healing, and less morbidity.[14] Fibrin glue, Bascoms technique are the other available options for the treatment of PNS.[15]

CONCLUSION

Pilonidal sinus especially intermammary sinus is a vexing problem for individuals especially young females. The changes in the hormonal balance during puberty is the triggering factor. Many treatment modalities are in the offering,

suggesting that a complete cure may not be possible with any of those available. Wide local excision with primary closure or Z plasty are two viable options for this condition.

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How to cite this article: Arun S, Sreejayan MP. Pilonidal Sinus, A Vexing Problem With Special Reference To Intermammary Sinus. Ann. Int. Med. Den. Res. 2017; 3(4): SG11-SG13.

Source of Support: Nil, **Conflict of Interest:** None declared