Pilonidal Sinuses of the Anal Canal:
Report of a Case*

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PILONIDAL SINUS of the anus and anal canal may arise in several ways. A postsacral or an anterior (perineal) pilonidal sinus may extend to the perianal tissues and, very rarely, may actually communicate with the anus. Second, following the excision of a fistula-in-ano or other anal lesion, hair may enter the subcutaneous tissues through the healing wound or through the newly formed scar and give rise to a pilonidal sinus. Hueston[7] reported such a case, but, strangely enough, these are very rare. Third, there are cases such as that described by Weston and Schlachter,[13] in which a pilonidal sinus apparently arises due to the entry of hairs into an open anal fissure. Fourth, it is to be expected that hair may penetrate the skin of an apparently normal anus or anal canal and give rise to a pilonidal sinus, as it does elsewhere. Recently, we encountered such a case, and there does not appear to be any other report of this type of lesion in the literature.

The name "pilonidal sinus" was first applied by Hodges[8] in 1880 to the granulomatous lesion containing hair, which is relatively common over the sacrum in hairy young men. Hodges[8] was the first to point out that a similar lesion may occur elsewhere. He described such a lesion of the foot. Since then, pilonidal sinuses in the foot have also been reported by Brearley[3] and by Mayo and associates.[11] In addition, similar lesions in many other sites have been reported.[4] These additional sites include: the abdominal wall, an amputation stump, the axilla, the buttock, the ear, the face, the hands of milkers and woolshearers, the lumbar region, the mons veneris, the nipple, the neck, the occipital region, the perineum, the penis, the umbilicus, and the vulva and clitoris.

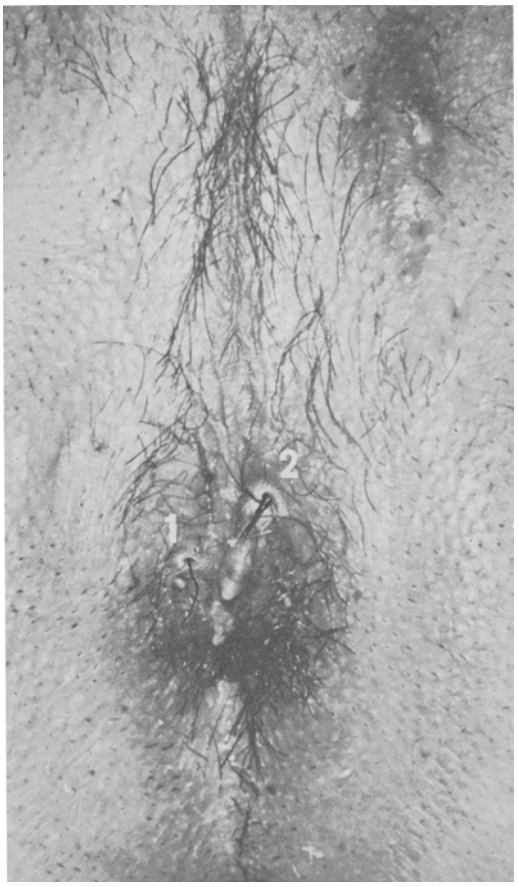

FIG. 1. *1*, External opening on the anus of one of the sinuses, which passed upward in the submucosal tissues. *2*, External opening on the anus of a sinus which passed forward to the subcutaneous granuloma.

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This wide scatter of sites is another point in keeping with the suggestion of King,[9] Dwight and Maloy,[5] and Brearley[3] that pilonidal sinuses are the result of loose hair pushed into the skin.

The patient reported by Aird,[1] who had a pilonidal sinus of the axilla, had previously had a postsacral pilonidal sinus excised. MacLeod[10] described a hair-bearing sinus of the suprapubic region in a patient who also had previously had a postsacral pilonidal sinus, but in this patient the suprapubic lesion originated in a simple dermoid cyst, and the term "pilonidal sinus" is not usually applied to such a lesion. In the case of a pilonidal sinus of the ear, described by Woodward,[14] sinuses (presumably pilonidal) were found in the natal cleft 12 months later, but operation was declined.

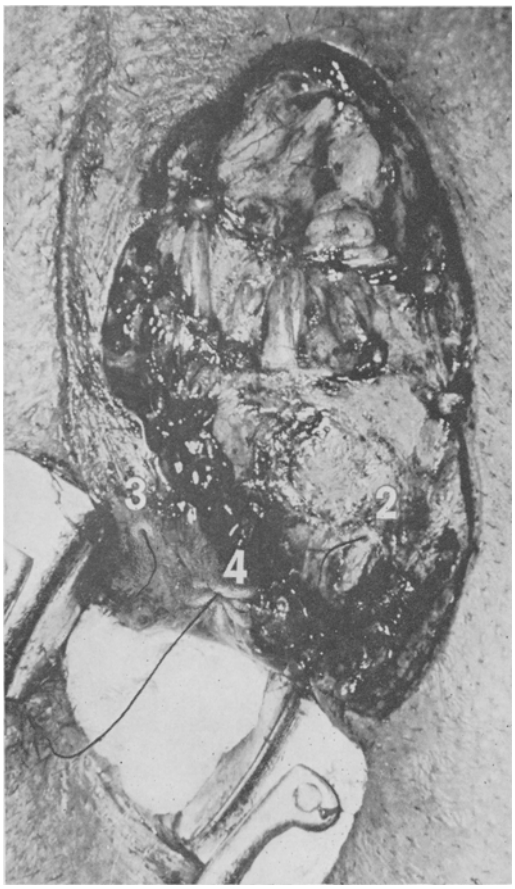

FIG. 2. Sinus 1 (Fig. 1) is covered by the blade of the retractor. *2*, Divided sinus running forward from anus to subcutaneous granuloma. *3 and 4*, External openings in anal canal of the other two sinuses, which passed upward in submucosal tissues.

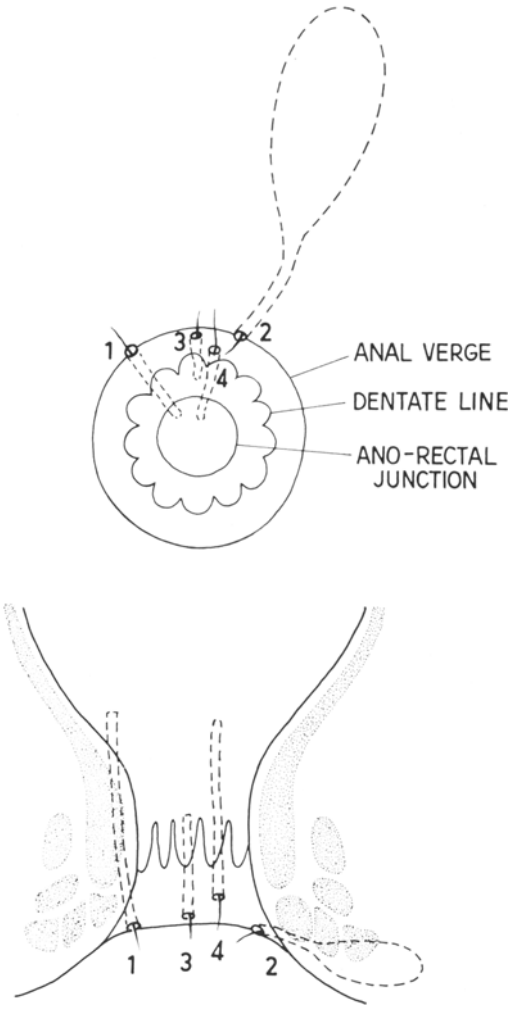

FIG. 3. Diagrams of the anus and a transverse section of the anal canal.

Smith,[12] Anderson,[2] and Edwards and Reimann[6] described small lesions in the neighborhood of the anus which contained remnants of hair and were lined with epithelium. Anderson[2] believed that "the process either originates in severe acne vulgaris or follows a process akin to hidradenitis suppurativa." In either case their his-

tology and their origin differed from those of the typical postsacral pilonidal sinus.

In addition to these reported cases, a personal canvas of the other 15 surgeons on the staff of Sydney Hospital has revealed nine unreported cases of pilonidal sinuses in the chest wall, fingers, groin, neck, perineal region (but not the anus), pubic region, toes, and umbilicus.

Report of a Case

A 27-year-old Italian man had been aware of hemorrhoids for five years, and for two years he had also complained of recurrent anal abscesses. He was very hirsute and had not noticed the hairs in the anus.

Examination disclosed internal hemorrhoids, two hair-bearing sinuses (Figs. 1–3) opening onto the anus (No. 1 and No. 2 in Figure 1), and two openings into the anal canal (No. 3 and No. 4 in Figure 2). Two of the sinuses (No. 1 and No. 4) passed upward in the submucosal tissues to a level above the puborectalis sling. One sinus (No. 2) passed forward to the left of the midline to a pilonidal granuloma in the perineum. The other sinus (No. 3) passed upward in the submucous tissues for 1.5 cm only.

At operation, no other inflammatory lesion, scar or wound was found near the anus; the sinuses and surrounding inflammatory tissue were excised. A portion of the external sphincter muscles was included, but it was not necessary to interfere with the internal sphincter or puborectalis. Second-intention healing was obtained within a month and, subsequently, there has been no evidence of any recurrence.

In the specimens removed none of the sinuses opened into the bowel above the anal canal. The tissues around the sinuses were firm and fibrous. Hairs were present within the tracts and within the granuloma in front of the anus. The walls of the sinuses were lacking in hair follicles or glandular structures, being lined by granulation tissue alone, except near their external openings, where stratified squamous epithelium was continuous with the skin of the anus and the anal canal.

Summary

The many reported cases of pilonidal sinuses arising outside the sacral area have been collected, and reference is made to nine unreported cases seen in the practices of the other 15 surgeons at Sydney Hospital. It is concluded that such pilonidal sinuses are not rare. In addition to these cases, a case is presented as an example of a pilonidal sinus arising in the anus and anal canal.

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