

Letter to the Editor

Bacteriology of pilonidal cyst abscesses

The bacteriology of infected pilonidal cysts has received little attention in the literature. In a recent symposium on pilonidal disease there is no mention of culture and sensitivity studies in the presentations by the various panel members (Hanley, 1977).

We have cultured purulent exudate from 11 patients with infected pilonidal cysts aerobically and anaerobically.

The Table shows the ages and sex of the patients and the culture results. A mean of 2.5 anaerobes and 0.9 aerobes was isolated per specimen. Anaerobes were grown from all 11 specimens but only six contained aerobes. No aerobic Gram-negative rods were cultured. Gram-positive anaerobic cocci accounted for 45% of the total bacteria recovered and for 55% of the anaerobes. *Bacteroides fragilis* was isolated on one occasion. Five other species of *Bacteroides* were isolated including *B. melaninogenicus*, *B. capillosus*, *B. putredinis*, *B. oralis*, and *Bacteroides* species.

It has been stated that 'the lowly pilonidal sinus and cyst perhaps by virtue

of their out-of-sight sacrococcygeal location have received little attention by the plastic surgeon' (Roth and Moorman, 1977). They have also escaped the attention of the microbiologist, probably because samples are not generally submitted for culture. Finegold (1977) cites 13 papers referring to the bacteriology of infected pilonidal cysts. At a recent conference on the Dilemma of Pilonidal Disease (Hanley, 1977) there was no mention of culture and sensitivity studies even though in one study of 175 patients 88.5% were infected at the time of admission (Eftaiha and Abcarian, 1977). Sandusky *et al.* (1942) studied 13 patients with infected pilonidal cysts. All 13 grew non-haemolytic anaerobic streptococci. There were eight isolates of *Staphylococcus aureus* and five of aerobic Gram-negative rods. Gram-positive anaerobic cocci accounted for 41% of all the isolates from our patients. There was only one isolate of *B. fragilis*, and no aerobic Gram-negative rods were isolated.

The bacteriology of pilonidal cyst abscess is different from that of perirectal or buttock abscesses (Meislin *et al.*, 1977). *B. melaninogenicus* and *B. fragilis* were

isolated from 81% and 47% of perirectal abscesses and from 58% and 17% of buttock abscesses. *Staph. aureus* was isolated from one-third of buttock abscesses but from none of the perirectal abscesses. Aerobic Gram-negative rods were isolated from 10% of the perirectal abscesses but from none of the buttock abscesses.

Our study shows that anaerobes are the predominant isolates from pilonidal cyst abscesses.

T. J. MARRIE, D. AYLWARD E. KERR,
and E. V. HALDANE

Department of Medicine and
Microbiology, Victoria General
Hospital, Halifax, Nova Scotia,
B3H 1VC, Canada

References

- Eftaiha, M., and Abcarian H. (1977). The dilemma of pilonidal disease: surgical treatment. *Diseases of the Colon and Rectum*, **20**, 279-286.
- Finegold, S. M. (1977). *Anaerobic Bacteria in Human Disease*, p. 389. Academic Press, New York.
- Hanley, P. H. (1977). The dilemma of pilonidal disease—discussion. *Diseases of the Colon and Rectum*, **20**, 292-298.
- Meislin, H. W., Lerner, S. A., Graves, M. H., McGehee, M. D., Kocka, F. E., Morello, J. A., and Rosen, P. (1977). Cutaneous abscesses—anaerobic and aerobic bacteriology and outpatient management. *Annals of Internal Medicine*, **87**, 145-149.
- Roth, R. F., and Moorman, W. L. (1977). Treatment of pilonidal sinus and cyst by conservative excision and W-plasty closure. *Plastic and Reconstructive Surgery*, **60**, 412-415.
- Sandusky, W. R., Pulaski, E. J., Johnson, B. A., and Meloney, F. L. (1942). The anaerobic nonhemolytic streptococci in surgical infections on a general surgical service. *Surgery, Gynaecology and Obstetrics*, **75**, 145-156.

Culture results

Patient	Sex	Age	Aerobes	Anaerobes
1	M	22		<i>B. capillosus</i> <i>Pc. asaccharolyticus</i> <i>C. malenominatum</i> <i>B. melaninogenicus</i>
2	M	16	Non-haemolytic streptococcus	Gram-negative anaerobic bacillus (failed to survive for identification)
3	M	23		<i>B. fragilis</i> <i>Pc. magnus</i>
4	M	24	<i>S. epidermidis</i> <i>Corynebacterium</i> spp.	<i>Pc. asaccharolyticus</i> <i>Pc. prevotii</i>
5	M	23	<i>S. epidermidis</i> <i>Corynebacterium</i> spp.	<i>B. melaninogenicus</i> <i>C. clostridiiforme</i> <i>Pc. prevotii</i> <i>Propionibacterium</i> spp.
6	F	26		<i>Peptococcus</i> spp. <i>Pc. prevotii</i>
7	F	21	Microaerophilic streptococcus	<i>Ps. anaerobius</i> <i>Pc. asaccharolyticus</i> <i>B. putredinis</i> <i>Ps. anaerobius</i>
8	F	18		<i>Peptococcus</i> spp. <i>Pc. prevotii</i>
9	F	21	<i>Streptococcus</i> spp.	<i>Peptostreptococcus</i> spp. <i>Bacteroides</i> spp. <i>Ps. anaerobius</i>
10	F	18	<i>S. epidermidis</i> <i>Corynebacterium</i> spp.	
11	F	22		<i>B. oralis</i> <i>Fusobacterium</i> spp. Gram-positive anaerobic cocci