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Case Report

Facklamia hominis isolated from infected sebaceous cyst on the breast

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ABSTRACT

Facklamia hominis is a gram-positive, catalase-negative, facultatively anaerobic coccus that is a rare human pathogen, with fewer than 15 cases isolated in the literature. We present the case of a 62-year-old female with an infected left breast sebaceous cyst treated successfully with surgical excision and flucloxacillin. Subsequent culture and microscopy isolated the organism *Facklamia hominis*. To the best of our knowledge, this is the first reported case of *Facklamia hominis* isolated from the breast, and the first reported isolate of the organism from a clinical specimen in Australia.

Keywords: Facklamia hominis, Gram-positive, Catalase-negative

INTRODUCTION

Facklamia hominis was first described in 1997 and is a gram-positive, α-haemolytic, catalase-negative, facultatively anaerobic coccus.[1] It has since been infrequently identified as a human pathogen with fewer than 15 reported cases in the literature, causing sepsis, urinary tract infection, subcutaneous abscess, prosthetic joint infection, and chorioamnionitis.[2] We present here the first reported infected breast cyst due to *Facklamia hominis*, found in Australia.

CASE REPORT

A 62-year-old female presented to the emergency department with an infected sebaceous cyst on the left breast. The cyst had been present for many years, but in the preceding two weeks had developed worsening pain and redness at the site with associated purulent discharge.

Her background was significant for previous bilateral breast cancer for which she had bilateral lumpectomy and left axillary node clearance three years prior. She had adjuvant chemotherapy but no radiation treatment. Her breast surveillance was up to date with benign appearing mammogram and ultrasound several months earlier. She suffered from left upper limb lymphoedema for which she wore a compression garment but had no other significant medical problems. She was a non-smoker and was not immunosuppressed.

On examination, the infected cyst was at 12 o'clock on the left breast and measured 5×3 cm with a small region of surrounding erythema. It was raised, fluctuant, and discharging pus through a central necrotic sinus (Figure 1). Previous peri-areolar and left axillary incision sites were noted. There were no other concerning cutaneous or breast findings. She was afebrile and had no features of systemic illness. Her white cell count was 7.0×10^9/l.

She was commenced on intravenous flucloxacillin and proceeded to surgical excision of infected cyst under general anaesthesia. She had an uneventful recovery and was discharged from hospital on post-op day one with a course of oral flucloxacillin. She was followed up in surgical clinic two weeks post-op at which point the wound had healed without any features of ongoing infection.

Histological examination of the specimen showed a heavily inflamed epidermal cyst with keratin fragments, histocytes, and multinucleate giant cells. There was no evidence of malignancy. Subsequent culture and microscopy of the sample isolated the organism *Facklamia hominis*.

Figure 1: Infected sebaceous cyst on the left breast.

DISCUSSION

Facklamia hominis is a gram-positive, α-haemolytic, catalase-negative, facultatively anaerobic coccus that is a rare isolate in human infection.[1] It was first described in 1997 using 16S rRNA sequencing and has since been infrequently identified as a human pathogen with fewer than 15 reported cases in the literature.[3] This is the first report of *Facklamia hominis* in an infected breast cyst, and the first reported isolate in Australia.

The *Facklamia* genus also includes species *F. ignava, F. sourekii, and F. tabaciasalis* and may be present as part of the normal flora of the female genitourinary tract.[4] Limited susceptibility studies have shown significant differences in antimicrobial sensitivity between species.[5] While some strains have resistance patterns which may present management difficulties in certain clinical scenarios, *Facklamia hominis* is shown to be sensitive to amoxicillin in the few isolates.[5] The susceptibility of *Facklamia hominis* to beta-lactam antibiotics is supported by our case with successful resolution of infection following surgical excision and treatment with flucloxacillin.

CONCLUSION

Facklamia hominis is a rare human pathogen that can cause superficial breast infection. It can be successfully treated by traditional surgical methods and shows susceptibility to beta-lactam antibiotics.

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