Facklamia hominis scapula abscess, Marseille, France

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Abstract

Facklamia hominis is a Gram-positive bacterium that was first isolated from various human samples, excluding abscesses of the scapula. We here report the first scapular abscess infection due to *F. hominis*, found in Marseille, France. We also reviewed all cases published in the literature.

Keywords: Abscess, emerging pathogen, *Facklamia hominis*, human infection, scapula
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Facklamia hominis is a catalase-negative facultative anaerobic and Gram-positive bacterium that was initially isolated from urine, vagina, blood and abscesses in humans [1]. The bacteria was then recovered from placentas [2], mitral valves [3,4], and joints [5]. Here we report the first human case of scapular abscess due to *F. hominis*, found in Marseille, France.

A 40-year-old woman was admitted to the emergency department at Casamance Hospital, Marseille, for persistent pain in an abscess located on the left scapula. For 15 years, the patient had an indurated mass on her left scapula after surgical evacuation of a worm. The first suppuration of this mass was reported 3 years ago. One week before hospitalization, she consulted her doctor for increasing pain and the formation of an abscess on her left scapula. Because the patient was apyretic, the doctor decided to treat her with pristinamycine. Upon admission on 29 January 2015, she was apyretic. She had no cervical adenopathy, and her white blood cell count was normal (4.18×10^9/L). Surgical drainage of the infected abscess was performed. During surgery, a subcutaneous sample was recovered. After culture, *F. hominis* was repeatedly identified from several colonies tested by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF), with a score of 1.77. The bacterium was susceptible to ceftriaxone, gentamicin, erythromycin, rifampicin, doxycycline and vancomycin and resistant to clindamycin. At last contact, the patient was still being treated with pristinamycin.

F. hominis has been isolated exclusively from human samples (Table 1). Indeed, 67% (8/12) of all the *F. hominis* cases published worldwide were isolated from female human subjects (Table 1). The fact that this bacterial species has rarely been isolated from humans can be explained by the ineffectiveness of traditional microbiologic tests to accurately identify *F. hominis*. Previous studies have highlighted this problem, arguing that traditional microbiologic methods for microbial identification incorrectly identified *Facklamia* spp. strains as responsible for endocarditis, whereas 16S rRNA PCR finally identified *Enterococcus faecalis* [4]. In the present study, the bacterial species was identified and confirmed several times using MALDI-TOF. Over the years, this strategy has considerably increased our capacity to detect rare bacterial species from clinical samples [6]. Table 1 summarizes the characteristics of the cases of *F. hominis* infection or carriage reported in the literature. In our case, and because the patient did not have

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TABLE 1. Worldwide human infections with *Facklamia hominis*

No. of patients (country)	Sex	Positive sample	Identification method	Antibiotic therapy provided	Result	Reference
6 (5 Sweden, 1 France)	4 F, 2 NA	1 urine, 3 vagina, 1 blood, 1 abscess	Characterization by API Rapid ID32 and API ZYM	NA	NA	[1]
2 (United Kingdom)	2 F	Blood, placental tissue, gastric aspirate	NA	Co-amoxiclav, metronidazole, ampicillin, teicoplanin, gentamycin, cefotaxime	Discharged cured	[2]
1 (India)	M	Blood	Vitek 2 system	Penicillin, gentamicin, ceftriaxone	Cured	[3]
1 (Spain)	F	Sample from joint pseudo-capsule	Vitek 2 system 16S rRNA PCR	Vancomycin gentamicin, ceftriaxone, amoxicillin	Cured	[5]
1 (United Kingdom)	NA	Blood	NA	Amoxicillin + clavulanic acid, gentamicin, vancomycin	Died	[4]
1 (France)	F	Abscess	MALDI-TOF	Pristinamycine	Under treatment	This study

NA, data not available; MALDI-TOF, matrix-assisted laser desorption/ionization time-of-flight mass spectrometry.

any underlying conditions, we speculate that the infection was facilitated by repeated contact of the surgical site with contaminated surfaces such as hands. All together, our observations emphasize that *F. hominis* is an emerging pathogen that may be responsible for opportunistic infections in humans.

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Conflict of Interest

None declared.

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