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# Solobacterium moorei bacteraemia in a patient with Fournier`s gangrene

Manuela Hernandez Blanco*[1], José Javier Costa[2], A. Aguilera[2], Manso Gómez Tamara[2], Guadalupe Abal-Morrazo[2], Pablo Lopez-Pais[3], Francisco Otero-Castro[3], Julián Álvarez[3], Maria Luisa Perez del Molino[1]

[1]*Complexo Hospitalario Universitario de Santiago de Compostela; Microbiology*

[2]*Complejo Hospitalario Universitario de Santiago de Compostela; Microbiología Y Parasitología*

[3]*Complejo Hospitalario Universitario de Santiago de Compostela; Anestesiología Y Reanimación*

**Background:** Fournier's gangrene (FG) is a polymicrobial necrotizing fasciitis of the perineum and genital area. Characteristically, FG exists due to the synergism between several bacteria, which are not so aggressive when presented separately. *Solobacterium moorei* is a non-spore-forming strict anaerobic Gram-positive bacillus initially isolated from human feces and recognized with the use of 16S rRNA gene sequencing.

**Material/methods:** A 56-years-old man came to the emergency department at our hospital presenting general malaise of 4 days of evolution. He refered discomfort in external genitalia for the last 2 days, but denied any evidence of previous lesion. The BACTEC 9240 system for blood cultures (Becton Dickinson) was used. Isolates were identified by mass spectrometry (MALDI TOF). The identification results were confirmed by 16s rRNA gene partial sequencing. The antimicrobial susceptibility was performed by E-test according to the CLSI criteria for anaerobesase

**Results:** After 5 days of incubation, one blood culture anaerobic flask became positive and a short Gram positive bacillus was founded. This bacillus grew on blood agar plates under anaerobic

conditions after 4 days at 37 °C. Both MALDI-TOF and 16s rRNA partial gene sequencing method identified the microorganism as *Solobacterium moorei*. The antibiogram showed susceptibility to penicillin, piperacillin-tazobactam, ertapenem and moxifloxacin. *Proteus mirabilis, Escherichia coli, Enterococcus faecalis* and *Bacteroides ovatus* were isolated from the necrotic tissue sample.

**Conclusions:** MALDI TOF was similar to 16s rRNA sequencing for identifying *S. moorei.* This is the first described case of *S. moorei* bacteremia in a patient with Fournier's gangrene. It could be speculated that the bacteria entered the blood from the gangrenous place. *S. moorei* produces volatile sulfur compounds. The toxic effects of these compounds are well documented and it would be possible that they contribute to the pathology of these patients.