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Letter to the Editor

Hand tendon abscess due to *Staphylococcus condimenti*

Absceso en tendón de la mano por Staphylococcus condimenti

Dear Editor,

Coagulase-negative staphylococci are commensals of human skin and mucous membranes.[1] More than 45 species of these microorganisms have been identified to date.[2] *Staphylococcus condimenti (S. condimenti)* is a coagulase-negative staphylococcus, described in 1998,[3] generally considered to be non-pathogenic.[4] This microorganism is not part of the human skin microbiota, but has been found in fermented foods and soy sauce.[1] Its genome contains several virulence factors, including leukocidin-like proteins.[5] The first documented case of infection with this organism was a catheter-related bacteraemia in a patient with severe dilated cardiomyopathy.[6] Other reported cases have included severe skin and soft tissue infection,[5] meningitis,[4] surgical site infection[7] and spondylodiscitis.[1]

We present a case of tenosynovitis due to *S. condimenti* in a 43-year-old woman, a teacher by profession, who had no contact with pets or involvement with rural activities or gardening, who came to Accident and Emergency with a four-day history of pain and loss of function, inflammation, heat and flushing of the third finger of her left hand. The onset of symptoms had been sudden, with no prior trauma, insect bite or foreign body, although they seemed to stem from a nodular lesion that the patient had developed five months previously. She had no fever or other accompanying symptoms. The patient had no immunosuppression or other risk factors, but her previous history included the fact that she had morbid obesity.

She had initially consulted her health centre, where she was prescribed antimicrobial treatment with amoxicillin/clavulanic acid (875/125 mg 3 times a day) with adequate adherence. In the absence of improvement, she went to Accident and Emergency where, after ruling out bone involvement with a plain X-ray, she was discharged with the same treatment. However, she returned to Accident and Emergency 48 h later as the condition had become worse. At this point, she had leucocytosis with a left shift ($21.80 \times 10^3/\mu l$), elevated C-reactive protein (3.60 mg/dl) and procalcitonin at normal levels (0.02 ng/ml).

Physical examination revealed slight swelling with oedema in the middle and proximal phalanges of her third finger which prevented flexion and full extension, with local pain on palpation, slight increase in temperature, but no oozing or wound. After assessment, the diagnosis was established as tenosynovitis of the third finger of her left hand, and admission for surgery was recommended.

During the surgical procedure, which consisted of draining the abscess and the tendon sheath, three samples were taken from the lesion and sent to the microbiology laboratory in a sterile container. Gram staining was performed and samples were seeded on blood agar, chocolate agar, MacConkey agar and Sabouraud agar, which were incubated in CO_2 atmosphere and on Brucella agar and BBE-amikacin agar plates in anaerobiosis. Gram-positive cocci with staphylococcal morphology were observed in the Gram stain.

After 48 h incubation, whitish colonies grew on blood agar and chocolate agar which were catalase positive, oxidase negative and non-haemolytic. By MALDI-TOF mass spectrometry (Becton Dickinson™ Bruker MALDI Biotyper® CA System) they were identified as *S. condimenti* with a score of 2.50. This microorganism was isolated in pure culture from the three samples sent to the laboratory. The microorganism was sent to Spain's National Microbiology Centre where identification was confirmed by PCR and sequencing of the 16S rRNA and *tuf* genes. The antibiotic sensitivity study was performed using broth microdilution panels (MicroScan WalAway96 plus System Beckman Coulter®), being sensitive to penicillin, oxacillin, cefoxitin, gentamicin, levofloxacin, moxifloxacin, vancomycin, teicoplanin, erythromycin, clindamycin, linezolid and trimethoprim/sulfamethoxazole, using the cut-off points established by the European Committee on Antimicrobial Susceptibility Testing (EUCAST; www.eucast.org). A commercial PCR (GeneXpert powered by Cepheid innovation: Xpert® MRSA/SA SSTI [REF: GXMRSA/SA-SSTI-10]) was performed and detection of the *mecA* gene was negative.

We emphasise the aggressive and invasive nature of this infection since, despite drainage and adequate antibiotic therapy with amoxicillin/clavulanic acid, a second surgical intervention was necessary due to the poor outcome, probably due to the residual presence of the microorganism at the focus. In the end, the postoperative period was uneventful and the patient was discharged from hospital after two weeks.

This case demonstrates, as has been done in other studies,[5] the pathogenicity of multiple antimicrobial-sensitive *S. condimenti* as a causative agent of skin and soft tissue infections in patients without immunosuppression.

We believe that the prolonged course of the infection, which required several surgical interventions, may have been due to the aggressiveness of the microorganism and the failure to completely eliminate the focus. *S. condimenti* infection is rare, but it can cause serious infections in healthy people. The isolation of new species of coagulase-negative staphylococci from surgical specimens, which are not part of the skin microbiota and in pure culture, means we have to consider these new pathogens in the aetiology of skin and soft tissue infections. However, at the same time, availability of new diagnostic methods such as mass spectrometry (MALDI-TOF) means we are able to effectively identify these microorganisms at an early stage.

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Conflicts of interest

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Carmen Piña Delgado [a,*], Margarita Bolaños Rivero [a], Christian Betancort Plata [b], Isabel de Miguel Martínez [a]

[a] *Servicio de Microbiología, Hospital Universitario Insular-Materno Infantil de Gran Canaria, Las Palmas de Gran Canaria, Las Palmas, Spain*
[b] *Unidad de Enfermedades Infecciosas y Medicina Tropical, Hospital Universitario Insular-Materno Infantil de Gran Canaria, Las Palmas de Gran Canaria, Las Palmas, Spain*

* Corresponding author.
E-mail address: cpindel@gobiernodecanarias.org (C. Piña Delgado).

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Standardization of cumulative antimicrobial susceptibility reports: A need

Estandarización de los informes de sensibilidad antibiótica acumulada: una necesidad

Dear Editor,

The Executive Committee of the European Committee on Antimicrobial Susceptibility Testing (EUCAST)[1] decided in 2019 to redefine the clinical categories Susceptible (S) and Intermediate (I) used in the interpretation of susceptibility results, but maintaining the abbreviations, such that "susceptible" becomes "Susceptible, standard dosing regimen" (S) and "intermediate" becomes "Susceptible, Increased exposure" (I).

This change directly affects the preparation of the cumulative antimicrobial susceptibility testing (CAST) reports that we periodically produce in microbiology departments/units; it is no longer appropriate to combine the categories "Resistant" and "Intermediate" as "non-susceptible". Instead, the Comité Español del Antibiograma (COESANT) [Spanish Antibiogram Committee] advises presenting the three categories separately, and if necessary, combining S and I, but indicating at the bottom of the table those cases in which there are two dosage regimens.[2] However, it does not establish recommendations regarding the threshold percentage of susceptible strains for the empirical use of an antibiotic.

Although there is no universally recognised susceptibility threshold for the empirical use of an antibiotic, it is common in CAST reports to consider 80%, based on expert recommendations for certain infections (higher thresholds in severe infections).[3] Thus, in CAST reports which only show the percentage of susceptibility, colour coding is often assigned to guide the clinician, using green or red depending on whether the percentage is above or below 80% (in other reports, 85% or 90%). Some CAST reports add a third colour to highlight percentages between 50% and 80%–85%, a range which does not correspond to any category of prescription and which does not provide information that is not conveyed by the percentage itself.[4]

As a consequence of the change in clinical categories, it seems particularly important to differentiate the combinations of antibiotic/microorganism that reach the threshold for empirical use from strains that require increased exposure. We therefore consider it necessary to assign a new colour to said category. If we have accepted green and red to differentiate the antibiotics that we should or should not use, it is logical that we assign yellow for the new category; just as we interpret traffic lights, clinicians will understand that they can use an antibiotic, as long as exposure to it is increased (Fig. 1).

Due to the great heterogeneity that exists in the preparation and presentation of the CAST report, which does not always provide all the information that the clinician may need, and considering that its main objective is to be a guide to choosing the most appropriate empirical antibiotic treatment, in our opinion, standardisation is a priority. We therefore propose the following:

- Unifying the percentage threshold of susceptible strains for recommending the empirical use of an antibiotic. Due to the extent of their use, to preserve the most powerful antibiotics and until a consensus is reached, we suggest 80% (reflecting in the CAST that in serious infections, options with greater susceptibility should be considered).
- Unifying colour coding: green for percentages of strains meeting the empirical use threshold; yellow for those that reach it with an increase in exposure; and red for the percentages that are below the threshold. A simplified presentation model is shown in Fig. 1 (all cells express the sum of S+I; at the bottom of the table, S and I are detailed separately for those marked in yellow).