Answers to Reviewer's Comments to Author:

Reviewer #1:
Dear Authors, Thank you for submitting your manuscript entitled "Subacute osteomyelitis due to Staphylococcus caprae in a teenager; a case report and review of the literature" to World Journal of Clinical Cases. I have carefully reviewed your submission and found it to be an interesting and informative case report, highlighting a rare instance of subacute osteomyelitis caused by Staphylococcus caprae in a teenage patient. Before I proceed with specific comments and suggestions for improvement, I would like to provide an overall assessment of the manuscript.

Your study design and presentation of the case are clear and concise, and the literature review provides valuable context to the current state of knowledge on this topic. However, there are several areas that could benefit from further clarification, elaboration, or revision to enhance the quality and impact of your manuscript.

*We thank the reviewer for these positive comments about our paper.*

In the following sections, I will provide detailed comments and recommendations for revisions. Please note that these suggestions are intended to help improve the manuscript and should be considered carefully. I look forward to receiving a revised version of your submission.

(1) In the Introduction, please clarify the abbreviation "CCSS" as it seems to be a typographical error, and it should be "CNSS" for Coagulase-negative Staphylococcus species.

*The reviewer is absolutely right. We have corrected the abbreviation into CoNS, i.e., the official abbreviation of Coagulase-negative Staphylococci.*

(2) Please provide a brief overview of the clinical significance of coagulase-negative staphylococci in the Introduction.

*We have provided this overview, as suggested, adding the following sentences to the text:*
Coagulase-negative staphylococci (CoNS) are ubiquitous human and animal commensals and form an integral part of healthy human skin microbiota. CoNS are frequently discovered in clinical samples and often considered contaminants because they can become opportunistic pathogens in certain situations. CoNS associated with nosocomial infection are typically characterized by their pronounced antimicrobial resistance, including methicillin-resistant and multidrug-resistant isolates. However, they do not have as much pathogenic potential as coagulase-positive staphylococci such as S. aureus.

(3) In the Introduction, consider rephrasing "fortunately confidential" to "fortunately rare" for better clarity.

*We have made this correction, as suggested.*

(4) In the Case Report section, please provide more information about the patient's medical history and any relevant comorbidities that may have predisposed her to this infection.

*Actually, the patient was in excellent health, with no co-morbidities, but we have added this information to the case report section.*

(5) In the Case Report section, please clarify the treatment plan regarding follow-up and any imaging or laboratory tests performed during the course of treatment.

*A sentence about the treatment plan regarding follow-up and any imaging or laboratory testing performed during the course of treatment has been added to the text.*

(6) In the Discussion section, please elaborate on the potential factors contributing to the misidentification of S. caprae strains by conventional phenotypic identification systems.

*Because we wrote this case report specifically about subacute osteomyelitis due to S. caprae—a situation likely to be of interest to other orthopedists confronted with this type of infection—and because we did not aim to compare identification methods, which goes beyond our area of expertise, we do not wish to elaborate on potential misidentifications.*

(7) In the Discussion section, consider discussing any potential limitations of molecular techniques used for identifying S. caprae strains.

*The following information has been added in the text:*
“In the present case, a culture of the sample was grown on a solid medium and the resulting bacteria were identified using matrix-assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF MS).”

(8) In the Discussion section, please provide more information on the relationship between biofilm formation and virulence of S. caprae infections.

_This following paragraph has been added to the Discussion section:_

“The formation of a biofilm is considered an essential step in the pathogenesis of CoNS. Another important step in the induction of an infection is the adhesion of bacterial cells to host tissues and their ability to grow into a biofilm (1). The genetic determinants of biofilm formation include the icaADBC operon, which codes for the biosynthetic enzymes involved in producing polysaccharide intercellular adhesin (2,3).”

(9) In the Discussion section, consider discussing the potential factors contributing to the development of subacute osteomyelitis in the reported case.

_We have added the following sentences to the Discussion section:_

“Subacute osteomyelitis may result from the inadequate treatment of acute osteomyelitis or may occur in settings displaying strong host resistance to infection, an illness due to less virulent organisms, prior exposure to antibiotics, or a combination of these factors. In this case, we hypothesized that S. caprae was one of the few virulent pathogens that could have become an opportunistic pathogen but which the subject managed to maintain relatively well-controlled.”

(10) In the Conclusion section, consider discussing the clinical implications of the findings and the need for increased awareness among clinicians regarding S. caprae infections.

_The clinical implications of these infections are addressed in the Conclusion section:_

“S. caprae should therefore be included among the organisms that can be implicated in subacute osteomyelitis, along with S. aureus, K. kingae, Salmonella and Streptococcus species, and Mycobacterium tuberculosis.”
(11) Please add a brief statement about the limitations of the study and any possible bias in the analysis or interpretation of the data.

Because this work deals with a case report, there are, in our opinion, no significant limitations or possible biases in the analysis or the interpretation of data.

(12) In the Ethics approval and consent to participate section, please confirm whether written informed consent was obtained from the patient and/or her legal guardian for participation in the study.

Written informed consent was indeed obtained from the patient and her legal guardian concerning the use of information, laboratory results, and the radiological images present in her medical file.

(13) Please provide details about the process of obtaining consent for publication from the patient and/or her legal guardian, including the format in which consent was obtained (e.g., written, verbal, etc.).

As mentioned above, we obtained written informed consent.

(14) In the References section, please ensure that all citations are properly formatted and complete, following the style guide of the target journal.

We have corrected and verified that all citations are properly formatted and complete, in accordance with the target journal's style guide.

(15) Throughout the manuscript, please check for any grammatical, punctuation, or spelling errors to ensure clarity and readability.

In accordance with the suggestion by Reviewer #2, the paper has been proofread and copyedited.
Reviewer #2:
The paper describes a novel case study of a patient with subacute osteomyelitis caused by *Staphylococcus caprae*. The history and medical findings have been well laid out. The case study is relevant to the medical establishment.

*We thank the reviewer for their interest and thoughtful comments on our paper.*

A number of things need to be modified to make the paper better.

1. There are numerous English language issues throughout the paper. Someone with more proficient English skills should review the paper.

   *In accordance with the suggestion by Reviewer #1, the paper has been proofread and copyedited.*

2. Use continuous line designations, not page specific.

   *This has been corrected as suggested.*

3. Don't use acronyms without identifying what the acronym stands for (e.g. ESR).

   *This has been corrected as suggested.*

4. What microbiological techniques were used to identify the species as *S. caprae*?

   *The following information has been added to the text:*
   
   “In the present case, a culture of the sample was grown on a solid medium and the resulting bacteria were identified using matrix-assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF MS).”

5. Lines 21 - 22 does not make sense. Genetic analyses *S. caprae* closely related to *S. epidermidis* and *S. caprae*?

   *We think that the Reviewer may have misread the sentence in question. In fact, the sentence reads “Genome analysis has demonstrated that *S. caprae* is closely related to *S. epidermidis* and *S. capitis*, i.e. not *S caprae*, as suggested by the Reviewer.*

6. Lines 23 - 24 on third page. *S. caprae* has the ica operon. Does the species have the dltA-D operon, the cidA-C operon, or the psm gene?

   *In our Discussion section, we merely wish to point out that *S. caprae* may express the ica operon, which provides the pathogen the ability to form a biofilm on orthopedic osteosynthesis devices, thus conferring the bacterium with resistance to the immune system and to antibiotics. We did not explore whether the bacterial strain found had the ica operon, the dltA-D operon, the cidA-C operon, or the psm gene.*
7. How do the Ica proteins contribute to biofilm formation in the species?

The genetic determinants of biofilm formation include the icaADBC operon, which codes for the biosynthetic enzymes involved in the production of polysaccharide intercellular adhesin (2,3).

8. Your species names need to be italicized in the reference section.

The citation titles have been formatted using the Endnote reference manager as they appear on PUBMED.

9. Call them figure rather than photos.

Corrected as suggested.

10. Photo 2 needs to have better resolution.

Unfortunately we cannot improve this figure’s resolution as the original image is of poor quality.

Bibliography

