

## Reviewer 1's comments

You mentioned in the end 7 articles which could be included in this review. Nevertheless, the question is if the palatal rugae are a constant anatomical marker like a fingerprint which does not change during lifetime. Regarding this, there is only one article which investigated children and young adults in the time span of 20-24 month. The studies out of the 3 which investigated 2 time points examined adult patients. So, the discussion and also conclusion should focus on the rugae being a constant feature and not mainly on the accuracy of intraoral scans.

So, the conclusion that the palatal rugae are a highly reliable tool for human identification is in my opinion a little bit misleading, because evidence is missing

I would also appreciate to include the methods in forensic odontology used for identification. Usually one prefers to identify prosthetics like inlays, crowns and bridges which are characteristic and it is not uncommon that general dentists are asked if the dental status of the human to be identified is fitting the status or if dentists remember characteristic restorations. Only in case these options are missing, the rugae might be a hint for identification.

## Response

Thank you so much for such a thorough analysis of our manuscript. We genuinely value the expertise and perspective you brought to the review process. We have added additional statements to alter the conclusion section as per your suggestion. We agree that global standardization for identifying unidentified bodies is based on DNA, fingerprints, and dental records. However, we admit that Global standardization in identifying unidentified bodies is based on the three primary identifiers: DNA, fingerprints, and teeth. Literature has shown that even a few remaining teeth, their position and presence, and the absence of restoration can help with human identification. However, the identification process based on a dental approach becomes challenging during traffic accidents or mass disasters as sometimes only part of the upper or lower jaw is present. This situation even worsens when the victim is edentulous as there would be no dental identification. Therefore, this group cannot be identified based on teeth. This adds on to the essentiality of palatal morphology, especially palatal rugae from palatal scans.

## References:

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2. Martin-de-Las-Heras, S.; Valenzuela, A.; De Dios Luna, J.; Bravo, M. The utility of dental patterns in forensic dentistry. *Forensic Sci. Int.* 2010, 195, 166.e1–166.e5. [CrossRef]
3. Kocher, T.; Holtfreter, B.; Pitchika, V.; Kuhr, K.; Jordan, R.A. Trends in dental and oral health status in Germany between 1997 and 2014. *Bundesgesundheitsblatt Gesundheits. Gesundh.* 2021, 64, 782–792. [CrossRef]