

Post-traumatic taste disorders: presentation of three meaningful cases

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Since the late 1800s there are reports of post-traumatic anosmia [1], but few studies investigated post-traumatic gustatory deficit and adopted validated evaluation tests [2,3,4,5,6,7]. Post-traumatic ageusia is rare, occurring in ~ 0.5% of head traumas, while a gustatory deficit is more frequently referred (5-7%) when olfaction is impaired [2,4]. Unlike olfaction, gustatory sensation is mediated by several cranial nerves (VII, IX, X) and taste receptors are widely spread in the oral cavity, so that taste is considered a “robust” sense. Peripheral and/or central mechanisms may be involved in the genesis of post-traumatic gustatory dysfunction. Beyond a reduction/loss of gustatory function following a trauma, taste changes (dysgeusia) may occur, even if they are reported to be rare [7,8,9]. Gustatory disorders might not be immediately reported because patient often pays attention to other post-traumatic sequelae. Especially when persistent, taste deficits might be particularly relevant for patients’ quality of life. Physicians are often not well-informed on the possible implications or treatment strategies.

Fifty-three consecutive patients with previous head trauma and chemosensory disorders were recruited by the olfactory and taste research group of the University of Verona. Every patient underwent a careful clinical examination, olfactory and gustatory testing by Sniffin’Sticks Extended test, Whole Mouth taste test and Taste Strips Test respectively (Burghart, Germany). Among them, we found 10 cases with hyposmia, 43 with functional anosmia, while 10 cases showed taste deficits (dysgeusia: n = 3, dysgeusia with hypogeusia: n = 1, hypogeusia: n = 5, ageusia: n = 1). Here we report anatomical, clinical correlations and detailed description of three cases representing central and peripheral injury patterns.

References

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- [3] Schechter & Henkin, 1974
- [4] Reiter et al., 2004
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Keywords

Trauma, taste disorders, anatomy of taste