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LETTER TO THE EDITOR

GLUT-1 expression confirms the reactive nature of traumatic neuroma

Comment on: Salla JT, Johann AC, Lana AM, do Carmo MA, Nunes FD, Mesquita RA (2008). Immunohistochemical study of GLUT-1 in oral peripheral nerve sheath tumors. *Oral Dis* **14**: 510–513.

Dear Sir,

Salla *et al*, (2008) performed a detailed immunohistochemical study of *GLUT-1* expression in oral peripheral nerve sheath tumors including traumatic neuroma. They found positive expression of a human erythrocyte-type glucose transporter GLUT-1, a marker of perineurial cells, in all cases of traumatic neuroma, whereas in other types of peripheral nerve tumors, the expression pattern was lower. They concluded that immunopositive reaction of GLUT-1 could be observed in the area surrounding the proliferating nerve fascicles. Moreover, in discussion, they stated that 'GLUT-1 immunoexpression confirms the reactive nature of traumatic neuroma'.

This finding is of particular interest to our group which is examining the mechanism of traumatic neuroma development. We hypothesized previously that traumatic neuroma development involves simultaneous nerve repair and defensive mechanisms (i.e. reactive proliferation of perineurial cells) in the region of concomitant wound and scar contraction (Foltán *et al*, 2008). Moreover, the subsequent development of an easily violable balance between nerve regeneration and damage has been proposed (Foltán *et al*, 2008). The finding of reproducible GLUT-1 expression in traumatic neuroma thus indirectly supports our hypothesis and adds important data to the whole problem.

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