

Long-lasting symptoms and signs after third molar surgery

Studies on pain mechanisms in patients and healthy human subjects

Gitte Irene Juhl

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Official opponents: Søren H. Sindrup, Søren Schou, DDS, and Flemming Isidor, DDS.

Tutors: Troels Staehelin Jensen and Peter Svensson, DDS.

Correspondence: Gitte Irene Juhl, Herlev Tværfagligt Smertecenter, Herlev Hospital, Herlev Ringgade 75, 2730 Herlev, Denmark.

E-mail: gij@akphd.au.dk

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ABSTRACT

The present dissertation is based on three studies initiated and carried out at the Danish Pain Research Centre and the Department of Neurology, Aarhus University Hospital, Denmark, and at the Department of Oral and Maxillofacial Surgery, Aarhus University Hospital.

The aim of the three studies performed in third molar surgery patients was to elucidate some of the mechanisms responsible for the transition from acute to chronic pain. This dissertation focused on the development of sensitization or long-lasting symptoms in the temporomandibular region within six months after third molar surgery.

The results from the studies indicate that third molar surgery causes sensitization of the nervous system peripheral and centrally. High pain intensity in the early postoperative settings is compatible with the development of sensitization. Third molar surgery causes disability for up to one month after surgery and contributes to long-lasting changes in the temporomandibular region.

This present dissertation has contributed with knowledge of sensitization and long-lasting changes in the temporomandibular region after third molar surgery. These changes may be risk factors and may contribute to the development of persistent pain in the temporomandibular regions after oral surgery. The result emphasizes the need for focus and further research on surgical procedures and pain management of the peri- and postoperative pain.