

Pain after craniotomy – really a problem?

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Recently there has been an interesting discussion about craniotomy pain [1, 2]. Post-craniotomy pain is an issue of neurosurgery that is seen often (up to 38% in our series [3]) and leads to daily medication and/or feelings of incapacity of the patient [3]. The origin of postoperative pain is not yet fully understood, but is – without doubt – multifactorial. Often, such complaints are misleadingly related to depressive and anxiety symptoms, but rather different surgical-related factors may play a causative role. The acknowledgement of this implies a modification of the operative techniques [3, 4]. For example, in the retrosigmoidal approach for surgery on vestibular schwannomas, dural adhesions to muscles or to subcutaneous tissues and dural tension after dural closure with stitches may explain postoperative headache [3]. In addition, excessive intradural drilling and the use of fibrin glue is the source of aseptic meningitis as the aetiology of persistent postoperative headache in these patient series [5]. In order to reduce postoperative headache, we suggest replacement of the bone flap at the end of surgery, dura plastic instead of direct dural closure, and avoidance of the use of fibrin glue or extensive drilling of the posterior aspect of the internal auditory canal, if possible.

Another example is the incision of muscle in the pterional craniotomy. Generally speaking, the incision of the temporal muscle in a pterional or frontotemporal craniotomy is inevitable. The muscle arises from the superficial temporal line at the side of the head and attaches at the coronoid process of the mandible. In craniotomies part of the muscle has to be mobilized basally so that the surgeon exposes the bone for the craniotomy. It is important to make the incision using a scalpel and not a monopolar device. Furthermore, the mobilization should be done with a raspatory. Many surgeons, however, use a monopolar device, which in our opinion might lead to shrinkage of muscle fibres and cause difficulties in the reattachment. When using a raspatory it is important to detach and not scrape off the muscle fibres from the temporal bone. Recently, we have also reported that the kind of incision of the temporal muscle leads to postoperative pain [4].

In our opinion, post-craniotomy pain is an important issue that should not be underestimated in current neurosurgical treatment. Modifying some operative techniques might be useful in pain reduction.

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