



## C0040 - SUBMUSCULAR DISSECTION FOR PRESERVATION THE FRONTOTEMPORAL BRANCH OF THE FACIAL NERVE DURING PTERIONAL APPROACH

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### Resumen

**Objectives:** The present study describes our results during the last 10 years (2006-2016) regarding the preservation of the frontotemporal branch (FTB) of the facial nerve during pterional craniotomy in 450 patients using interfascial, subfascial and submuscular dissections.

**Methods:** We carried out a descriptive and retrospective study of historical cohort. We reviewed all the cases operated on by pterional craniotomy and performed by the same experienced surgeon of our Department of Neurosurgery during the period 2006-2016. For each reported case, we analyzed the type of temporal dissection performed and the existence or not of facial paresis in the post-surgical period as well as its evolution during the follow up at our outpatient clinic.

**Results:** We recorded 450 clinical cases that respected the study inclusion criteria. Our outcomes demonstrate that submuscular dissection technique presents an ARR in comparison to interfascial dissection technique of 28.88%, 5.55% and 4.44% (for the immediate post-surgical period, after 6 months and after 12 months, respectively); compared to subfascial dissection technique, the submuscular technique presents an ARR of 39.09%, 10.9% and 9.09%. Moreover, submuscular approach shows a RRR of 100% compared to both interfascial and subfascial approaches.

**Conclusions:** Submuscular dissection technique could offer greater protection and preservation of the FTB of the facial nerve during pterional approach.