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C0163 - VALIDATION OF INTRAOPERATIVE TASK TO IDENTIFY EMOTIONS IN FACIAL EXPRESSIONS IN RIGHT HEMISPHERE TUMOR AWAKE SURGERY. PRELIMINARY RESULTS

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Resumen

Objectives: To establish the sensitivity of intraoperative Facial Emotion Recognition Task (FERT) to predict postoperative performance on socio-emotional measures.

Methods: Six patients with right hemisphere tumors were operated by using awake craniotomy in the period 2014-2016. Computer morphed images derived from the facial features of real individuals each showing a specific emotion, are displayed on the screen preoperatively during brain mapping and postop. Patients must select between six basic emotions, which emotion the face displayed from 2 options. The outcome measures for FERT cover correct or incorrect choices, and overall response latencies. Results can be looked at across individual emotions, or across all emotions at once.

Results: We found FERT able to identify changes in detecting emotions in facial expressions in 5 out of 6 patients with lesions located in the right pars opercularis and the dorsal part of the right pars triangularis. Choice accuracy and latency were recorded and probed to be significatively affected in these patients. Postoperatively we observed complete recovery in both measurements at 3 months. No permanent deficit in terms of social adjustment or proper relationship was observed in any case.

Conclusions: Facial emotion recognition is an important cognitive skill involved in social adjustment, proper relationship, working and living independently. FERT appears as a reliable task to detect brain areas involved in this cognitive skill during brain mapping. However, the measurement of emotional abilities should also include mnestic tasks because facial expressions are often short-lived and the judgment of patients may partly rely on retrieval of their previous facial recognitions.