évoquait une HNPP. D'où une étude génétique à la recherche de délétion du gène PMP22 était indiquée.

Conclusion   La HNPP est caractérisée sur l'ENMG par un ralentissement diffus de la vitesse de conduction nerveuse sensorielle et un allongement des latences distales motrices avec une diminution occasionnelle et discrète des vitesses de conduction nerveuse motrice. Bien que le diagnostic définitif de la HNPP se fasse par l'étude génétique, l'ENMG a un rôle primordial dans le diagnostic positif, le dépistage des sujets asymptomatiques, l'évaluation de la gravité ainsi que l'évolution électrique.

Mots clés   Cas clinique ; Électroneuromyogramme ; HNPP

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Intracerebral electrical stimulation of the right anterior fusiform gyrus elicits a transient face-specific impairment in recognizing famous people

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Background   While the role of posterior temporal regions in face recognition has been largely demonstrated, the importance of the anterior temporal lobe (ATL) is still underestimated, especially because fMRI suffers from a signal dropout in this region. A recent intracranial case study by Jonas et al. (2015) has shown that electrical stimulation of the right anterior fusiform gyrus elicited a transient inability to recognize faces. However, because only naming tasks were used, it was hard to distinguish between a face-specific impairment or a naming/semantic deficit.

Objectives   Here we report the case of a patient (DN) who was implanted with SEEG electrodes in the right ATL.

Methods   During electrical stimulation, DN was asked to perform famous face and name pointing tasks, which did not require verbal outputs and allowed the direct comparison between two different types of famous stimuli (faces and names).

Results   Following electrical stimulation of the right anterior fusiform gyrus, DN was unable to point the famous face among 2 unfamiliar face distractors. Interestingly, stimulation at these critical contacts did not affect the detection of a famous name among 2 unfamiliar name distractors. Moreover, significant intracerebral face-selective responses and responses to famous faces were found at the critical contacts of stimulation using paradigms of fast periodic visual stimulation.

Conclusion   Altogether, these findings suggest that the transient inability to recognize famous faces following electrical stimulation of the right anterior fusiform gyrus is specific to face stimuli and provide new evidence for the role of this region in familiar face recognition.

Keywords   Electrical stimulation; Intracerebral recordings; Prosopagnosia

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The cortical sources of face selective N170: A simultaneous multi-scale EEG study

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Background   According to a widely held view, the main cortical source of the N170 lies in the fusiform gyrus (FG), whereas the posteriorly located inferior occipital gyrus (IOG) would rather generate earlier face-selective responses.

Objectives   In this study, we asked the following questions:
— can we find an intracerebral N170 response in thelateral IOG with similar response properties as the N170 measured onthe scalp OT region in the same patient?
— are the SEEG responses in the IOG and the LFG correlated with the scalp N170?

Methods   Here we report neural responses to upright and inverted faces recorded in a unique patient using multicontact intracerebral electrodes implanted in the right IOG and in the OT sulcus above the right lateral FG (LFG) and 28 scalp electrodes.

Results   Simultaneous EEG recordings on the scalp identified the N170 over the right OT scalp region. The latency and amplitude of this scalp N170 were correlated at the single-trial level with the N170 recorded in the lateral IOG, close to the scalp lateral occipital surface. In addition, positive component maximal around the latency of the N170 (a P170) was prominent above the internal LFG, whereas this region typically generates an N170 (or ''N200'') over its external/ventral surface.

Conclusion   Altogether, these observations provide evidence that the IOG is a major cortical generator of the face-selective scalp N170, qualifying the potential contribution of the FG and questioning a strict serial spatiotemporal organization of the human cortical face network.

Keywords   Face perception; Multi-scale EEG; N170

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Impact de la fatigabilité musculaire du quadriceps sur les cocontractions spastiques entre quadriceps et ischiojambiers et sur la marche chez les patients hémiparétiques post-AVC

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