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Case report

Foix–Chavany–Marie syndrome after unilateral anterior opercular contusion: A case report

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1. Introduction

Severe dysarthria and a bilateral central voluntary paresis of lower cranial nerves with preserved automatic, involuntary, emotional movements are rare after head injury. This symptom is categorized as Foix–Chavany–Marie syndrome, which is generally considered to result from bilateral anterior opercular lesions. We present an extremely rare case of Foix–Chavany–Marie syndrome following contusion in the unilateral, right frontal operculum and premotor area.

2. Case report

A 20-year-old right-handed woman with a serious head injury in a traffic accident was transferred to our emergency unit by ambulance. On admission she was comatose, and computed tomography of the head showed a right-sided subdural hematoma causing mass effect and shift of midline structures from right to left, and left small occipital epidural hematoma with left occipital skull fracture. During emergency operation performed to remove hematomas, a brain contusion on the right operculum and premotor cortex was observed. Intraparenchymal ICP monitoring instrument was inserted and mild hypothermia was introduced. Her clinical condition improved gradually and she recovered consciousness one month and a half later. She was alert and awake, but was unable to swallow and speak.

She had no history of neurological illness. She had always been dextral from birth and scored +90 on the Edinburgh handedness inventory (EDI), agreeing with right hand dominance. Although her parents were right-handed, one of her brother and paternal grandfather were left-handed. Her listening and reading comprehension, and writing ability were normal. She was able to write research papers of her college without grammatical mistakes using a computer.

She had no dysosmia, visual disturbance, abnormal light reflex, sensory symptoms of trigeminal nerve, or hypoacusis. She had left lateral gaze palsy at first, presumably because of the right frontal lobe dysfunction, but it improved completely. The mouth was half open. She had masticatory diplegia. There was central facial diplegia with automatic voluntary dissociation. She could not wrinkle the forehead, shut the eyes or show the teeth forcibly. However she closed her eyes bilaterally when she slept. She smiled without asymmetry of the face when laughing involuntarily, indicating that there was no Bell's palsy. There was bilateral palate palsy with an abolished palatal reflex and brisk jaw reflex. Although the tongue was almost immobile, did not deviate, did not fibrillate at two months after the injury, it improved gradually and she could protrude the tongue a little with left hypoglossal nerve palsy at 18

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