# Effects of propofol on cortico-cortical evoked potentials in the dorsal language white matter pathway

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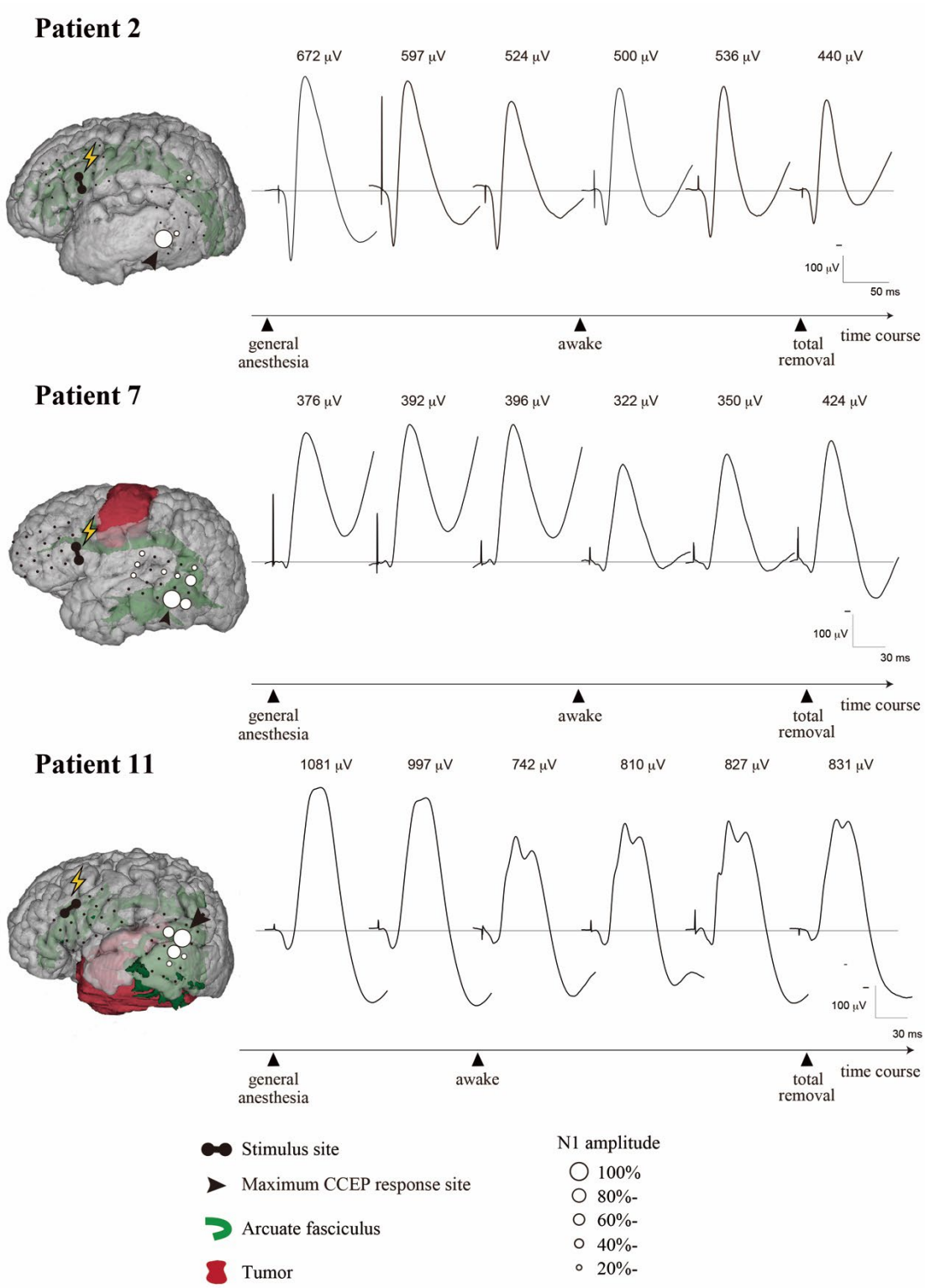
**Supplementary figure 1**

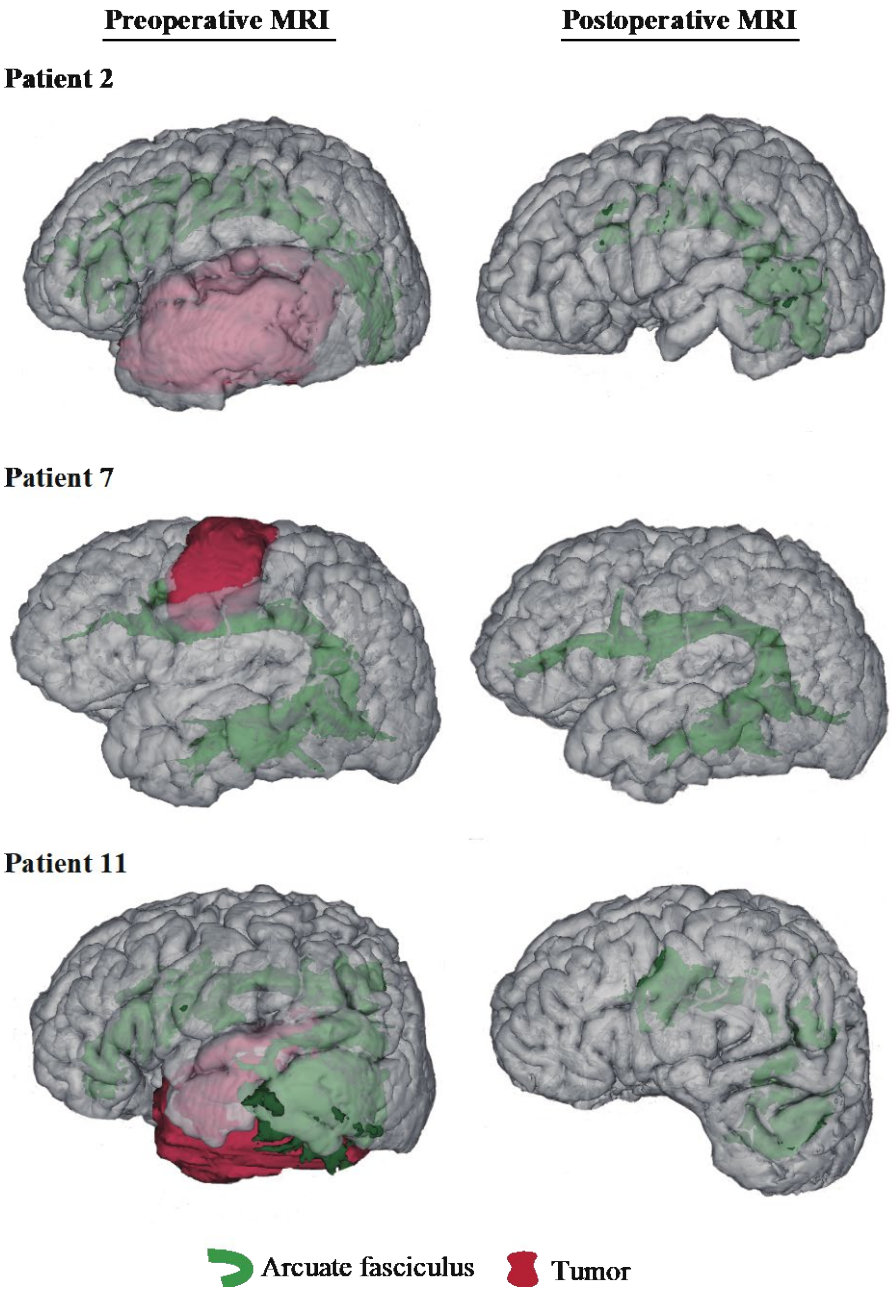


The live changes to the N1 amplitude during surgery in Patients 2, 7, and 11. In Patient 2, a temporal lobectomy incorporating removal of the tumor was performed under general anesthesia. The N1 amplitude decreased during general anesthesia (e.g., 672 to 524 μV), and after awakening, once the N1 amplitude increased due to reduction of brain edema or compression of the tumor (e.g., 500 to 536 μV), the N1 amplitude finally decreased (440 μV). This was probably due to partial damage to the arcuate fasciculus. In Patient 7, the resection of cortex and the white matter around the tumor started just before the patient awoke. The N1 amplitude decreased from the general anesthesia state to the awake state (e.g., 396 to 322 μV) and, after awakening, the N1 amplitude increased due to reduction of brain edema or compression of the tumor (424 μV). In Patient 11, a temporal lobectomy incorporating removal of the tumor was performed under general anesthesia. The N1 amplitude decreased during the general anesthesia (e.g., 1081 to 997 μV) and, after awakening, the N1 amplitude increased due to reduction of brain edema or compression of the tumor (831 μV).

The CCEP distribution is shown by a circle map in each patient. The diameter of the circle at each electrode represented the percentile of the largest amplitude at the maximum CCEP response site.

CCEP: cortico-cortical evoked potential

**Supplementary figure 2**




The preoperative and postoperative MRI in Patients 2, 7, and 11. Three-dimensional MRI shows the long segment of the AF (green) and the tumor (red). In Patients 2 and 11, temporal lobectomy was performed. Note that the postoperative AF tract remains traceable in all three patients.

AF: arcuate fasciculus, MRI: magnetic resonance imaging