

## **P12 The pathological embodiment of someone else's' arm: an anatomical account**

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**Objective:** Here we aim at examining the anatomo-functional nature of recently discovered monothematic delusion of body ownership due to stroke-induced brain damages: the "embodiment" of someone else's body part within one's own somatosensory/motor system.

**Participants:** Two groups of neuropsychological patients affected by focal right hemisphere lesions, but differing (only) for the presence of such delusional belief of body ownership. The lesional cluster specifically associated to the delusion was obtained by means of a voxelwise statistical analysis.

**Results:** The subtraction analysis revealed a pattern involving different brain structures, particularly within white matter tracts of the brain.

**Conclusions:** According to the current anatomical evidence on the neural basis of body ownership, we discussed such kind of body ownership impairment in terms of the relationship between preexisting body representation and actual incoming sensory inputs.