**Supplementary File 1. Number of significant voxels (from the atlas of grey matter – AAL – and white matter – JHU – and NatBrainLab’s atlas) resulting from the VLSM analysis with the general pleasantness sensitivity scores** (velvet-sandpaper average pleasantness ratings), N=36**.**

As control for a general pleasantness deficit, patients rated how pleasant it would be to be touched by a typically pleasant material (i.e. velvet, Mpleasantness rating = 6.91, SD = 1.88) and a typically unpleasant fabric (i.e. sandpaper, Mpleasantness rating = 0.33, SD = 0.93). Similarly, as for CT pleasantness sensitivity, top-down tactile pleasantness sensitivity was computed as the difference between pleasant (velvet) and unpleasant pleasantness ratings (sandpaper), for each patient. We considered the same patients as for the CT pleasantness sensitivity VLSM analysis (N=36 as we had missing data for 5 of them) and ran a VLSM analysis with this top-down tactile pleasantness sensitivity.

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| --- | --- | --- | --- | --- | --- | --- |
| **Regions necessary for imagined tactile pleasantness sensitivity** | | | | | | |
| **AAL** | **Region** | **Volume** | **x** | **y** | **z** | **T-value** |
| Unclassified | 111 | 24 | -18 | 6 | 3.23 |
| Caudate | 48 | 13 | 14 | 4 | 2.85 |
| Putamen | 14 | 21 | 4 | 8 | 2.69 |
| Pallidum | 69 | 22 | -5 | 7 | 2.86 |
| Thalamus | 19 | 20 | -13 | 7 | 2.96 |
| **JHU** | Unclassified | 22 | -5 | 7 | 22 | 2.86 |
| Anterior\_limb\_of\_int | 15 | 14 | 4 | 15 | 2.85 |
| Posterior\_limb\_of\_in | 24 | -18 | 6 | 24 | 3.23 |
| Retrolenticular\_part | 25 | -22 | 7 | 25 | 2.60 |
| Posterior\_corona\_rad | 27 | -34 | 25 | 27 | 2.53 |
| **NatBrainLab** | Unclassified | 82 | 13 | 14 | 4 | 2.85 |
| Corpus\_Callosum | 1 | 22 | -28 | 28 | 2.53 |
| Cortico\_Ponto\_Cerebellum | 6 | 19 | -10 | 12 | 2.49 |
| Cortico\_Spinal | 96 | 23 | -18 | 6 | 3.10 |
| Internal\_Capsule | 76 | 24 | -18 | 6 | 3.23 |