Bilateral transient olfactory bulbs edema during COVID-19-related anosmia

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An asymptomatic 27-year-old physician is diagnosed SARS-CoV-2 by occupational medicine after contagion (RT-PCR). Four days after the diagnosis (D4) he experienced complete anosmia and dysgeusia. MRI-1.5T (D7) showed signs of bilateral olfactory bulbs edema on 3D-CISS-T2-WI, demonstrated by severe enlargement (left: 73 mm³, right: 64 mm³) and an abnormal high-signal intensity (Figure). Olfactory clefts showed mild edema. The olfactory pathways, including the cortical projections (FLAIR and DWI not shown) were normal. Sensory recovery and negative RT-PCR (positive at D1-2-10) appeared at D14. A D24 MRI confirmed the normalization of OB signal and volumes (left: 22 mm³, right: 17 mm³).
## APPENDIX. AUTHORS

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REFERENCES


FIGURE. Transient olfactory bulbs (ob) edema

Coronal 3D-CISS-T2wi at (1.5-Tesla) during anosmia (D7, A, C) compared to recovery (D24, B, D). MR shows olfactory bulb (pink) transient volume and signal increase, olfactory cleft edema (brown) and focal left ethmoid (green) sinusitis (*), normal cranial fossa (grey line) and orbit (yellow).
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