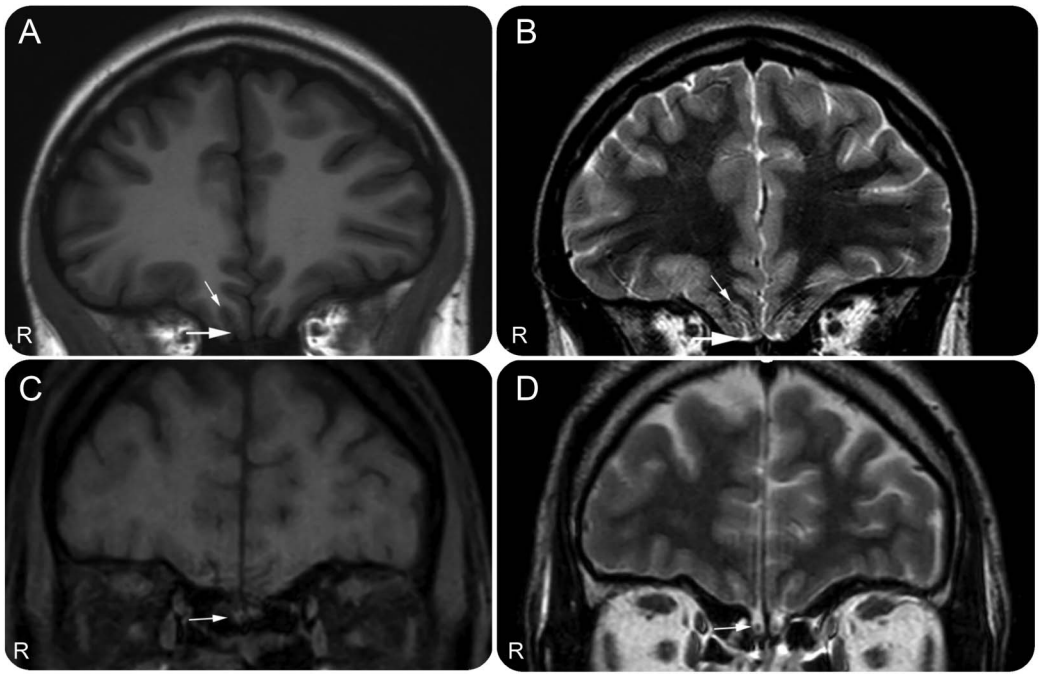
A case of congenital anosmia

Figure MRI findings of congenital anosmia



(A) Coronal T1 and (B) Coronal T2 MRI show absence of the olfactory bulbs in olfactory groove (thick arrows) with well-developed olfactory sulci (thin arrows). Normal (C) T1 and (D) T2 MRI from an age-matched girl for comparison show presence of olfactory nerves (white arrow).

An 18-year-old girl presented with inability to smell from birth. She had no symptoms to suggest an endocrine disturbance. Anosmia was confirmed on bedside testing. A diagnosis of congenital anosmia was made. A 3T MRI scan (figure) of this patient revealed no olfactory bulbs but developed olfactory sulci. The rest of the brain including corpus callosum was normal. The differential diagnosis for congenital anosmia is Kallman syndrome. However, in Kallman syndrome, the olfactory sulci would also be absent.

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