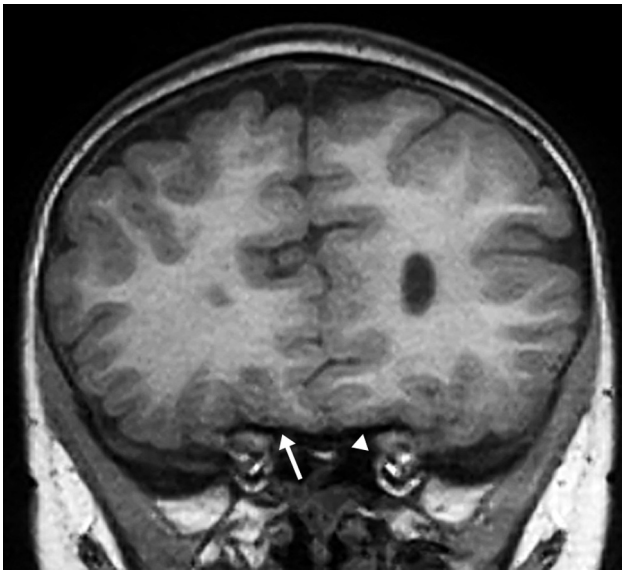
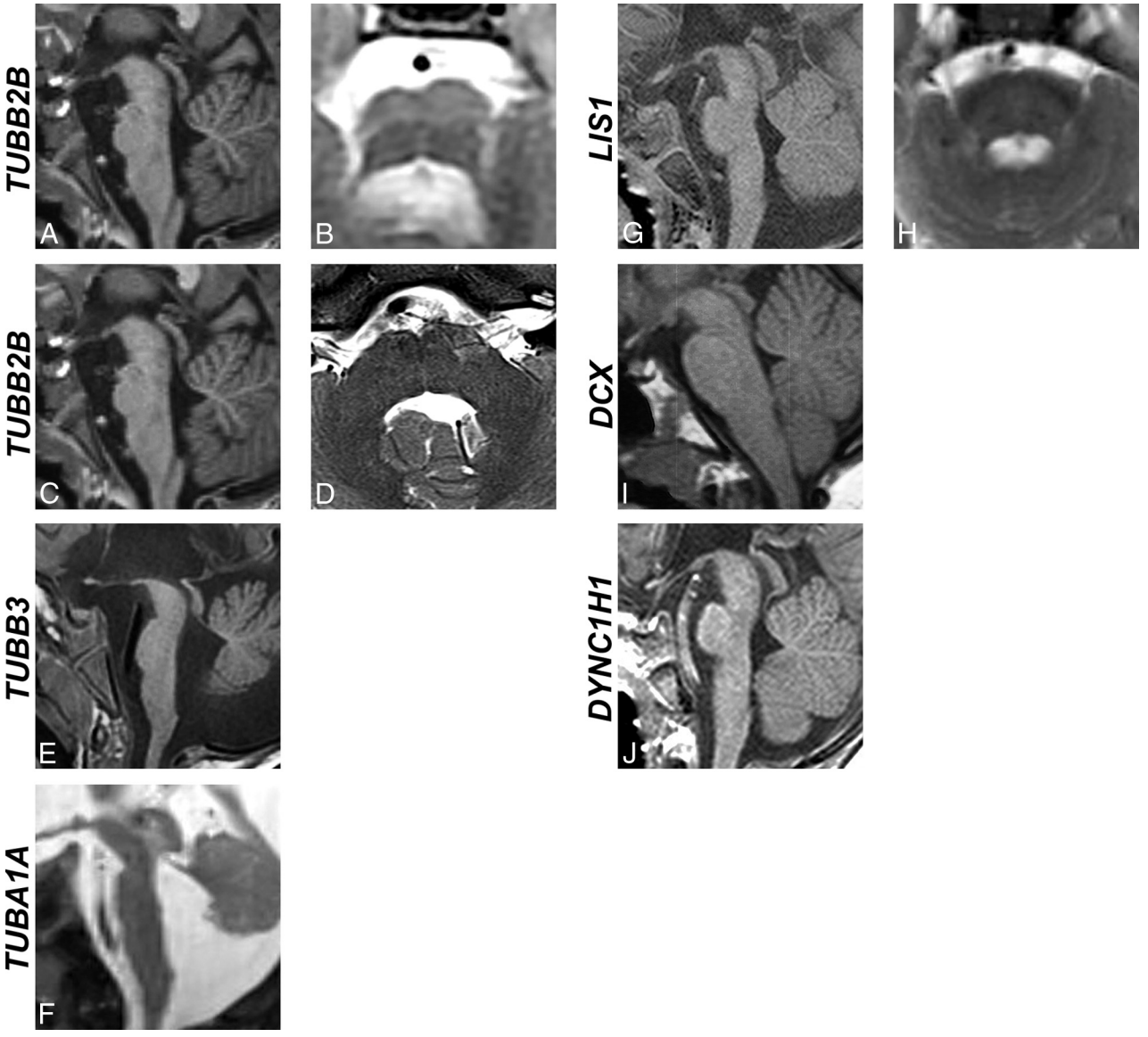
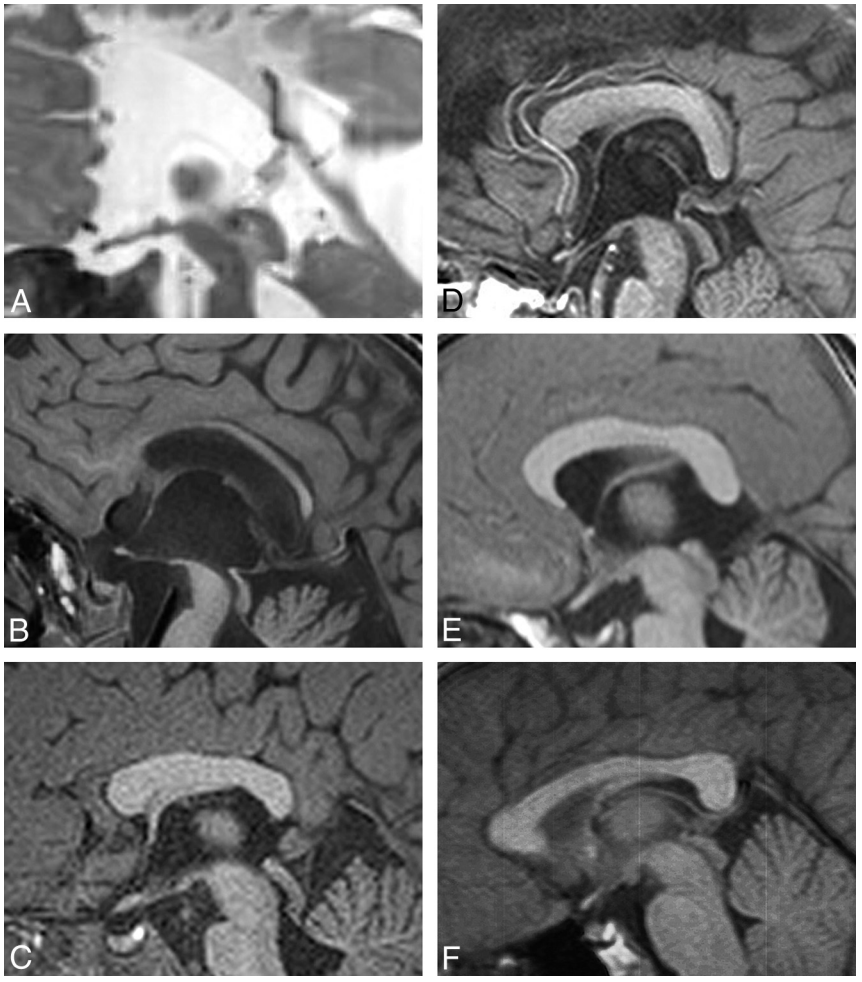


ON-LINE FIG 1. Coronal T1WI in 3-year-old patient with a *TUBA1A* mutation reveals an absent left olfactory sulcus with a relatively preserved right olfactory sulcus.



ON-LINE FIG 2. Midline sagittal T1WI (*A*, *C*, *E*, *F*, *G*, *I*, *J*) and axial T2WI through the pons (*B*, *D*, *H*) reveal different brain stem phenotypes. A patient with a *TUBB2B* mutation (*A* and *B*) has an asymmetric small pons with a central cleft and asymmetric, small middle cerebellar peduncles. Another patient with a *TUBB2B* mutation (*C* and *D*) also exhibits a small pons with a central cleft, though this one is more symmetric. A patient with a *TUBB3* mutation (*E*) demonstrates a diffusely thin pons and brain stem. A patient with a *TUBA1A* mutation (*F*) exhibits a disproportionately small brain stem, which is similar in anteroposterior diameter to the adjacent medulla. Overall, patients with MAP mutations have less severe brain stem (particularly pontine) findings. Sagittal (*G*) and axial (*H*) images from a patient with a *LIS1* mutation show a mildly thin pons. These findings can be contrasted with the normal brain stem (including a normal pons) in a patient with a *DCX* mutation (*I*). Finally, a patient with a *DYNC1H1* mutation (*J*) exhibits a small but distinct pons.



ON-LINE FIG 3. Midline sagittal T1WI (*B–F*) and T2WI (*A*) in patients with different tubulin and microtubule-associated protein gene mutations reveals different callosal phenotypes, including the following: an absent corpus callosum in a patient with a *TUBA1A* mutation (*A*); a very thin corpus callosum in a patient with a *TUBB3* mutation (*B*); a short, thick corpus callosum in a patient with a *TUBB2B* mutation (*C*); an L-shaped corpus callosum in a patient with a *DYNC1H1* mutation (*D*); a nearly normal corpus callosum in a patient with a *LIS1* mutation (*E*); and a normal corpus callosum in a patient with a *DCX* mutation (*F*).