

Common brain and spinal MRI abnormalities seen in patients with MPS ⁴

	MPS I-H	MPS I-H/S	MPS I-S	MPS II	MPS IIIA	MPS IIIB	MPS IIIC	MPS IIID	MPS IVA	MPS IVB	MPS VI	MPS VII	MPS VII
Signal alterations	+++	++	++	+++	++	++	—	+	±	±	+	++	—
Enlarged PVS	+++	++	++	+++	++	++	—		—	—	++	—	—
Hydrocephelus/ ventriculomegaly	+++	++	++	+++	++	+	—	±	±	—	+	—	—
Atrophy	++	+	+	+++	+	+++	—	+	—	—	+	—	—
Spinal stenosis	++	++	++	+	+	—	—	—	+++	+++	+++	+	—

+++ Constant ++ Frequent + Less frequent ± Rare — Not described in the literature to our knowledge

Adapted from Zafeiriou, *Am J Neuroradiol*, 2013.

Abbreviation: PVS, perivascular space.