

Table S1 MRI characteristics of vascular malformations adapted from *Compendium Vascular Anomalies* [15].

Type of VMF	Description	T1-sequence	T2-sequence	Twist-Angio	Contrast-enhanced T1-sequence
AVM	Nidus, dilated vessels, flow-related aneurysms	Nidus nearly invisible, dilated vessels, flow-related aneurysms, flow voids	Nidus nearly invisible, dilated vessels, flow-related aneurysms, flow voids	Nidus immediately contrasted, draining veins immediately contrasted, Flow-related aneurysms	Dilated vessels to and from MF, Flow-related aneurysms
VM	Phlebolites & thrombi, septated, lobulated mass with low space-occupying effect	Isointense (to muscle), fluid-fluid-levels in large VM	Hyperintense, fluid-fluid-levels in large VM	None to very slow contrast agent pooling	Homogenous enhancement
LM	Cystic lesion	Iso- to hypointense, fluid-fluid-levels	Hyperintense, fluid-fluid-levels	Not visible	Only enhancement of cystwall

Abbreviations: LM: Lymphatic Malformation VM: Venous Malformation AVM: Arteriovenous Malformation VMF: Vascular Malformation