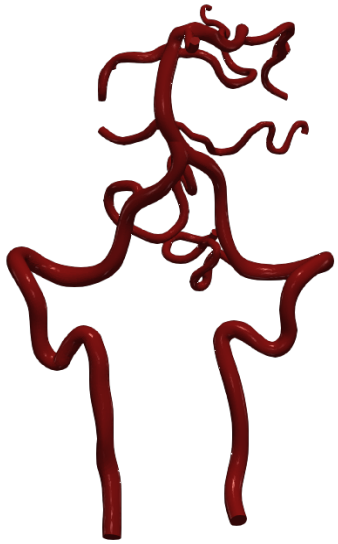
Vascular Model Repository Specifications Document



0167_0001

Species	Human
Anatomy	Vertebral
Disease	Healthy
Procedure	-

Clinical Significance and Background

Vertebral

The vertebral arteries are involved in providing blood to the brain and the spine. They provide about 20% of the blood to the brain while the carotid arteries provide the other 80%. The two vertebral arteries start at the subclavian arteries near the collarbone and run up the left and right sides of the spinal column in the neck. At the base of the skull, the two vertebral arteries then merge into one artery called the basilar artery which is the main supply of the blood to the brain stem and also supplies a blood to the brain itself through the Circle of Willis.

Clinical Data

General Patient Data

Age (yrs)	24
Sex	Female

Notes

Paper patient ID "4". See DOI for more details. See below for information on the image data and boundary conditions associated with the model.

Image Modality: MR

Image Type: DICOM

Image Source: UCSD

Image Manufacturer: GE MEDICAL SYSTEMS

Publications

See the following publications which include the featured model for more details:

Bockman, M.D., Kansagra, A.P., Shadden, S.C. et al. Fluid Mechanics of Mixing in the Vertebrobasilar System: Comparison of Simulation and MRI. Cardiovasc Eng Tech 3, 450-461 (2012).
https://www.doi.org/10.1007/s13239-012-0112-8

License