

Vascular Model Repository

Specifications Document



0003_0001

Species	Human
Anatomy	Aortofemoral
Disease	Healthy
Procedure	-

Clinical Significance and Background

Aortofemoral

The largest blood vessel and the human body's primary artery, the aorta is responsible for carrying oxygenated blood pumped from the heart to rest of the body. The aorta is divided into four sections: the ascending aorta, the aortic arch, the thoracic aorta, and the abdominal aorta.

The last section of the aorta, the abdominal aorta, starts at the diaphragm and ends just above the pelvis. This section is responsible for supplying blood to the stomach, kidneys, liver, and intestines. Past the abdominal aorta, the artery branches into two separate iliac arteries, one for each leg, which are responsible for supplying oxygenated blood to the legs and lower half of the body.

Each iliac artery, in turn proceeds to branch into the external and internal iliac arteries, the former of which then becomes the main femoral artery. Again, the femoral arteries are a major component in supplying oxygenated blood to the legs and lower body. When the femoral arteries are included with the abdominal aorta, the whole system is referred to as the aortofemoral system.

Clinical Data

General Patient Data

Age (yrs)	21
Sex	Female

Notes

- See below for information on the image data and boundary conditions associated with the model.

Image Modality: CT

Image Type: DICOM

Image Source: OSMSC

Boundary Conditions: Refer to boundary conditions in the SimVascular file.

Publications

There are no publications associated with the featured model.

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AND/OR

N.M. Wilson, A.K. Ortiz, and A.B. Johnson, "The Vascular Model Repository: A Public Resource of Medical Imaging Data and Blood Flow Simulation Results," J. Med. Devices 7(4), 040923 (Dec 05, 2013) doi:10.1115/1.4025983.

AND/OR

Reference the official website for this data: www.vascularmodel.com

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