Question 1404091200

Damping of arterial pulse due to hyperelastic and viscoelastic deformation

• Damping of arterial pressure

Arterial pulse oscilates usually between 80 and 120mmHg (from 10665.76 to 15998.64 Pa with increment of 5332.88 Pa). Pulse is damped along the arterial path.

We are interested in simulating such behaviour with coupled structure fluid analysis.

Fluid must be transient analysis with pulse of non newtonian blood.

Solid must be hyperelastic with viscoelastic properties showing energy absorbtion.