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# Modeling of Blood flow through multi-stenosis arteries

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Heat transfer and fluid flow analysis of blood flow through multi stenosis arteries with viscous dissipation effect are investigated. The governing equations of the blood flow are solved numerically by finite volume technique. The flow pattern of temperature, pressure and shear stress distribution at the wall are obtained for different flow conditions. A comparison of the present solution with some experimental and numerical published data is also presented and a good agreement was found. The viscous dissipation affects heat generation such that several parameters such as Reynolds number, Eckert number and the area constriction seem to be important in the development of arterial diseases such as atherosclerosis. The results indicate that high radial velocities prevail for high degree of stenosis and high velocity gradient in the concavity in artery wall. This leads to high shear stress which is a major factor in arterial diseases. These instructions give you basic guidelines for preparing camera-ready papers for conference proceedings

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