

Article Abstract

Title:	Effect of magnetic field on the blood flow in artery having multiple stenosis: a numerical study
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Abstract:	In the present study a mathematical model for the blood flow in stenosed artery in the presence of magnetic field is proposed. The laminar, incompressible, fully developed, non-Newtonian flow of blood in an artery having multiple stenosis is numerically studied under the action of transverse magnetic field. The governing equations are transformed by using a radial transformation and the numerical results are obtained using a finite difference technique. Effect of overlapping stenosis and externally applied magnetic field in the blood flow is discussed with the help of graph. All the flow characteristics are found to be affected by the presence of multiple stenosis and exposure of magnetic field of different intensities.
Keywords:	Blood flow, Magnetic Field, Overlapping Stenosis, generalized Power Law, Finite Difference Method

Abstract

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