Mathematical Formulation on the Multi-phase Flow through Composite Stenosis

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Abstract

The present article provides a concept concerning the mathematical model describing flow of blood through a Composite Stenosis Artery. Stenosis or sclerosis is abnormal and strange condition of the obstruction of flow of blood across the semi lunar valve resulting in serious consequences. The matter of stricture is increasing at dreaded rate within the developing and also the underdeveloped countries. During this paper there's analysis of the mathematical laws and equations of blood flow through a composite stenosis in an artery and a few vital results are found. The result shows that the speed of the blood varies reciprocally with the radius of artery. The pressure exerted by the blood varies directly with its rate.

Keywords: Formulation, Multi-phase flow, Stenosis.

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