

عنوان مقاله:

A Balloon Model Examination with Impulsion of Cu-Nanoparticles as Drug Agent through Stenosed Tapered Elastic Artery

محل انتشار:

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خلاصه مقاله:

In this speculative examination, main focused is to address Cu-nanoparticles application in an inclined stenosed elastic artery with balloon model examination. Flow of blood in an inclined stenotic artery is investigated mathematically by considering its behavior as viscous fluid. The dimensionless terms of temperature, velocity, resistance to blood flow and stress on wall of stenotic inclined artery has been computed by using mild stenosis approximation. The model is also used to understand the significance of overlapping stenosed artery with tapered angle and inclination angle. At the end, the results confirmed that the impulsion of copper as drug agent minimized the amplitude of the resistance to blood flow and hence nanoparticles plays an important role in engineering as well in biomedical applications.

کلمات کلیدی:

Blood flow, Overlapping stenosis, Balloon model, Cu, Nanoparticles

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