

## A Study of Stenosis and Aneurysm

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## Abstract

Aneurysm and stenosis are precursors to some fatal diseases. This study aims to find out how the changes in an artery geometry can influence the flow characteristics of blood. A wedgeshaped geometry with an appropriate cosine curve section was used to model the diseased arteries. They were studied for different degrees of the disease in terms of axial wall pressure and wall shear stress. A study on the insufficiency of a Newtonian model to describe these phenomena is also done.

## References

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