A STUDY ON A NEWLY DESIGNED AORTOFEMORAL PROSTHETIC Y GRAFT

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Aortofemoral prosthetic Y grafts are applied for treating abdominal aortic aneurysms. In this study, experiments were conducted in order to demonstrate the effects of an incremental increase in branch diameter in a newly designed aortofemoral Y graft under conditions of both steady and pulsatile flow conditions. It was revealed that in Y grafts, the incremental increase by only 4 mm in the branch diameter affects hydrodynamic characteristics drastically under conditions of both steady and pulsatile flow conditions.

Keywords: aortofemoral prosthetic Y graft, mock circuit, bifurcation, pulsatile flow, steady flow