

**BOVINE PERICARDIUM COVERED STENT
FOR TREATMENT OF DEGENERATIVE SAPHENOUS VEIN GRAFT LESIONS**

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Background: Percutaneous Intervention (PCI) of old saphenous vein grafts is associated with complications due to the release of occlusive material and subsequent no reflow phenomenon. The risks of restenosis in these cases are also very high. Bovine pericardium has been shown to be well tolerated in the human body and has been successfully applied for use on prosthetic heart valves. The use of a bovine pericardium covered stent for SVGs may successfully reduce the no reflow effect as well as restenosis.

Methods: Consecutive patients providing informed consent were included. SVGs were greater than 3 years of age and were between 3.0-4.5mm in diameter. The bovine pericardium was mounted upon a GFX stent which was hand crimped upon an angioplasty balloon.

Results: Six patients (5 males) aged 61-76 years underwent deployment of 11 stents to 8 grafts. Graft age ranged from 9-16 years. Two patients had undergone CABG twice. The mean FC was class II. In 4 of the 6 cases GP2b3a inhibitors were also used. Stent deployment was successful in all cases. Adjunctive stenting with uncoated stents was performed in two cases. Thirty day follow-up demonstrated no MACE in 5 cases. There was a single mortality in a case where two SVGs were treated and it appears that at 10 days the patient may have suffered a subacute occlusion of a stent. It is not clear whether the patient had taken antiplatelet therapy.

Conclusion: Initial experience with a bovine pericardium covered stent demonstrates that it can be successfully deployed in old SVGs with good acute results. Antiplatelet therapy remains essential with this device