

**Methods:** All patients at a tertiary care facility that underwent femoral arterial access from January 2009 to July 2011 were reviewed. Arterial complications that resulted in operative repair during hospitalization were identified. Cases were separated into those utilizing CD and those employing manual compression (MC). The two groups were evaluated for demographic and procedural differences. The subgroup of patients that underwent CD placement were then evaluated for ultrasound use and performance of adequate completion angiogram.

**Results:** 11,114 cases were reviewed. CD were placed in 5576 (50.2%) while MC was used in 5538 (49.8%). Surgical complications were identified in 30 (0.54%) of CD cases and 26 (0.47%) of MC cases ( $P=.61$ ). Demographic data and procedural data was not statistically significant between the two groups except for younger average age in the CD subset ( $P=.032$ ). Amongst the 30 surgical complications employing CD, 7 patients (23.3%) were found to have access in the wrong vessel. Ultrasound was utilized in 4/30 cases (13.3%). Completion angiograms were not recorded in 12/30 (40%) of cases. In 11/18 cases (61%) completion angiograms were determined to be inadequate for placement of a CD.

**Conclusions:** Our data suggests that use of CD following femoral artery access does not decrease the rate of surgical complications compared with MC. Demographic and procedural factors did not appear to influence the complication rate. In 10/30 (33.3%) cases the wrong vessel was accessed or a device was deployed in an inadequate vessel by completion angiography. Unless, factors can be employed to decrease the rate of complications, we cannot justify the use of CD in the prevention of surgical complications.

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#### PVSS10.

##### Temporary Distal Vessel Occlusion Using Reversible Thermo-Sensitive Polymer in Infra-Popliteal Bypasses for Severe Leg Ischemia

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**Objectives:** We report our experience with the use of a novel Thermo-Sensitive Polymer (LeGoo) for distal vessel control during Infra-Popliteal Bypasses (IPB) in patients with severe leg ischemia.

**Methods:** Retrospective analysis of all IPB procedures performed using LeGoo from January 2010 till April 2011. We specifically looked at technical success in achieving bloodless anastomotic field, intraoperative LeGoo-related complication and re-intervention for anastomosis-related lesion during follow-up.

**Results:** Thirty-four IPBs using LeGoo were performed during the study period. The distal anastomosis was performed to the Anterior tibial artery (n.=9), Posterior tibial artery (n.=7), Peroneal artery (n.=5), Tibio-Peroneal trunk (n.=6) and Dorsalis Pedis artery (n.=7). Follow-up period ranged from 4 to 24 months. They were all enrolled in a duplex graft surveillance programme and were offered intervention for threatened grafts. Twenty-three patients completed at least 1 year follow-up. Bloodless anastomotic field was achieved in 32 patients. One patient needed a Fogarty catheter-assisted retrieval of the occlusive polymer plug for the outflow vessel. Five patients needed salvage angioplasty, 2 of them for a distal anastomosis-related stenosis. Four grafts occluded during follow-up, one was successfully thrombolysed and 2 patients had a major amputation.

**Conclusions:** LeGoo is a potentially safe and useful device to achieve a bloodless distal anastomotic field in patients undergoing IPBs. This may be particularly important in constructing the anastomosis to a calcified distal vessel. A large randomised controlled study is needed to support our findings.

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