

Improving Fem Pop Bypass Graft Patency Rates

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A fast track referral system from the vascular laboratory to interventional radiology was set up in March 2011 for graft surveillance programme (GSP) patients with significant stenoses/risk of graft failure.

Background

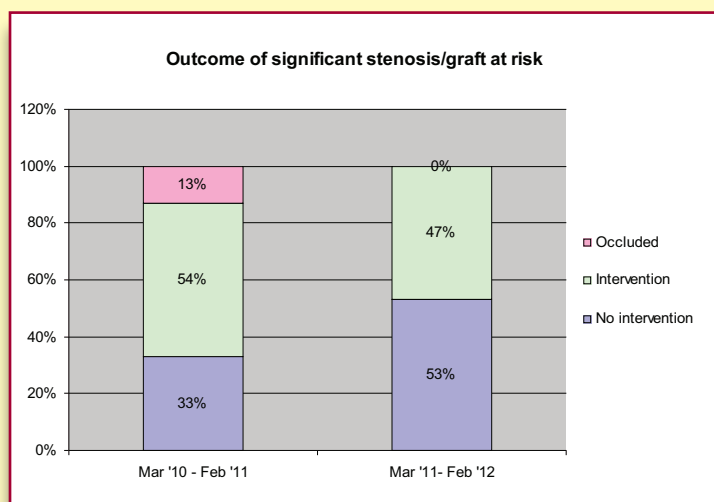
Development of graft stenosis is a major source of bypass graft failure. Bypass grafts are prone to stenosis/intimal hyperplasia and research has shown that up to 30% of vein grafts develop stenosis or defect, 77% of these occurring in the first year. Patients are scanned at regular intervals, up to 18 months post op, to allow detection of any defects so that disease progression can be monitored or intervention can be carried out before the graft occludes.

We were finding that the patients with significant stenoses weren't getting interventions in time, as the referral pathway was too long, resulting in graft occlusions. Therefore a rapid access referral system was set up to try to prevent graft occlusion. The Vascular Lab now has direct access to refer a patient for intervention.

Results

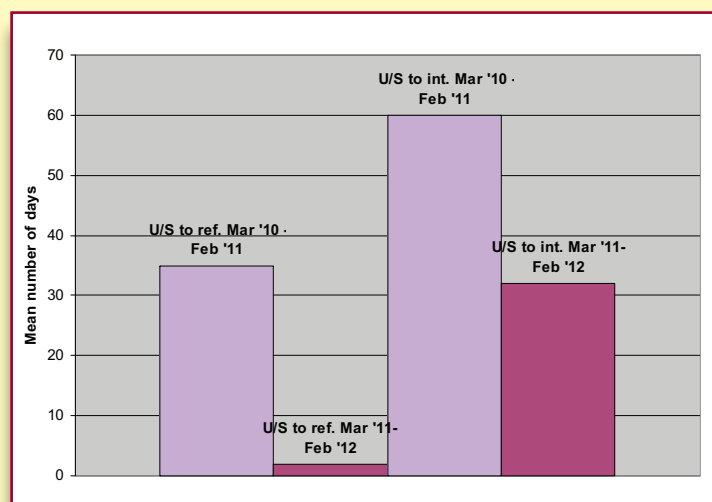
March 2010 – February 2011.

- 24 of the 111 (22%) scans for this period were noted to have significant stenoses/at risk of failure.
- 8 had no intervention (33%), 13 had intervention (54%) and 3 were occluded by time of angiogram (13%).
- The mean number of days from U/S scan to referral to radiology was 35 (0 – 109 days).
- The mean number of days from U/S scan to intervention was 60 (11 – 167 days).



March 2011 – February 2012.

- 17 of the 89 (19%) scans for this period were noted to have significant stenoses/at risk of failure.
- 9 had no intervention (53%).
- 8 (47%) had intervention – 5 (63%) of which had direct, same day referral from vascular lab to radiology.
- No grafts were found to be occluded by the time of angiogram.
- The mean number of days from U/S scan to referral to radiology was 2 (0 – 10 days).
- The mean number of days from U/S scan to intervention was 32 (6 – 88 days).



Conclusions

- Approximately 20% of patients from each set of data were found to have significant graft stenosis or to be at risk of failure.
- The mean number of days from U/S to referral to radiology reduced from 35 to 2 after the introduction of fast track referral.
- The mean number of days from U/S to intervention halved (60 to 32) after the introduction of fast track referral.
- No grafts were found to be occluded by the time of angiogram after the fast track referral route was introduced.

For this audit, 111 GSP scans from March 2010 – February 2011 were compared to 89 GSP scans from March 2011 – February 2012.