

Type-3 endoleaks. Renal complications were seen in 3/11 patients, 2 acute kidney injuries resolved spontaneously. 1 patient re-admitted Day-19 with acute renal failure and bilateral renal artery occlusion, underwent endovascular recanalization and stenting of the left renal artery, remains dialysis dependent. 2/11 have died at 21 and 60 months, both from non-aneurysm related disease. One iliac limb has been extended for 1b endoleak and sac expansion. 2/11 endoleaks are under surveillance.

Conclusions: Complex Endovascular Aneurysm Repair is feasible in patients considered unsuitable for standard endovascular. Mid-term results suggest this procedure is durable, but long-term follow-up is essential and awaited.

Supervised Exercise Therapy (SET) in the Management of Peripheral Arterial Disease: Factors Determining Compliance and Functional Outcome

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Introduction: Peripheral arterial disease (PAD) is a common condition associated with considerable morbidity. Supervised exercise therapy (SET) has emerged as an effective option in the management of this patient cohort. Unfortunately, poor compliance remains prevalent.

Aim: The aim of this study was to assess factors influencing symptomatic improvement and SET participation.

Methods: This single-centre retrospective cohort study was inclusive of all patients with confirmed PAD referred for SET between October 2010 and December 2013. Patient demographics and compliance data were extracted from medical records with phone interviews establishing subjective outcomes.

Results: A total of ninety-eight patients were referred for SET during the study period. The mean age was 69.2 (± 10.1) with 18% being female. Median follow-up was 25.1 months (IQ range 17.0–31.6). Overall, the mean number of sessions attended was 19.5. Regarding symptomatic improvement exercise compliance was associated with a significant improvement in symptoms ($p = 0.001$). Other factors including anatomical level of claudication ($P = 0.042$) and educational level ($p = 0.007$) were found to affect the outcome of SET. Multivariate analysis revealed hypertension as a predictor of symptomatic outcome after SET ($p = 0.045$). Concerning compliance, ex-smokers ($p = 0.021$) and those previously diagnosed with hypercholesterolemia ($p = 0.020$) or ischemic heart disease ($p = 0.029$) had superior exercise compliance. Using linear regression, smoking history ($p = 0.024$) and quality of symptoms ($p = 0.018$) were identified as predictors of compliance to SET.

Conclusion: Establishing exercise compliance remains challenging in the PAD cohort. Pre-exercise patient education and optimization may result in improvements in function and compliance.

Explant of Aortic Stent Grafts Following Endovascular Aneurysm Repair

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Introduction: Failure of endovascular aneurysm repair (EVAR) may require explant of the stent graft in a subset of patients.

Methods: Patients undergoing explant of EVAR were identified from a prospectively maintained online database, with additional information obtained through retrospective analysis of medical records.

Results: Over an 18 year period 1996–2014, there were 496 EVAR procedures performed in our institution for abdominal aortic aneurysm. There were 11 explants, three of these were referrals from other vascular centres. The average age was 72 years (range 65–77). The median length of time from implantation to explant was 33 months (range 0.3–106). Overall 5/11 cases were elective procedures. Indications for elective explant were Type 1 endoleak ($n = 1$), type 2 endoleak with increasing sac size ($n = 1$), type 4 endoleak ($n = 1$), increasing sac size without evident endoleak ($n = 1$) and stent migration not amenable to endovascular revision ($n = 1$).

The remaining 6 cases were emergency procedures, with three patients presenting with rupture post EVAR, and two patients presenting with acute stent thrombosis. The remaining patient presented emergently with aorto-enteric fistula with a known infected EVAR stent. There were no mortalities in the elective group and two mortalities (33%) in the emergency group.

Conclusion: Endoleak remains the most common indication for EVAR explant. Explant of aortic stent grafts in an elective setting is a safe and effective treatment option.

SURGICAL TRAINEE POSTER ABSTRACTS

Even a Small Change can Still Make a Difference

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Background: Session starting time is one of the key factors of TPOT and represent a recognized measure of theatre efficiency as late start is associated with list overrunning and patient cancellation. We aimed to investigate the vascular list start time in our institution and to implement interventions in order to minimize delay.

Methods: Data was collected from a prospectively updated theatre database and medical notes. SPSS 22 was used for statistical analysis. Initial audit was conducted to determine delays in starting time. This led to the proposal and implementation of "fistula first" initiative. Plan-do-study-act (PDSA) cycle were completed and a re-audit was then carried out.

Results: Initial audit showed that 82% of our theatre sessions did not start in time with a mean delay of 51.9 (\pm 53.1) minutes. In addition, 47% of the lists overran the finishing time with mean delay of 34.5 (\pm 47.9) minutes. Implementation of “Fistula first” significantly improved the number of late starting sessions to 56% with a mean delay of 22.6 (\pm 26.7) minutes ($p = 0.001$). It also reduced overrunning lists to 35% with a mean delay in finishing time of 28.2 (\pm 48.9) minutes ($p > 0.05$). Looking at dialysis access fistula, intervention reduced late starting sessions from 87.5% to 60% with mean delay reduction from 52.7 (\pm 41.8) to 20.13 (\pm 26.2) minutes ($p = 0.028$).

Conclusion: Fistula first proved its efficiency in reducing the delay in session starting and this experience could be adopted by other similar institutions.

Study Protocol: Endovenous Ablation of Incompetent Saphenous Veins and Best Medical Therapy Versus Best Medical Therapy in Patients with Venous Leg Ulceration, a Multi-center Randomized Controlled Trial

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The care of venous leg ulcers (VLU) is associated with prolonged disability, important socioeconomic impact, and significant psychosocial morbidity and can consume a significant amount of resources. In addition, approximately 50% of VLUs may recur within 10 years and they are marked by a significant component of chronicity.

Compression therapy remains the most popular and effective method in management of venous ulcer. Although surgical correction of superficial venous incompetence was found to reduce recurrence rate of ulceration, its role in ulcer healing is not confirmed. Our systematic review and meta-analysis confirmed that the quality of the evidence available to support recommendations for operative management is mostly limited to level C evidence.

Moreover, different modalities of treating varicose veins were intensively investigated in RCTs and they identified similar efficiency and quality of life of endovenous ablation and open surgery in treating varicose veins but less post-operative pain, complication rates and recovery in the endovenous group.

Hence, we are proposing a multi-center randomized controlled trial to determine whether endovenous ablation of incompetent superficial veins in addition to best medical treatment has any superior effect compared to best medical treatment alone in regards to ulcer healing and ulcer recurrence rates. The secondary objectives are; to evaluate the cost effectiveness of the intervention for incompetent superficial veins in management of chronic venous ulcers and to compare the commonly used endovenous ablation procedures in management of lower limb varicose veins.

Baroreceptor Activation Therapy for the Treatment of Resistant Hypertension: First Case in the British Isles

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Introduction: The need to treat resistant hypertension has triggered the development of novel therapeutic options. Several trials have shown that carotid baroreceptor activation is a safe, & effective approach in treating this condition. Used in Europe for few years, this report describes the first case of surgical implantation of the Barostim neo device in the British Isles.

Case Description: 53 years-old gentleman with medical background of Sjogren’s syndrome, Type II diabetes, & drug-resistant hypertension. The hypertension is thought to be related to autonomic dysfunction, as no other causes for secondary hypertension was found, despite exhaustive investigations. Through standard longitudinal neck incision, exposure of the carotid bifurcation was done avoiding dissecting the carotid adventitia. Mapping of the carotid sinus with the 2mm electrode was done. Upon testing, excellent response with 20% blood pressure drop, & 10% heart rate drop was elicited. The electrode was fixed to the carotid bulb using 6/0 prolene interrupted sutures. After creating the infraclavicular submuscular pocket on the right chest wall for the pulse generator, the electrode cable was tunneled, & connected. Both wounds were closed in layers, after repeat testing with satisfactory response. No immediate postoperative complications were reported. The patient was discharged home on the following morning with a plan for device activation after two weeks.

Discussion: Based on the initial test results, a successful outcome is expected.

Clinical Conundrum: An Inflammatory AAA...A Cautionary Tale

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Introduction: Inflammatory AAA account for 5–10% of all AAA. Although the pathogenesis of inflammatory AAA appears to involve an immune response localized to the vessel wall, the aetiology of the inflammatory reaction is unknown. Chronic periaortitis is a spectrum of diseases including inflammatory AAA. In most cases chronic periaortitis is idiopathic; other causes are drugs, retroperitoneal injury, infection and malignancy.

Case Description: A previously fit and active 66yo man was admitted under medics with blurring of vision and a suspected TIA. During admission he c/o left flank pain with CT showing a 4.3cm inflammatory AAA, left hydronephrosis and right ureteric stone. He required bilateral JJ stents and percutaneous nephrostomy due to persistent left hydronephrosis. Autoimmune screen and temporal artery biopsy were negative. Subsequently he developed bilateral leg swelling and duplex scan showed DVT. Then he developed RUQ pain and obstructive jaundice. Investigations showed gall stones,