it can help to define and monitor standard of care and enable international research collaboration.

**Disclosure:** Nothing to disclose

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### O-029 The Strict Adherence to the Indications for Endovascular Repair of the Popliteal Artery Aneurysm—Guaranteed the long term Success in the Single Center Experience

**Peripheral Arterial Disease**

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**Introduction:** Endovascular exclusion of popliteal artery aneurysm is an attractive and noninvasive alternative to the classical open vascular surgery treatment. It provides an opportunity for treatment of patients with comorbidities who have a high risk associated with an open surgery procedure. Endovascular procedures alleviates complications related with open surgery, in particular it reduces pain and convalescence time. Comparable to the classical open vascular surgery method, the results of endovascular treatment induce vascular surgeons to prefer the less invasive option. An important aspect affecting the operation results is proper planning and adherence to the indications for endovascular procedures. The basic criteria we have approved were: proximal(1) and distal(2) landing zone off 15mm, oversizing within limits of 10-30%(3) and patency of at least one artery of the below knee arteries that supplies the arch of the foot. The aim of the study was to assess the legitimacy of compliance with the qualification requirements for the procedure of endovascular repair of the popliteal artery aneurysm and the assessment of the evident effects of departures or bending the eligibility criteria for this procedure.

**Methods:** In the examined group of 43 patients, who underwent Viabahn stent graft implantation, 31 patients met all 4 eligibility criteria. The remaining 12 (27,90%) patients did not meet at least one, of the 4 stent graft implantation criteria, of which 4 (9,30%) did not meet two criteria. All completed procedures ended with immediate success. Patients were discharged on anti-aggregation treatment with traditional dressings over closed groin incisions following vascular surgery, comparison of ciNPT usage over closed groin incisions in randomized controlled trials (RCTs). Inclusion criteria included abstract or manuscript written in English, published or unpublished studies, RCTs, ciNPT usage over closed groin incisions in vascular surgery, comparison of ciNPT use and traditional dressings, study endpoint/outcome of SSI, and study population of >10. Characteristics of study participants, surgical procedure, type of dressing used, duration of treatment, incidence of SSI, and length of follow-up were extracted. Weighted risk ratios and 95% confidence intervals were calculated to pool study and control groups in each publication for analysis. Treatment effects were combined using Mantel-Haenszel risk ratios, and the chi-square test was used to assess heterogeneity.

**Results:** All patients were monitored for the average follow up of 38 months. There were no complications in the group of patients qualified for surgery according to our Clinic guidelines. Conversely, in the group of patients in which not all the eligibility criteria for stent graft implantation were met, 3 (25 %) cases of stent graft clot were found within follow up period. In addition, there were 2(16,67%) cases of the stent graft migration to the aneurysm sac without thrombosis and 2(16,67%) cases of leakage of the stent graft within peripheral embolism.

**Conclusion:** Complications after stent graft implantation in the popliteal artery aneurysm were observed exclusively in the group of patients without all eligibility criteria for the endovascular procedure. Therefore strict adherence to the eligibility criteria for popliteal artery aneurysm surgery is crucial for the successful outcome of the operation and post-operative recovery.

**Disclosure:** Nothing to disclose

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### O-030 Evaluating a Single use Closed Incision Negative Pressure Therapy System over Closed Groin Incisions Following Vascular Surgery: Meta-analysis of Comparative Trials

**Peripheral Arterial Disease**

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**Introduction:** Surgical site complications pose a significant risk for patients. With groin incisions, surgical site complications may result in limb loss and increased risk of death, with rates as high as 44%. Closed incision negative pressure therapy (ciNPT) has been associated with decreased SSI rates in published literature. A number of recent publications have compared SSI rates between ciNPT and traditional dressings following vascular surgery with groin incisions. This meta-analysis examines the effect of a the PREVENA™ Incision Management System (KCI, an ACELYT Company, San Antonio, TX) in reducing SSIs versus traditional dressings over closed groin incisions following vascular surgery.

**Methods:** A systematic literature search using PubMed, OVID, EMBASE, and QUOSA was performed, focused for publications between January 1, 2005 and December 31, 2018. The literature search was limited to PREVENA™ Therapy use over closed groin incisions in randomized controlled trials (RCTs). Inclusion criteria included abstract or manuscript written in English, published or unpublished studies, RCTs, ciNPT usage over closed groin incisions in vascular surgery, comparison of ciNPT use and traditional dressings, study endpoint/outcome of SSI, and study population of >10. Characteristics of study participants, surgical procedure, type of dressing used, duration of treatment, incidence of SSI, and length of follow-up were extracted. Weighted risk ratios and 95% confidence intervals were calculated to pool study and control groups in each publication for analysis. Treatment effects were combined using Mantel-Haenszel risk ratios, and the chi-square test was used to assess heterogeneity.

**Conclusion:** Complications after stent graft implantation in the popliteal artery aneurysm were observed exclusively in the group of patients without all eligibility criteria for the endovascular procedure. Therefore strict adherence to the eligibility criteria for popliteal artery aneurysm surgery is crucial for the successful outcome of the operation and post-operative recovery.