



## AB146. 6. Classical Limberg versus classical Karydakis flaps for pilonidal disease—an updated systematic review and meta-analysis of randomized controlled trials

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**Background:** Pilonidal disease (PD) is associated with significant disability culminating in time off work/school. Recurrence rates remain high following conventional surgical interventions. Flap-based techniques are postulated to decrease recurrence. We performed a systematic review and meta-analysis to compare the effectiveness of the classical Limberg (LF) and Karydakis (KF) flaps in the treatment of PD.

**Methods:** The online databases of Medline, CINAHL, EMBASE, Cochrane Central Register of Controlled Trials as well as Google Scholar were searched for relevant articles from inception until May 2017. All randomized studies that reported direct comparisons of classical LF and KF

were included. Two independent reviewers performed data extraction. Random effects models were used to calculate pooled effect size estimates. A sensitivity analysis was also carried out.

**Results:** Five randomized controlled trials describing 727 patients (367 in LF, 360 in KF) were examined. There was significant heterogeneity among studies. On overall random effects analysis, there was a lower rate of seroma formation associated with LF, and this approached statistical significance (OR =0.47; 95% CI: 0.22–1.03; P=0.06). However, there were no significant differences in recurrence (OR =1.03; 95% CI: 0.48–2.21; P=0.939), wound dehiscence (OR =0.53; 95% CI: 0.09–2.85; P=0.459), wound infection (OR =0.59; 95% CI: 0.23–1.52; P=0.278) or haematoma formation (OR =2.08; 95% CI: 0.82–5.30; P=0.124) between LF and KF. On sensitivity analysis, focusing only on primary and excluding recurrent PD, the results remained similar.

**Conclusions:** LF and KF appear comparable in efficacy for both primary and recurrent PD, although LF is associated with less seroma formation.

**Keywords:** Pilonidal disease; Limberg; Karydakis

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