Lower Limb Amputations

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Goals of amputation surgery:

1- Ablation: Remove all that is necessary to eliminate the pathologic state and provide primary or secondary wound healing.

2- Reconstruction: Create the optimum motor and sensory end-organ for prosthetic substitution and restoration of function.
INDICATIONS

- Ischemia
  - PVD
  - Trauma
- Infection
- others:
  - Tumour
  - Burns
  - Frostbite
Transtibial amputation

Technical options

- Long Posterior Myocutaneous Flap
- SKEW FLAP
- MEDIAL BASED FLAP
- SAGITAL FLAP
Long Posterior Myocutaneous Flap
Long Posterior Myocutaneous Flap

Burgess VS Modefied Bruckner tech
Modefied Bruckner tech

- Retrospective chart review over period of 10 years
- 69 patients with end stage occlusive vascular disease
- Burgess 29, Bruckner 40
- Mean age 69.7 years
- Outcomes > wound healing, rate of revision, prosthetic fitting
- Conclusion: modified Bruckner tech is at least equivalent to Burgess tech.
Skewflap versus long posterior flap in below-knee amputations Ruckley Cv et al 1991

- multicenter trial
- 11 centers randomized 191 patients with end-stage occlusive vascular disease
- skewflap technique in 98 vs long posterior flap in 93
- Conclusion: It is concluded that the skew flap is just as effective as the long posterior flap and is an excellent option for below-knee amputation.

- 1998-2004
- 9 patients underwent modified BKA
- 4 f 5 m
- Age 44-74
- Conclusion: saphenous artery-based flap used in the modified BK amputation comprises one valuable alternative when conventional techniques are unsuitable.
Type of incision for below knee amputation. Tisi PV et al 2004

- Metanalysis Comparing different types of BKA tech
- Stump healing, wound infection, reamputation rate and mobility with a prosthetic limb
- 3 studies included
- Two-stage versus one-stage BKA
- Skew flaps BKA versus long posterior flap BKA
- Sagittal flaps BKA versus long posterior flap BKA
- Conclusion: the choice of amputation technique has no effect on outcome and can therefore be a simple matter of surgeon preference.
THANKS