

使用前外側大腿游離皮瓣合併濶筋膜對足底惡性腫瘤術後軟組織及肌腱缺損的一次性重建

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Simultaneous Reconstruction of Plantar Soft Tissue and Flexor Tendon Defect after Wide Excision of Malignant Sarcoma with Free ALT flap incorporated with Fascia Latae

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Purpose:

Plantar soft tissue defect after tumor excision and trauma remained difficultly to reconstruct because of deficiency of functional flexor tendon and weight bearing tissue. Usually a local flap or a free vascularized muscle flap was used for wound coverage. It only accomplished wound closure with adequate appearance rather than functional result. We provided a practical technique for one-stage soft tissue and tendon reconstruction with a well-vascularized free tissue transfer.

Materials and Methods:

We designed a free ALT fasciocutaneous flap incorporated with fascia lata for the plantar defect. The ALT size was measured as the defect size of the plantar area. Then, the incorporated fascia lata was divided into 4 parts. Each segment was folded by itself into adequate thickness related to flexor tendon. Modified Kessler technique was used with 4-0 prolene for each segment of fascia lata with the residual flexor tendon during flap setting. Then anastomosis for both artery and vein was completed between flap and recipient vessels under microscope assistance.

Results:

The flap survived after operation and under regular OPD f/u. Toes could do plantar flexion since 3 months after operation. Weight bearing ambulation started 6 months after surgery.

Conclusion:

This provided a new method for one-stage soft tissue and flexor tendon reconstruction with a well-vascularized free tissue transfer. It could preserve the function of both toe plantar flexion and weight bearing at the same time during reconstruction rather than preserving the appearance only.