## DermaClose preserves limb length to maximize outcomes

The primary goal of amputation surgery is to preserve limb length, which is dependent on soft tissue coverage<sup>1</sup>

Preserving limb length, functional segments and stable joints contributes to:1

- A more normal gait
- Increased functional capacity
- Decreased energy expenditure, which during ambulation directly correlates with limb length, preservation of functional segments and stable joints

"...a 25% to 60% increase in energy expenditure above baseline could be the difference between a mobile vs wheelchair dependent 60 year old in the future."

--Mark Fleming, Annals of Plastic Surgery. 2014.1

## Dermaclose expands tissue coverage to preserve limb length

Case 1. Pediatric Traumatic Amputation









This pediatric patient lost portions of all four extremities due to an electrocution accident. The DermaClose External Tissue Expander was used successfully to preserve limb length and close the stump wounds.

Case 2. Below Knee Amputation Used with NPWT (VAC)







The DermaClose External Tissue Expander can be used in combination with NPWT (VAC). When following instructions for utilizing the DermaClose with NPWT, the tissue will continue to expand in conjunction with the use of NPWT, and the wound will typically be ready to close in 3-5 days.

Case 3. DermaClose Used to Offload High Tension Closure in Below Knee Amputation

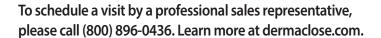






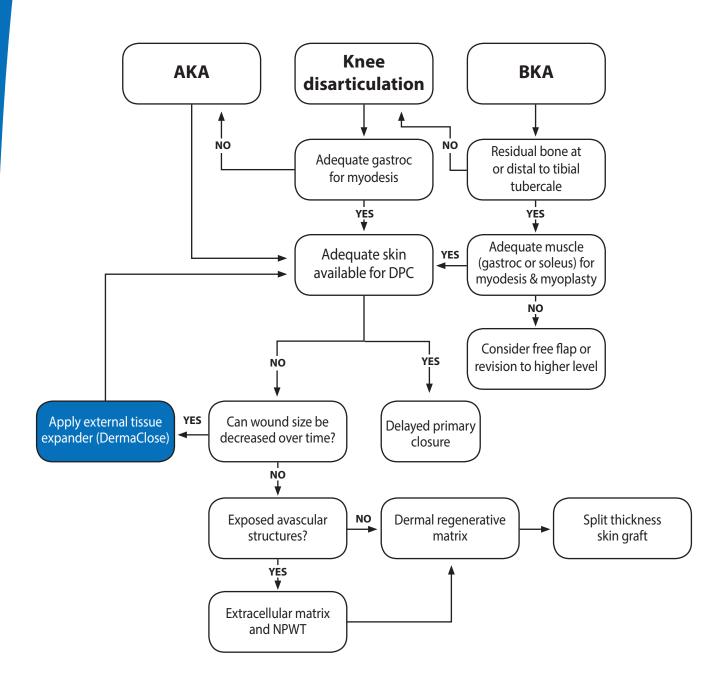


In this case the DermaClose was used to offload a high tension closure on a below knee amputation. The DermaClose anchors are placed 3cm from the closure. As the tension controller is tightened, the tissue is pulled from behind the anchors, and tissue in front of the anchors is pushed toward the closure. This use of the DermaClose tissue expander releases tension on the closure, increases vascularity for faster healing and reduces chance of dehiscence.





## Decision matrix for management of lower extremity amputation length preservation<sup>1</sup>



<sup>1.</sup> Fleming ME, O'Daniel A, Bharmal H, Valerio I. Application of the orthoplastic reconstructive ladder to preserve lower extremity amputation length. Ann Plast Surg. 2014; 73(2):183-189.

**Indications for Use:** The DermaClose Continuous External Tissue Expander is indicated for use in reducing or assisting with the closure of full-thickness wounds of the skin.

**Contraindications:** The DermaClose Continuous External Tissue Expander should not be used on ischemic or infected tissue. It should not be used on fragile tissue at the edges of a wound.



