

Abstract

**Combined Medial Plantar and Medialis Pedis Chimeric Flap
for Sole Reconstruction**

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The reconstruction of soft tissue defects of the sole requires to stand the force of weight bearing, provide sensation and adequacy for normal foot-wear. Although certain local flaps have been described and used for resurfacing the foot, extensive injury requires distant or free flaps for coverage. There is no doubt that the ideal tissue for resurfacing the sole is the plantar tissue itself. The specialized dermal-epidermal histology and fibrous septa of the subcutaneous layer gives its unique property to stand the pressure and to absorb the shock upon gait. This paper presents a case of reconstructing the sole that involves about 70% of the weight bearing portion. The combined medial plantar and dorsalis pedis chimeric free flap based on the medial plantar artery and medial plantar nerve adds another dimension in resurfacing the weight bearing sole of moderate to large sized defects.

Key Words : Sole reconstruction, Combined flap

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1-5)

1. 3 가
 18 가
 가
 13 × 6cm
 (Fig. 1). Foot-print 70%



Fig. 1. An 18-year-old female patient with defect size of 13 × 6cm of the left sole is noted

13 × 7cm
 (Fig. 2). 가

2. 가



Fig. 2. A 13 × 7cm sized combined medial plantar and medialis pedis chimeric flap from the contralateral foot is elevated for coverage

2,6,8)

9,10)

가

3

7

2cm

foot scan

(Fig. 3). 2

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가

(Fig. 4).

(medial plantar flap) 10

× 7cm

가

가

(medialis pedis flap) 7

× 3cm

Achilles

1

(medial

plantar artery)

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Fig. 3. A satisfactory overall contour of the left sole is noted after 7 months.

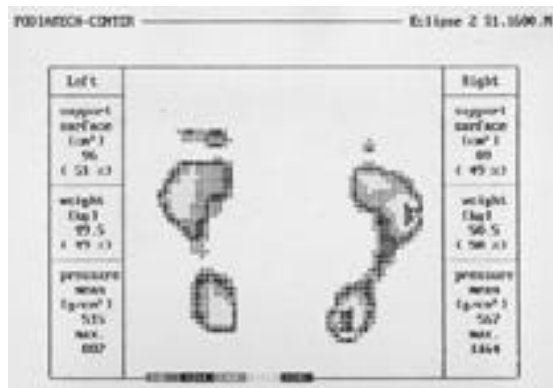


Fig. 4. The foot scan of the resurfaced left foot reveals relatively similar distribution of pressure compared to the normal right foot.

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‘Chimeric Principle’

70%

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70%

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