

Type I Bovine Collagen and Wound Care

A Study on 1000 Patients

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Types of Wounds include:

- Deep Verruca
- Superficial Verruca
- Permanent Nail Removal
- Non-Permanent Nail Removal
- Ulcers - Diabetic, Pressure, Neurotrophic
- Primary Closed Wounds

Introduction:

This study is a continuing project being performed by the author. The initial retrospective portion studied 300 patients from June 1994 to March 1995.^{1,2} Another 700 patients were studied on a prospective basis from April 1995 to July 1996.

Purpose:

To determine if a single primary wound care dressing could be used throughout the healing process on wounds of varying etiologies and obtain an wound environment more conducive to healing as compared to current standards of care.

Methods:

The same physician performed initial history and physical exams on all patients. In some cases, additional work up was obtained (this included: X-Rays, C.A.T. scans, M.R.I. scans, blood studies, TC 99 scans, L.E.A. Doppler with Toe P.P.G., culture and sensitivity reports and outside consultation).

Concomitant consultation with other physicians, physical therapists, and home health nurses was obtained at the physician's discretion.

All surgical procedures were performed by the same physician. The enrolled patients ranged from 5-100 years in age. No disease states were excluded. When appropriate, antibiotics were given orally, IM, or mixed with wound dressings and applied topically (see ulcer picture).

In each category, paronychia, verruca, ulcers (physician's judgment) did limit product selection based upon reported success and failure rates from manufacturers and literature (example: calcium alginates not indicated in infected wounds). Patients were randomly assigned in paronychia to soaks vs.

type I bovine collagen. In verruca and primary sutured cases, patients were alternately assigned to control or type I bovine collagen. In ulcers, patients had to meet specific criteria to receive different primary dressings. This criteria was based upon the surgeon's professional experience and current literature.

Materials:

Medifil® and SkinTemp® products (BioCore Medical Technologies, Inc.) were utilized in the collagen cases.

Materials used in the non-collagen cases included products used in standard protocols for each etiology. Selection was based on the author's professional experience and current literature (Table I).

Table I

	Ischemia	Infection	Exudate	Edema	Dry
Hydrogel					X
Dextrans	X		X	X	
Hydrocolloids			X	X	
Calcium Alginates			X		
Impregnated gauze		X	X	X	
Topicals	X	X	X	X	X
Collagens	X	X	X	X	X

