Scientific Presentation Abstract
2010 International Symposium on Dupuytren’s Disease

Authors: E. Anne Ouellette, MD., MBA, Miami International Hand Surgical Services
Melissa Diamond, Med. Student, University of Miami
Anna-Lena Makowski, HTL, Miami International Hand Surgical Services

Hypothesis: Apligraf™ coverage of wounds after Dupuytren’s surgery using the McCash incision improves long term outcome.

Methods: Chart review of 137 patients (153 hands) patients undergoing surgery to release Dupuytren’s contracture between 1999 and 2007 was conducted. Patients who had McCash incisions followed by application of Apligraf skin graft during this time period was contacted for follow-up evaluation. The patients filled out an Upper Extremity Disabilities of the Arm, Shoulder, and Hand (DASH) questionnaire collecting information on pain level, range of motion and activities of daily living. The patients also submitted pictures of their palmar scar. Descriptive statistics was used to present DASH scores. Students T-test (2-tailed) was used to evaluate the difference in time from surgery to skin healing between patients receiving Apligraf coverage with patient that did not.

Results: 36 patients had the Apligraf skin graft applied to their surgical wounds, of these 9 have submitted their outcome information to date. Average follow-up time was 76 months (range 30-129 months). Average DASH score for this group was 8. Dash score distribution was n=7 (DASH 0-10), n=1 (11-20), n=0 (21-30), n=1 (31-40), n=0 (41-100). (Table 1). Wounds covered with Apligraf (n=10) took longer to heal than wounds not covered (n=17), 40 days vs 27 days (p<0.05). The scars healed well for all patients. (Figure 1).

Summary:
- Statistically significant different time to skin healing; wounds took longer to heal after coverage with Apligraf
- DASH scores received to date is predominantly in the lower range (0-10) indicating a good outcome. This data compares to average DASH scores of 3.85 and 32 post long term surgical follow-up reported in the literature not using a skin graft.
- Palmar scars healed well in all subjects based on long term follow-up photos.
Table 1: Distribution of DASH scores. No scores were over 40.

Figure 1. Patient 60 months post McCash incision covered with Apligraf. DASH score 3.3.