THE INTEGRA – SPLIT-THICKNESS SKIN GRAFT “SINGLE STAGE” APPLICATION: A NOVEL TECHNIQUE
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Background: Many soft tissue defects are reconstructed using a two-stage procedure which requires placement of the Integra Bilayer Wound Dressing and separate split-thickness skin grafting 2-4 weeks later to allow dermal matrix incorporation. The need for two separate operations and the total time required for complete reconstruction at times makes this an inconvenient or non-feasible process. We report a new method of soft tissue defect reconstruction using a single stage placement of Integra Matrix Wound Dressing (IMWD) with concomitant skin grafting. Methods: Five patients with soft-tissue defects of the hand or head and neck after excision of non-melanomatous skin cancers were reconstructed with “single stage” Integra IMWD and split thickness skin graft placement with a simple sterile sponge bolster dressing. Results: All patients had excellent skin graft “take” after their bolsters were removed on average 8.5 days (range, 7-9 days) post-operatively. Patients demonstrated excellent coloration, no evidence of hypertrophic scarring, and excellent tendon excursion when placed over extensor tendons of the hand. There were no skin graft losses and all patients were spared a second step as part of a planned or “staged” reconstruction. Conclusion: “Single stage” reconstruction using Integra Matrix Wound Dressing and a split-thickness skin graft simultaneously is not only a successful and efficacious technique; it prevents the added morbidity of prolonged multi-staged reconstructions and possible exposure to additional anesthetic agents. Additionally, many patients and surgeons who may not initially consider reconstruction with a skin substitute such as Integra because of the need for prolonged healing time and multiple procedures may reconsider as our technique produces excellent results in a single operation.