Prospective randomized controlled trial: fibrin sealant reduces split skin graft donor-site pain.

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Abstract:

Pain at split skin graft donor sites is common. Fibrin sealant has been demonstrated to reduce time to hemostasis at wound sites, and patients receiving this treatment were incidentally noted to report less pain. This study aimed to evaluate pain and incapacity in split skin graft donor sites treated with and without fibrin sealant. Fifty patients requiring thigh donor-site split skin grafts were prospectively randomized to receive either a self-adhesive fabric dressing alone or fibrin sealant plus the self-adhesive fabric dressing as primary donor-site dressings. External secondary dressings were the same. Patients were blinded with regard to treatment group. Using visual analogue scales (scored 0 to 5), patients rated their donor-site pain and incapacity for 14 days postoperatively. Secondary endpoints were length of hospital stay and duration of requirement for dressings. Forty patients were included in the study analysis and completed self-reported pain and incapacity scores. Twenty received the fibrin sealant plus self-adhesive fabric dressing and 20 received the fabric dressing only (controls). Patients using the fibrin sealant plus the dressing reported significantly less pain (mean score, 0.42 versus 1.60, $p < 0.001$) and significantly less incapacity (mean score, 0.48 versus 1.71, $p < 0.001$). Patients allocated to the fibrin sealant group recorded shorter lengths of stay and faster time to discontinuation of dressing, though statistical significance was not achieved. Patients whose split skin graft donor sites were dressed with fibrin sealant plus self-adhesive fabric dressing experienced significantly less pain and incapacity than patients with self-adhesive fabric dressings alone, allowing a more rapid return to normal activity. Therapeutic, II.