

Effective Methods for Preventing Pressure Ulcers

■ **CLINICAL QUESTION:** Which interventions are effective for the prevention of pressure ulcers?

■ **BOTTOM LINE:** Effective strategies for preventing pressure ulcers include the use of support surfaces (mattresses, beds, and cushions), mattress overlays on operating tables, and specialized foam and sheepskin overlays. Frequent repositioning is effective, but the optimal schedule for turning is uncertain. Nutritional supplements are beneficial in patients with impaired nutrition. Simple skin moisturizers, specifically to the sacral area, are also effective. (LOE = 1a-)

■ **REFERENCE:** Reddy M, Gill SS, Rochon PA. Preventing pressure ulcers: a systematic review. *JAMA* 2006; 296:974-984.

■ **STUDY DESIGN:** Systematic review

■ **FUNDING:** Government

■ **SETTING:** Various (meta-analysis)

■ **SYNOPSIS:** Multiple preventive approaches are used in the management of pressure ulcers. These authors systematically searched multiple evidence-based databases including the Cochrane Registry, bibliographies of identified articles, and scientific meeting abstracts for randomized controlled trials (RCTs) evaluating preventive measures for pressure ulcers. No language restrictions were applied. They used standard methods to critically appraise individual RCTs. The search strategy identified 763 citations, from which 59 trials meeting eligibility criteria were selected. The methodologic quality of the RCTs was generally suboptimal. Interventions were grouped into 3 categories: those addressing impairments in (1) mobility, (2) nutrition, and (3) skin health. Effective strategies for those with impaired mobility included the use of support surfaces (mattresses, beds, and cushions), mattress overlays on operating tables, and specialized foam and sheepskin overlays. Frequent repositioning is effective, but the optimal schedule for turning (every 2 vs every 4 hours) is uncertain. Nutritional supplements are beneficial in patients with impaired nutrition. Simple skin moisturizers, specifically to the sacral area, were helpful, but the incremental benefit of other specific topical agents is minimal.