

**COMPARISON OF THREE DRESSING STRATEGIES FOR HEEL ULCERS: OUTCOME AND COST-EFFICIENCY RATIO****Noreen Campbell**<sup>1</sup>, Peter Dryden<sup>2</sup>, Donna Campbell<sup>2</sup>.<sup>1</sup>VIHA (North Saanich, Canada)<sup>2</sup>VIHA (Victoria, Canada)

**Aim:** Arterial disease or diabetes increases the risk of osteomyelitis and amputation associated with heel ulcers. The efficacy and cost-efficiency of three heel ulcer dressings were compared: standard care (SC) (any other dressing), padded heel dressing (PHD) (reduce pressure), and PHD plus protease modulating matrix\* (PP).

**Method:** An intent-to-treat, retrospective random selection of sixty ulcers: twenty each group. Outcomes measured were: ulcer closure, weeks to close, nursing visit cost, and cost-efficiency-ratio. Same wound care for all groups: moist wound healing, debridement, and monitoring.

**Results:** Wound closure difference was significant between the SC (13, 65%) and both PHD and PP (both 100%) (Chi-Square  $P < .000$ ). Significant difference existed between mean nursing visits ( $p < .001$ ) with SC 42.23, PHD 25.73 and PP 18.38. The number of weeks treatment for SC (14 closed, 2 amputations, 4 lost contributes to underestimate) was 527, PHD 368 and PP 237. Nursing costs at \$155/visit (Canadian) was SC (\$114,080), PHD (\$73,470) and PP (\$40,610). Cost-efficiency-ratios are PP (1), PHD (1.8) and SC (2.8). Number of ulcers probing to bone and outcome was: SC (4, 2 closed, 2 amputations), PHD (3, closed) and PP (5, closed). Weeks to close bone depth ulcers averaged 82 (SC), 42 (PHD), and 15 (PP).

**Conclusion:** The PP group closed faster in spite of 50% bone depth and cost a third of SC and nearly half PHD.

\*protease modulating matrix – Prisma or Promogran (Systagenix)