

QUALITY OF LIFE OUTCOMES IN NEGATIVE PRESSURE WOUND THERAPY

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AIM: Negative Pressure Therapy (Vacuum Assisted Closure, VAC) has been described as an adjunct to wound closure in Reconstructive Surgery. While the indications for its use are expanding, there is a paucity of literature on patient's quality of life during treatment. We investigated the impact of Negative Pressure Wound Therapy (NPWT) on health-related quality of life (HRQOL) using the Cardiff Wound Impact Schedule (CWIS), a wound specific tool.

METHODS: An exploratory prospective cohort study was conducted on 26 patients with complex unhealed wounds. NPWT was applied and HRQOL was investigated at 2 points: pre-VAC and at 4 weeks of VAC therapy/wound closure. Wound dimensions were measured at each point and the relation of HRQOL scores to clinical variables investigated, using parametric and nonparametric tests.

RESULTS: The mean duration of therapy was 3.3 ± 1.7 weeks. VAC therapy helped achieve complete wound closure in 14 patients (54%) and the mean surface area of the wound was reduced from $52.2(4-150)$ cm² to $26.8(0-120)$ cm². While there was no significant change in HRQOL of patients with healed wounds, the physical functioning domain improved in obese patients ($p < 0.05$) and worsened in ambulatory patients ($p < 0.05$). The portable VAC had no significant impact on HRQoL, while the global HRQOL deteriorated with surgical intervention (Skin grafts/flaps) ($p < 0.05$).

CONCLUSION: Although NPWT aids wound closure in patients with complex wounds, their quality of life can deteriorate in selected cases during treatment. This is the first exploratory cohort study of its kind and has identified an urgent need to validate the use of patient based outcome measures in NPWT.