Effectiveness of Negative Pressure Wound Therapy on Reducing Wound Size of Pressure Ulcers in the Community of HKEC

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**Introduction**
The use of negative pressure wound therapy (NPWT) on management of pressure ulcers (PU) is commonly confined to secondary care. It has been proven to be beneficial both in healing and in relation to patient’s quality of life. In order to benefit the patients in the community with quality PU management, a pilot study of CNS NPWT program was started in July 2014.

**Objectives**
Retrospectively review the effectiveness of the CNS NPWT program in reducing the wound size of PU and improving patients’ quality of life.

**Methodology**
Patients in the community with hard to heal PU in stage 3 or 4 over 8 weeks, but had adequate blood supply, receiving pressure redistribution, moist wound healing and able to have their nutritional factors corrected were recruited in the CNS NPWT program. Qualified community nurses would perform conservative sharp wound debridement according to the needs and use same technique to measure the surface area of PU before and after starting of NPWT. PU with > 20% to 40% reductions in size over the initial 4 to 6 weeks is used as an indicator that the PU is responding to the NPWT effectively.

**Result**
In the period of July 2014 to Jan 2016, a total of 20 patients were recruited. Age ranged from 37 to 98 (Mean age: 79.6). Male to Female ratio was 4:16. 8 patients were living in residential care homes for the elderly (RCHE) and 12 patients were living at home. 2 patients (10%) with stage 4 PU, 1 from home and 1 from RCHE, had a 45% and 52% reduction in wound size, from 31.5cm² to 17.4cm² and 26.1 cm² to 12.6 cm² at the initial 4 weeks. Both PU healed up at 8 weeks and 14 weeks respectively after receiving NPWT for 4 weeks. 18 patients (90%) with an average reduction of 35% in wound size from 29.6cm² to 19.2 cm² over the initial 4 to 6 weeks of NPWT. In conclusion, the CNS NPWT program is effective on the initial percentage reduction in surface area of PU and improving patients’ quality of life.
through shortening the healing process.