A research roundup of recent papers relevant to wound care

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This section brings together information found online and published in other journals about wound healing research. The aim is to provide an overview, rather than a detailed critique, of the papers selected.

OPPORTUNITIES FOR BETTER VALUE WOUND CARE: A MULTISERVICE, CROSS SECTIONAL SURVEY OF COMPLEX WOUNDS AND THEIR CARE IN A UK COMMUNITY POPULATION

Gray T, Rhodes S, Atkinson R, Rothwell K et al (2018): *BMJ Open* doi:10.1136

This paper, as the title suggests, reports on the economic burden of wounds and the complexity and variability of wound care delivery, involving a large number of different settings, clinicians and products. It aimed to identify what part the skill and competency of those involved plays. The study team sought to examine the number of wounds treated in a 2-week period and to explore variations in practice. The authors used a multiservice cross-sectional survey to enable data collection that was deployed in eight community services within five Northern England NHS Trusts. The point prevalence of complex wounds in the community population was 16.4% per 10,000. Worryingly, the paper reports antimicrobial dressings were being used on 36% of patients with complex wounds. No pressure-reducing mattress or cushion in use for 39% of patients with pressure damage. Of the lower limb population, 40% had not had an Ankle-brachial pressure index (ABPI) or it was unclear if one had been taken. 31% of patients, who had their worst wound on their lower leg, were not receiving compression. In addition, there was limited use of hosiery systems despite the recent recommendations. This study adds important robust epidemiological data to the complex wound literature where existing prevalence data have been found to be limited when systematically reviewed It concludes that marked variations were found in care, underuse of evidence-based practices and overuse of practice not supported by robust research. The study team suggest that significant opportunities exist to optimise the organisation and delivery of wound care to community patients and that efforts should concentrate on developing strategies to identify, assess and promote evidence-based practice and discourage those supported by little or no evidence.

Implications for Practice

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SHORT STUDY EVALUATING PRESSURE ULCER MANAGEMENT IN CLINICAL PRACTICE IN THE UK FOLLOWING INITIAL PRESENTATION IN THE COMMUNITY: COSTS AND OUTCOMES

Guest JF, Fuller GW, Vowden P, Vowden K (2018): *BMJ Open* doi:101136

This study aimed to estimate the level of resources attributable to the care of patients with a pressure ulcer in the community by the UK's NHS, and define the costs associated with management. The data was collected retrospectively from 209 patients identified within a randomly selected population of 600 patients with a wound that had data extracted from the THIN database. The patients were all deemed to have developed their pressure ulcer in the community, hospital-acquired ulcers were excluded. Wound intervention, outcome and resource data was extracted over a 12-month period and cost of management estimated at 2015/16 prices. The results showed that only 50% of patients healed within 12 months of initial

presentation, splitting this into category 100% of cat 1 and only 21% of cat 4 ulcers healed, the mean times for healing are also listed in the paper. The primary caregivers were community nurses with minimal input from specialist services. Of the sample, 53% of the PU were deemed to be clinically infected at the time of presentation and 35% of patients were treated for at least one wound infection during treatment. The costs of wound care ranged from £1,400 for a category 1 PU to >£8,500 for other categories. In addition, the cost of treating an unhealed PU is estimated at 2.4 times that of a healed ulcer. The authors report limitations of not being able to assess the hospital and nursing home populations as part of the study arguing that this would also impact on overall costs. The data in the paper can be used to inform teaching materials, policy and budgetary decision making. 87% of the cohort was over 60 years of age, they report patient characteristics and that a third of the patients develop an ulcer within 3 months of hospital discharge. The mean number of comorbidities was 5.8 per patient; unsurprisingly 9% of patients were wheelchair users. Perhaps one oversight was to include only patient who developed a PU and survived for at least a year following diagnosis.

Implications for Practice

This study provides the evidence needed to help improve clinical practice around pressure ulcer management in the community in the UK. The authors listed a number of measurements that would help overcome the problems encountered, which are in line with current national guidelines and include:

- Improving documentation
- Increasing diagnostic support
  Assessing patients' nutritional status
- Enhancing communication and coordination between health and social care
- Prescribing antibiotics and antiseptics for signs of sepsis and cellulitis.

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A RANDOMIZED TRIAL OF EARLY ENDOVENOUS ABLATION IN VENOUS ULCERATION

Manjit G, Heatley F, Xinxue L, Bradbury A et al (2018): *N Engl J Med* 378:2105-2114 DOI: 10.1056/NEJMoa1801214 https://www.nejm.org/doi/full/10.1056/NEJMoa1801214

This study was conducted at 20 centres in the UK and randomly assigned 450 patients with venous ulcers to receive compression therapy and early endovenous ablation of superficial venous reflux within 2 weeks after randomisation (early-intervention group) or to receive compression therapy alone, with consideration of endovenous ablation deferred until after the ulcer was healed or until 6 months after randomisation if the ulcer was unhealed (deferred-intervention group). Primary outcome measure was time to ulcer healing, with secondary outcomes, rate of ulcer healing at 24 weeks, rate of ulcer recurrence, the length ulcer-free time during the first year after randomisation, and patient-reported health-related quality of life.

The results of the trial are presented in full in the paper suggest that the treatment of superficial venous reflux has been shown to reduce the rate of ulcer recurrence, but the effect of early endovenous ablation of superficial venous reflux on ulcer healing remains unclear. The most common procedural complications of endovenous ablation were pain and deep-vein thrombosis. Early endovenous ablation of superficial venous reflux resulted in faster healing of venous leg ulcers and more time free from ulcers than deferred endovenous ablation.

Implications for Practice

This study provides the evidence to empower clinicians and patients to embrace a call for change in practice. The findings of the study demonstrate that standard or best practice with venous leg ulcer management must become early endovenous ablation combined with therapeutic compression. This will result in faster wound healing as well as improving the patient's quality of life.

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