Wound healing in frail elderly patients

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Care of the elderly and geriatric medicine is a rapidly expanding specialty, due to a growing elderly population with an increasing complexity of health problems and care needs. Frailty, a state of increased vulnerability to changes in homeostasis or external stressors is an increasing problem in the elderly, and worsening frailty is associated with an increased risk of hospital admission, care home admission and death so managing frailty is everyone's concern (Romero-Ortundo, 2012). The presence of one or more frailty syndromes (such as falls, immobility, susceptibility to medication side effects, delirium and incontinence) suggests that the patient is vulnerable and as such, all treatment plans need to be carefully considered to attempt to maintain equilibrium.

A HOLISTIC APPROACH

An increasing number of frail elderly patients are presenting to wound healing services with a variety of problems including injuries following falls, pressure ulcers, arterial and venous leg ulcers, diabetic foot ulcers and even post-surgical wounds as surgical interventions become more prevalent in this age-group. It is important, however, that these wounds are not managed in isolation as poor healing or skin failure may well be a feature of a broader underlying physiological imbalance and the frailty phenotype, requiring a holistic approach to management (Levine, 2017).

As with any patient assessment in the Wound Healing clinic, a thorough history is crucial to enable appropriate diagnosis and management, and in the frail population, this is even more important. Drug history, in particular, should be reviewed as polypharmacy in this age group is a significant problem and may be contributing to delayed wound healing (e.g. nicorandil or steroids), as well as a host of other medical problems such as delirium, osteoporosis, and postural hypotension. It is also important to review the patient's past medical history and to enquire about other systems, as patients in this population group do not always disclose their medical issues. For instance, many patients accept urinary incontinence as an inevitable part of ageing, which in our experience is rarely the case. Recognition of urine staining on lower limb bandaging may provide the opportunity to discuss continence issues and refer onto an appropriate continence service, which may both improve patients' quality of life and their lower limb wound healing by reducing contamination.

A thorough social history can also provide some insight into the reasons why wounds can be difficult to heal. A patient who is unable to climb the stairs to go to bed, and therefore sleeps in the chair, may present with challenging lower limb oedema and ulceration. Rather than compression alone, referral to physiotherapy and occupational therapy for a home assessment to improve mobility and enable them to sleep in a bed may significantly reduce their dependent oedema. Patients who have little social support may be unable to collect prescriptions, and those who are unable to prepare meals without support may have a poor nutritional state, both impacting on their wound healing.

CONSIDERATE WOUND MANAGEMENT

When implementing wound management plans, we also need to be practical in terms of risks and benefits as the frail are more at risk of side effects than their more robust counterparts. For instance, a frail elderly patient commenced on morphine for wound pain will be at considerably increased risk of confusion, falls and constipation as a result of this medication (British National Formulary [BNF], 2019a); while antibiotics commenced for wound infections can interact with other medications such as anticoagulation, or increase the risk of antibiotic-associated diarrhoea (BNF, 2019b). Cognition is also an important factor to consider when designing a treatment plan.

Those with advanced dementia or delirium may require additional support even with basic wound or skin care plans. They may also be less able to understand their treatment or retain this information, so bandaging or dressings may be repeatedly removed as the patient explores the unfamiliar; alternatively, adhesive dressings or multilayer bandaging may be helpful to prevent patients with cognitive impairment interfering with wounds if they are not readily accessible or visible.

It is also important to consider not only what can be done but also what is appropriate for each individual patient. Conservative management may be considered more appropriate than revascularisation of an ischaemic ulcerated limb in those with multiple comorbidities (making intervention high risk) or in those with little mobility or limited life expectancy. However, we need to balance this against the consequences of claudication pain, limited mobility, delirium caused by potential wound infections or lack of sleep and the psychosocial burden of living with a non-healing wound. In these instances, it is important to discuss these issues with with patients and their families to enable shared decision making and a mutual understanding of realistic goals of treatment.

BEING PREPARED FOR AN AGING AND FRAILER POPULATION

As we have discussed frailty encompasses a number of conditions and syndromes and no two patients are the same, a pragmatic, holistic approach to assessment and treatment of wounds in this complex patient group is needed to optimise their care. Involvement of the multidisciplinary team can be very beneficial in patients with multiple conditions. Physiotherapy or falls services should be considered for those with instability or immobility, while occupational therapy can provide advice on a range of day to day practical problems as well as providing aids to help with issues such as dexterity or vision which may help patients to take a more active role in their wound care. Dietitians are also crucial in ensuring optimal nutrition in the elderly who may present to wound healing services with a range of underlying problems from obesity to sarcopenia. For more complex multifactorial problems, both hospital and community-based geriatricians provide a range of services to help manage the frail population and many also have access to enhanced services such as hospital at home, day hospitals or virtual clinics so referral on to these services should be considered to support ongoing care if needed.

As wound healers, we are likely to see a significant increase in the age, complexity and frailty of our patients over the coming years and while specialist geriatric services are evolving to manage the ageing population, every practitioner needs to be confident in how to recognise frailty in their service and what referral pathways are available to them locally, as well as a robust understanding of how frailty is likely to impact on wound healing and how to approach these patients in a holistic manner. WUK

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