

## **Long Term wounds in the older person: an exploration of some of the issues.**

Long term wounds which include leg ulcers either arterial, venous or of mixed aetiologies not only can have a devastating effect on the person and their life, but also on society generally and significantly impact on NHS funding. Current research by Guest et al (2017) has identified that long term wounds which include leg, foot and pressure ulcers are increasing at the rate of 12 percent per year in the UK. Guest's (et al 2017) research was presented to the House of Lords in 2017, the subsequent debate included the fact that in excess of 2 million patients with long term ulcers are treated annually at a cost of more than 5 billion pounds to the NHS (Browning 2017). The precise numbers of venous leg ulcers (VLU) are unclear, but it has been estimated that at least one in every 170 adults has a VLU. Also there is no current accurate data regarding the prevalence of long term wounds in the UK, and the true extent of the problem is not fully known (Bishop and White 2017: Guest et al 2015). However, there is no escaping the fact that long term wounds and all of the issues both personal and social surrounding the aetiology of the condition are highly costly in terms of a person's quality of life

It has been recognised that wound care is predominantly a nurse led discipline Nazarko (2016). The advantages of the specialised practitioner with the skills to assess a patient holistically and who has also been trained in wound care has been identified as a key priority in the management of this health problem (Hopkins et al 2015 :Guest 2015). Holistic assessment also has the advantage of identifying when a patient should be referred on to members of the wider team. In order to ensure that an overarching programme is put in place. Also to reduce some of the components that generate a long term wound, which may encompass not only health but also social and environmental issues.

However, accessing other members of the multi disciplinary team is not always straightforward, and many people with long term wounds are managed by non specialised practitioners who struggle with the practicalities of wound care management. Research demonstrates that 30% of people with long term wounds lack a differential diagnosis, (Guest et al 2012). In particular those people with VLUs who have been described in some cases as receiving 'palliative' care only (White et al 2016) However, the advantages of specialised training and multi disciplinary team work in order to holistically manage a person with a long term wound has proved to be successful in reducing wound prevalence (Guest et al 2015a:Hopkins et al 2015) This paper will explore some of the issues related to long term wounds, and in particular with regard to the older person. There has been a noted expansion in the ageing population in the UK, in many cases the older person may present with a range of co morbidities, which will impact on the healing abilities of a wound (Evans 2017).

A long term wound has been described as a one that does not progress through healing in a timely fashion, with an inability of dermal and epidermal cells to respond to repair, affecting the processes of cell regeneration (Troxler et al 2006). The wound presents with a range of features which may include prolonged inflammation ,persistent infections and the formation of drug resistant microbial microfilms (Frykberg and Banks 2015). Also the aetiology of the wound and underlying co morbidities all contribute to prolonged healing rates. Venous leg ulcers in particular can take weeks or months to heal, and recurrence rates are in the region of being between 18-28% (Asaf et al 2018: Mauck et al 2014)

Although long term wounds and the issue of those of the older age group have been linked, they are not exclusive to the elderly. For example the increase of obesity and also type 2 diabetes has

increased amongst the younger age group, of which current estimates are that 75% of people with this diagnosis will die of microvascular complications. Diabetes is one of the most common long term conditions in the UK, and encompass a range of co morbidities including lower leg ulcers, and the number of diabetics in the UK between 2006 to 2013 was shown to have increased by 53% from 1.9 million to 2.9 million (NICE 2013)

**Depression.** A long term wound can invoke anxiety in an individual and has long been recognised as a factor enhancing emotional problems, which can include feelings of depression, increased stress levels affecting quality of life (QOL)(Cole-King and Harding 2001). Further factors potentiating stress and depression may relate to wound size or location. Some people have described themselves as affected by the dominance of the wound in their life, leading them to disengage with society (Mc Caughan et al 2019). Other stressors include those people with Ischaemic pain or issues surrounding the wound location which may impact on relationships (Hopman et al 2016; Zhou 2016). Pain alone has been cited as significantly leading to depression and reducing QOL(Renner et al 2017)

Research has demonstrated a direct association between wound healing and psychological distress. The effect of stress has been shown to disrupt the release of inflammatory agents that are key to wound repair especially in the early stage of wound healing (Gouin and Kiecolt-Glaser 2011)

Also negative behavioural practices can impede wound healing and those under greater levels of stress are more likely to increase tobacco or alcohol use, decrease their participation in physical activities and make poorer diet choices (Vitaliano et al 2002).

**NUTRITION-**Malnutrition is complex it is not just about eating too little but also not enough of foods that assist with maintaining health. Nutritional factors include components such as proteins, calories or specific vitamin and minerals. The effect of deficiencies in balancing these dietary factors can lead to weight loss or weight gain. Also, the presence of nutritional deficiencies are considered as independent risk factors for wound non-healing (Guest et al 2017; (Molnar et al 2014).)

The UK has seen an increase in the rise of food banks, and research has identified that adults with food insecurity are more likely to have problems managing their health conditions (Seligman et al 2010). The quality of food in food banks is directly related to shelf life of goods, and the accommodation of fresh food is not necessarily available. Although some food banks do have agreements with local suppliers for fresh produce, but this is not a general rule (Strobele-Benschop et al 2017). Non perishable food whilst having a longer shelf life may not necessarily meet the subtle requirements of the older person or those people with underlying health needs, and the presence of nutritional deficiency is an independent risk factor for non healing of wounds (Blak et al 2011)

A study by Brownie (2006) identified that up to 10% of older people living alone showed evidence of malnutrition, and one of the leading causes of decreased food intake in this age group is due to loss of appetite. Appetite loss can be due to a range of reasons and include both physical and mental health issues including reduced physical activity or complete immobilisation. Poorly managed pain, social isolation, dementia and stroke to name a few, but all of which are contributory factors.

Research has also identified weight gain in those with long term conditions due to the effect of reduced mobility and general discomfort. These issues may put curbs on social integration leading to isolation. Some people report a lack of self control in their daily life, caused by the management

requirements and limitations of a long term wound (WHO 2012). Conversely increased activity can put a curb on wound healing due to the extra demand on the body. Also extra functional demands can affect underlying co morbidities, whose status may fluctuate increasing the potential of malnourishment, which then affects wound healing rates. The elderly in particular are at risk of micronutrient deficiency which includes vitamin D, zinc and vitamin B 12 (Tulkinsky 2010). A reduction in dietary zinc has been linked to the ageing process. Zinc is a critical factor in supporting the immune system, and reduced levels can increase the possibility of infection (Prasad et al 2012). Likewise vitamin D has been linked to the promotion of healing factors in wounds, reduced levels of this vitamin has been identified in people with venous and pressure ulcers (Burkiewicz et al 2012)

Oral health is a significant factor in wound healing and dental dysfunction such as tooth loss, or difficulties with mastication, may lead to food choices that are deemed appropriate by the individual as they are easier to eat as opposed to being nutritional. Other contributory factors to poor nutrition include multi pharmacy and prescribed medication which may increase with age. A UK study identified that more than 90% of people over the age of 75 take in excess of 1-2 medications, and commonly noted drug related reactions include a decrease in appetite, altered taste, nausea and vomiting (2017 Health Survey for England)

#### **Local resources and support networks:**

Research has proved that collaborative care is the optimum way of managing a person with a long term wound. The reasons for a non healing wound are usually part of a range of causes and surrounding problems that need to be addressed in order to promote healing. A coordinated approach to wound care which includes centralisation and standardisation of expertise and services has been shown to enhance healing rates (Lanceley A et al 2007). It was identified in a study by Sloan et al (2010) that diabetic patients with foot ulcers who were managed by a podiatrist and one other health care worker, were less likely to undergo an amputation. Also a wound care audit in 2012 at a London Borough in Tower Hamlets demonstrated a lowered long term wound prevalence. In this area a specialist team has been providing wound care management since 1995. demonstrating that early intervention and specialist expertise can reduce long term wounds. This study occurred in an area of deprivation, an issue cited within this research as being a major contributor to long term wounds (Hopkins and Warboys 2014). The patient outcomes of the Tower Hamlets project demonstrate that co ordinated services have created an inverse proportion of long term wounds considering the age and deprivation percentiles of the area.

#### **Conclusion.**

Long term wounds in the UK have been described as growing in prevalence, whilst those people receiving wound care in the UK have been described as too few people 'being successfully managed' (White et al 2016). Guest's report (2017) identified the cost of long term wounds to the NHS, of which there are a range of factors. These include not only the challenges of managing the older patient whose metabolic processes are slower, therefore lengthening tissue repair. Also the health care professional with insufficient wound care education. Or localised under provision of specialised wound care resources (Anderson 2010: EWMA 2008). Yet the advantages of a co ordinated team approach to wound care include not only budgetary reduction, but also benefit to all members of the health care professional team in terms of time saving and pooling of expert knowledge. (Vu et al 2007).

Training for health care workers in wound care is vital and patient outcomes have been noted to be improved when health care professionals receive post graduate training (Clark et al 2015). Other factors include the opportunity for staff to access the support of a collaborative team with the knowledge and skills to prevent a patient's wound from becoming long term (Hopkins et al 2012; Vu et al 2007; Leung et al (2012). However, of greater importance is the patient whose independence and self esteem can be greatly affected by the realities of the 'never healing process' of a long term wound.

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