

The role of multidisciplinary contracture management in pressure ulcer prevention

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Summary

A range of case studies showcasing the benefit of multidisciplinary working in relation to contractures management and pressure ulcer prevention. The application of postural management and issuing of bespoke equipment can assist in reducing the risk of pressure ulcer development or promote healing of an existing pressure ulcer.

Aims & Objectives

The aim of this multidisciplinary working is to manage limb contractures and to reduce the risk of developing pressure ulcers. It is imperative that patients and healthcare professionals are aware of the complications associated with contractures and pressure ulcers, how to recognise risk and how to manage these postural changes when they occur.

Background

The Pressure Ulcer Prevention and Intervention Service (PUPIS) is an innovative and multi-professional collaboration between the Welsh Centre for Burns & Plastic Surgery and the Rehabilitation Engineering Unit at Morriston Hospital. PUPIS addresses the devastating but often avoidable condition of pressure ulcers through prevention and timely, specialised assessment followed by targeted intervention. The team consists of nurse specialists, clinical scientists, rehabilitation engineers and administrators.

PUPIS has seen increased referrals in the community presenting with pressure damage as a consequence of immobility and subsequent limb contractures. A snapshot review of the caseload of patients with pressure ulcers identified 44% had contractures. The case studies presented show examples and the value of multi-disciplinary working to achieve optimum outcomes.

A contracture is the shortening and hardening of soft tissue, often leading to deformity and rigidity of a joint (Oxford English Dictionary, 2021). There is an increased risk of bony parts contacting each other, increasing pressure. Offloading is ideal method for reducing pressure but this can be challenging to fully remove and positioning options are limited. They are attributed to increase immobility, or other medical conditions that impact on mobility (Born, 2017). People who have conditions that impact on spasticity have an increased risk of developing contracture (Wagner, 2010). Paratonia, a form of hypertonia, is the involuntary resistance to passive movement, often associated with high muscle tone and is often present in severe dementia (Van Deun, 2019).

Bespoke solutions are often required for those who have developed severe limb contractures and subsequent pressure ulcers. Some of the solutions to be presented in the case studies include complex moulded seating systems, bespoke bed positioning aids and postural management devices. Aside from pressure ulcer and contracture management, these outcomes have helped with pain and comfort, respiratory and digestive systems and even improved social aspects and quality of life for people.

Discussion

People are often confined to bed for management of contractures and pressure ulcer but this isn't always in their best interest. Sitting out safely with the correct equipment can enhance their daily quality of life whilst managing their contractures and pressure ulcers. Good positioning will help prevent contractures, can improve comfort and circulation, can help maintain a good posture and assist with pressure distribution. This can be achieved in both bed and when sitting. It is imperative

that the onset of contracture development is managed at the earliest stage to reduce the risk of further deterioration and the complexities that are associated. A multidisciplinary approach to both pressure ulcer prevention and contracture management will assist in achieving the best outcomes.