

# Effects of Wegener's granulomatosis and rheumatoid arthritis on leg health and wound healing



**H**azel is a 63-year-old woman who has osteoarthritis, rheumatoid arthritis and Wegener's granulomatosis. Wegener's granulomatosis and rheumatoid arthritis are clinically and immunologically independent diseases, and in both conditions, treatment with immunosuppression is required for any active disease (Chinoy and McKenna, 2002).

Wegener's granulomatosis is a chronic granulomatous inflammatory vasculitis primarily involving the respiratory system. However, this necrotising, small vessel vasculitis can affect any organ in the body, including the kidneys, joints, skin and eyes (Jennette et al, 2013). Skin lesions are quite common, including palpable purpura, ulcers, vesicles and papules. Wegener's granulomatosis is of unknown aetiology but does have an autoimmune component, and it is thought to be caused by heavy-metal exposure (i.e. mercury) and occur in those with a prior history of allergy (Albert et al, 2004). Treatment involves administration of prednisolone in addition to cyclophosphamide or rituximab, as the latter help increase patient survival and suppress local disease (Ntatsaki et al, 2014).

Slow-healing wounds, including leg and foot ulcers, are a known complication of several autoimmune inflammatory diseases, including Wegener's granulomatosis and rheumatoid arthritis. Both these diseases require similar treatment with steroid therapy, and it is well known that corticosteroids negatively influence all phases of wound healing, and should

be a major concern for any health professional treating wounds (Anstead, 1998; Schäcke et al, 2002).

Thus, the member in the present case has two autoimmune diseases that not only cause wounds but also have a detrimental effect on wound healing.

Hazel lives alone and had been a dedicated science teacher who also taught chemistry, maths and geography for 28 years. She retired early due to the symptoms of the Wegener's granulomatosis.

Due to the osteoarthritis, Hazel was scheduled to receive a knee transplant, but she developed a venous leg ulcer, and the surgery could not go ahead until the wound had healed. When it became obvious that the wound was becoming chronic, Hazel was referred to a Leg Club for specialist treatment.

An ankle brachial pressure index assessment was undertaken, and the value was within normal limits. Thus, peripheral artery disease was ruled out, and compression therapy could, therefore, be used.

The Leg Club nurses are educated and experienced in the treatment of leg ulcers and have obtained excellent results in healing hard-to-heal wounds. Hazel's leg ulcer was no exception, and within 2 months, her wound had healed, and the knee transplant surgery could then be planned.

Given that her leg ulcer had been non-healing, without the support of the Leg Club, Hazel would have been in considerable pain with her knee for a longer time, and there was a risk that the wound would become clinically infected.

People with arthritis have high rates of depression and anxiety, both of which are under-diagnosed, and many of those affected do not receive the mental health treatment that could potentially help with their physical arthritis symptoms (Arthritis Foundation, 2019). Leg Clubs not only offer better healing rates but also support the social side of wound care. The fact that Hazel could interact with others in a similar situation and discuss her wound with them helped to relax her and relieve some of her anxiety. Stress is a major contributor to delayed wound healing, and by providing peer support, the social environment of Leg Clubs tends to alleviate some of the symptoms of stress.

Hazel enjoyed being in the Leg Club and appreciated that her wound would not have healed as quickly without the skills of the nurses who helped her. She also recognised the

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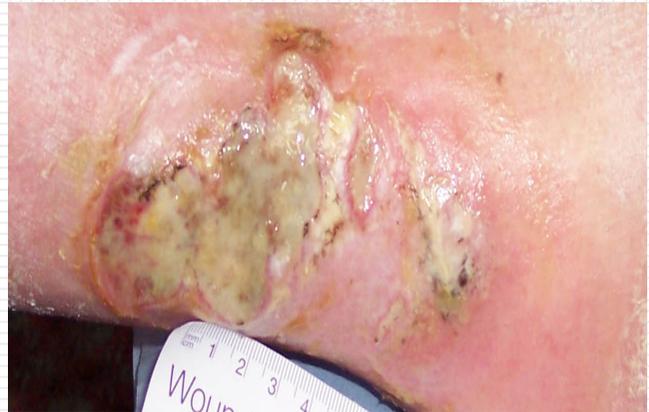
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part played by the volunteers and her fellow Club Members and was grateful to the Leg Club.

Hazel thinks the Leg Club is a brilliant idea and feels it must take some of the pressure off the local surgeries. She also likes the fact there are choices of which club to attend and is delighted that there will be an increase in number of Leg Clubs, which will be held every day from November 2019 onwards.

When patients have multiple comorbidities, as in Hazel's case, then healing becomes a greater challenge. The Leg Club achieved amazing results in this case due to the experience and skills of the nurses, and the Leg Clubs' recognition of the need to consider the social aspects of care. **CWC**

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Wound of a patient at first assessment



After 2 weeks of treatment at a Leg Club

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