COLUMNS

The Role of Physical Therapy in Wound Management - Part One

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The Roles of Physical Therapists in Wound Management

Over the past 15 to 20 years, clinical wound management has evolved into a practice specialty that has been adopted by practitioners who represent several health care professions. In some clinical settings, wound care professionals from different disciplines have realized that their collective knowledge gained over many years of experience is of greater benefit to patients if they work as a transdisciplinary team that provides up-to-date, evidence-based care of individuals with acute and chronic wounds. Included among the professionals on the comprehensive wound care team are physicians, nurses, physical therapists (PTs), podiatrists, certified diabetic educators, registered dietitians, and prosthetists or orthotists. In the United States, PTs have been major players on wound care teams since the early 1980s. In countries such as Canada, Poland, Singapore, Thailand, and Colombia, PT involvement in wound management is on the increase. In many other countries, it appears that although few PTs are involved in direct wound care, more are involved in the restoration of function that is frequently compromised or lost in patients with acute and chronic wounds.

The primary aim of this column is to promulgate, in a series of presentations, the roles of PTs in wound

management, in hopes that other practitioners involved in wound care will realize how their patients can benefit from the expertise of PTs on their wound care teams. As previously mentioned, the multidisciplinary wound team offers a wider range of knowledge, skills, and expertise to patients than can be offered by 1 or 2 health professionals who work together.¹

The earlier history of PT involvement in the management of patients with wounds in the USA dates back to the 1940s. During and following World War II, many PTs worked in acute care hospitals and in the rehabilitation of soldiers with a variety of war-related wounds and burns and the sequela of scarring and compromised function.²⁻⁵ The PT profession has always emphasized but not limited its scope of education and practice to biophysical technologies and exercise interventions. During and following the war, it was common practice for PTs to treat wounds and burns of injured soldiers with hydrotherapy (whirlpool) for the purpose of cleansing wounds of particulate matter and bacteria, for easing the removal of adherent dressings, and to soften necrotic tissue prior to debridement. Over the ensuing decades, the role of PTs in wound management in the United States expanded to include patient and wound evaluation, dressing selection and application, debridement, orthotic-prosthetic training for amputees, and orthotics or total-contact cast fabrication for off-loading the diabetic foot, pressure mapping for wheelchair and bed surfaces, edema management, enhancement of wound healing with

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biophysical technologies (eg, low-frequency ultrasound, electrical stimulation, negative pressure wound healing, pulsed lavage with suction, monochromatic infrared) and restoration of function and mobility.^{1,6} In addition, PTs have made considerable contributions to wound-related basic science and clinical research, which has added to the evidence base for several interventions. Many PTs involved in wound management in the United States are certified wound specialists through the American Academy of Wound Management⁷ and are fellows of the American College of Certified Wound Specialists (<http://www.theccws.org>).

To best describe the roles of PTs in wound management, several of the interventions just mentioned will be presented in this column in subsequent issues. The columns will focus on a particular wound diagnosis or simply address an intervention in isolation.

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