

Wound Sleuth

By Rob Miller, MD, FRCP Dermatologist
and Cathy Burrows, RN, BScN, MScCH (Wound Prevention and Care)

History

A 50-year-old female presents with a severely deformed left foot and ulceration (see photo 1) that is heavily exudating. The wound has been chronic for the past two years. She is a non-smoker, has type 2 diabetes, is married and is active in her community.

Q What is the cause of this deformity and ulceration?

A Charcot Marie Tooth Disease (CMT). CMT is one of the most common inherited neurological disorders, affecting approximately 1 in 2,500 people in the United States. CMT is named for the three physicians who first identified it in 1886: Jean-Martin Charcot; Pierre Marie of Paris, France, and Howard Henry Tooth of Cambridge, England. CMT affects both motor and sensory nerves. A typical feature includes weakness of the foot and lower leg muscles, which may result in foot drop and a high-stepped gait. Foot deformities, such as high arches and hammer toes are also characteristic due to weakness in the small muscles in the feet. In addition, the lower

legs may take on an “inverted champagne bottle” appearance due to the loss of muscle bulk.

Source: *The National Institute of Neurological Disorders and Stroke: Fact Sheet. Available online at www.ninds.nih.gov/disorders/charcot_marie_tooth/detail_charcot_marie_tooth.htm.*

Q What is the treatment?

A There is no cure for CMT, but physical therapy, occupational therapy, braces and other orthopedic devices as well as orthopedic surgery can help patients manage the condition. In this case the patient was assessed by a pedorthist, and a wound care shoe was applied to accommodate pressure relief with the dressings. Once the wound had healed (see photo 2) a custom shoe was built (see photo 3). Wound management consisted of regular surgical debridement, cadexomer iodine to manage bioburden and an alginate dressing to maintain drainage. Dressing changes were done by community nurses three times per week. 🩹

Rob Miller is a dermatologist and **Cathy Burrows** is an independent wound care consultant, both in Halifax.



Further Reading

For more on Charcot deformity, please see the following:

- Charcot-Marie-Tooth Disease www.patient.co.uk/doctor/charcot-marie-tooth-disease
- What Is Charcot-Marie-Tooth (CMT)? www.cmtausa.org/index.php?option=com_content&view=article&id=70&Itemid=159