by Alistair McInnes, Editor, *The Diabetic Foot*

Introduction

Diabetic peripheral neuropathy is probably the most common complication of diabetes, affecting approximately 30% of patients (Kumar et al, 1994). Peripheral neuropathy may lead to foot ulceration and is a major factor in many amputations (Apelqvist and Agardh, 1992).

The most common manifestation of peripheral neuropathy is bilateral, symmetric, predominantly sensory involvement of the lower extremities. Various stages of peripheral neuropathy have been described, including the chronic painful and the acutely painful forms (Boulton et al, 1998).

Clinical assessment of neuropathy should be part of the annual review process. The objective is to determine the presence of clinical neuropathy (Boulton et al, 1998). ***It is important that any undiagnosed pain is reported to the patient's GP or consultant diabetologist for further assessment and investigation.***

The following information is intended to aid the healthcare professional (HCP) in the assessment and management of these less frequent, debilitating forms of peripheral neuropathy. ***It is advised that all HCPs review the relevant literature on screening for diabetic peripheral neuropathy before using this guideline in isolation (Young and Matthews, 1998). This guideline is tailored to the painful forms of peripheral neuropathy only.***

Chronic painful neuropathy

Chronic painful neuropathy can occur with other forms of neuropathy. It is therefore important to be thorough in the diagnosis and assessment of this condition.

A comprehensive patient history is required to identify risk factors for the neuropathy and any other potential aetiological factors (Boulton et al, 1998).

Assessment

The patient presenting with chronic painful neuropathy will often complain of two outstanding symptoms, namely pain and paraesthesias. The pain may vary from dull or aching to cramp-like, burning, lancinating, or crushing, and usually has a root type of distribution (Ellenberg, 1976). There is often an exacerbation of pain at night, which may be relieved by pacing the floor. This finding aids the differentiation from peripheral vascular disease (where pain may be relieved by standing or taking a few steps only). There may be absent sensation to several modalities and reduced or absent reflexes (Boulton et al, 1998).

Management

The management of this condition is best described in the *Guidelines for the Diagnosis and Outpatient Management of Diabetic Peripheral Neuropathy* (Boulton et al, 1998). The fundamental management involves the maintenance of optimal glycaemic control and the use of tricyclic drugs (e.g. imipramine) for the chronic pain (low dose at night, increasing as necessary).

Acute painful neuropathy

Acute painful neuropathy can occur with other forms of neuropathy. It is important to refer all patients with painful neuropathy to the consultant diabetologist or neurologist with an interest in diabetes.

Assessment

The patient presenting with acute painful neuropathy may have similar symptoms to the patient with the chronic type. The neuropathy is characterised by pain produced by innocuous skin stimulation, e.g. with a cotton wisp (allodynia). Patients with allodynia may find light touch, clothing and wind very painful (Foster et al, 1994). Patients may suffer these symptoms following insulin therapy following poorly controlled diabetes.

Management

Refer to the Guidelines document (Boulton et al, 1998). The pain may be treated with simple analgesic drugs, progressing to NSAIDs or tricyclic drugs. Patients suffering from allodynia may find relief with the use of the topical analgesic, Axsain (capsaicin 0.075%; Elan Pharma). The use of Opsite film (Smith and Nephew) has also been reported as having beneficial effects (Foster et al, 1994).

Conclusion

It is important to recognise these painful forms of neur -opathy and refer affected patients to the diabetologist or neurologist accordingly. Many of the patients may be depressed, and could benefit from additional counselling. They will require assurance that the painful neuropathy may disappear within 3 months or so. Unfortunately, in some cases, the symptoms may take up to and beyond one year to subside. The patients will, however, benefit from maintaining optimal glycaemic control, where possible. It is also very important to emphasize the importance of footcare education for the patients who have peripheral neuropathy and to utilise the most appropriate teaching and learning strategies, which are well described in the literature (Rettig et al, 1986; Bloomgarden et al, 1987; Malone et al, 1989). This may help to prevent the onset of foot ulceration and thus remove the threat of amputation. ■

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