Letters

NICORANDIL AS A CAUSE OF PERINEAL ULCERATION.

Editor,

We report a case of extensive perineal ulceration that healed spontaneously on discontinuation of nicorandil therapy, avoiding major perineal reconstructive surgery. We note a previous report of penile ulceration related to nicorandil therapy in this journal and wish to remind readers to consider nicorandil as a causative agent for any ulcerated non-healing chronic wound.¹

Case

An 82 year-old man presented with an 18 month history of painful perineal ulceration. He denied any other colorectal or gastrointestinal symptoms. His past medical history included myocardial infarction, atrial fibrillation and prostatic carcinoma. He received no radiotherapy to treat his prostatic carcinoma. He had been commenced on nicorandil 30mg twice daily 18 months previously following his myocardial infarction. Soon after this, he reports the gradual onset of painful perianal ulceration.

Biopsies performed by the referring specialty had excluded malignancy and inflammatory bowel disease. On initial review by Plastic Surgery he was found to have a deep 3x1cm area of ulceration adjacent to his anus, which was sloughy and had well circumscribed margins (Figure 1). Microbiological investigations were negative.



Fig 1. Ulcer at presentation.

Under the guidance of the patient's cardiologist, his nicorandil was discontinued and the dose of his Beta-Blocker was increased. On review at one month he was pain free and the ulcer was healing. At 5 months the defect had completely healed and he remained pain free.

Discussion

There are many causes of perineal ulceration for which malignancy and inflammatory bowel disease (Crohn's disease) account for the majority.^{2,3} Other causes include infective,

neoplastic, Extra-mammary Paget's disease, pharmacological and auto-immune.

Patients presenting to plastic surgeons with chronic perineal ulceration can have passed through several other specialties and have often undergone a plethora of haematological, microbiological, endoscopic and radiological gastrointestinal investigations prior to referral.² In addition they may have undergone several tissue biopsies.

Nicorandil is used as a third line agent in the treatment of angina and ischaemic heart disease.² It's pharmacological effects result in vascular smooth muscle relaxation dilating peripheral and coronary resistance arterioles, therefore increasing coronary blood flow.²

Nicorandil has been reported as a cause of mucosal ulceration in the gastrointestinal, gynaecological, surgical and urological literature. 1.2.3.4.5 It has been associated with non-healing surgical wounds. Despite the link of nicorandil and painful perineal ulceration being reported in the literature, this patient passed through the care of a colorectal surgeon and the medical physicians prior to seeing the plastic surgeons. This would suggest that this link is not generally known about.

The onset of perianal ulceration after starting nicorandil can vary from several weeks to months, but healing on withdrawal of the drug is characteristic of nicorandil-induced ulceration. Some authors have suggested that the ulcerative effects of nicorandil may be dose dependent and patients on doses of 10mg daily are at risk of ulceration.

In summary

We report a case of extensive painful perineal ulceration that healed spontaneously on discontinuation of nicorandil therapy. Failure to recognise nicorandil as an aetiological factor in the development of perineal ulceration may lead to unnecessary surgical intervention.

The authors have no conflict of interest.

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