The successful treatment of acute refractory pseudo-obstruction with prucalopride

Introduction

A 54-year-old man was admitted with acute severe abdominal distension and CT-confirmed pseudoobstruction. He had suffered a spinal injury 35 years previously and was confined to a wheel chair but lived an independent full life. He used occasional Micralax enemata to aid bowel function but had never had any symptoms similar to the present admission. There was no secondary cause found for his presentation.

He was initially decompressed by colonoscopy which was carried out to the caecum. This relieved the distension but he suffered an early recurrence. Intravenous neostigmine (2.5 mg) was administered with cardiac monitoring but decompression was not achieved. A course of oral prostigmine in increasing dose was commenced, as he remained distended, but without signs of colonic ischaemia. This did not lead to decompression or bowel emptying.

It was decided to give prucalopride (2 mg) orally. This initiated a large decompression within 1 h and the patient felt instantaneous relief. A further 2 mg was given on the second day after which his normal bowel habit returned. He did not suffer any side-effect. After a lengthy inpatient stay he was discharged home, with the support of ongoing community nursing care, and remains well and independent.

Discussion

Colonic pseudo-obstruction is defined as 'massive dilatation of the colon with obstructive symptoms but in the absence of mechanical obstruction' [1]. Its true cause remains unclear but it is associated with intercurrent illness or chronic underlying conditions such as Parkinson's disease and their respective treatments. It can cause a costly and prolonged inpatient stay and is a source of morbidity and mortality if associated with perforation.

Traditional algorithms of treatment include initially the reversal of acute physiological disturbances followed by supportive care. There is randomized trial evidence that neostigmine [2] and colonic decompression can be helpful but recurrence is high [3].

5-Hydroxytryptamine receptor 4 (5-HT₄) agonists may have an exciting role in the management of colonic pseudo-obstruction and we await the results of trial evidence to support this [4]. In this case the treatment was the only successful modality that facilitated the discharge of the patient back to his home environment without the need for expensive ongoing nursing care. Subsequently he has not experienced any recurrence.

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