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## DRUG POINTS

# Nicorandil may be associated with gastrointestinal ulceration

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Nicorandil (Ikorel; Rhône-Poulenc Rorer, Guildford) is associated with mouth and anal ulcers,<sup>1-3</sup> but we are not aware of any previous reports of association with gastrointestinal ulceration. A 69 year old woman had had percutaneous coronary intervention and a stent inserted into her left anterior descending artery two years before presentation. She had recurrent angina, and her general practitioner increased her dose of nicorandil to 30 mg twice a day. She had another percutaneous coronary intervention for in-stent re-stenosis, after which she presented to her general practitioner with mouth and anal ulcers and was referred for gastrointestinal evaluation. She was taking aspirin, a  $\beta$  blocker, nitrate, and a statin. Upper and lower gastrointestinal endoscopy showed, in addition to her oral and anal ulcers, multiple ulcers of the small and large intestines and multiple biopsies showed non-specific ulceration. A provisional diagnosis of inflammatory bowel disease was made and she was due to be started on steroids and immunosuppressive treatment. She was seen in our clinic for cardiac review, and, at that time, she had anal ulcers and a large ulcer, 15 mm in diameter, at the base of her tongue. We stopped nicorandil, and her ulcers healed, and she had no further problems and remains well.

Full investigations to rule out other pathologies and causes of ulceration are important. Ulceration related to

nicorandil usually resolves itself on stopping nicorandil, but reducing the dose may promote ulcer healing.<sup>4</sup> This is important as nicorandil is usually used as a third line treatment in patients with severe coronary artery disease, and it may not be possible to stop it completely without recurrence of anginal symptoms.

This case suggests that nicorandil might be associated with intestinal ulceration, in addition to ulceration of the mouth and anus, because no other cause was identified, and the ulcers resolved after stopping nicorandil. The Medicines and Healthcare Products Regulatory Agency's website lists two cases with possible relation to nicorandil: one of oesophageal ulceration and another of fatal small intestinal ulceration. Similarly, a report of perforation of the terminal ileum putatively linked it to nicorandil.<sup>5</sup>

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## The 1918 influenza pandemic: a survivor's tale

Patrick Collins, my uncle, was a cavalry soldier in the first world war. In 1918 he was one of the few survivors in his Cheshire regiment.

When the influenza pandemic struck, it went through his camp like wildfire. Patrick noticed that virtually all those who stayed in camp died, presumably from the secondary staphylococcal pneumonia which killed so many. When he developed the first signs of influenza, he begged that he be allowed to leave camp with three days' rum ration and a tent. He managed to drag himself and his tent up a hill away from the camp, and there he

sweated and shivered and was delirious for several days, sustained by his rum allowance.

Patrick was one of the few survivors. He lived until the age of 92. He was a wonderful storyteller to his children, nephews and nieces, grandchildren, and great-grandchildren. The one story he never told us was this one. His eldest daughter, in whom he had confided, told the story at his funeral in 1987.

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