

Red-Brown Urine Discolouration in Two Patients Taking Mesalamine

Tim Smeets¹ and Florence van Hunsel¹

1 Netherlands Pharmacovigilance Centre Lareb, 's-Hertogenbosch, The Netherlands

Abstract

A 38-year-old male and a 36-year-old female experienced red-brown urine discolouration after 2 and 3 days, respectively, during the use of mesalamine for inflammatory bowel disease. Both patients mentioned that the urine discoloured after contact with sodium hypochlorite detergent in toilet water. Mesalamine and the inactive metabolite N-acetyl-5-aminosalicylic acid are primarily excreted in the urine. We hypothesised a possible reaction with sodium hypochlorite and/or light. Naranjo assessment scores of 9 and 6 were obtained for the reports, indicating a certain and probable relationship, respectively, between the red-brown urine discolouration and the use of the suspect drug mesalamine. Knowledge of this harmless reaction is desirable to avoid unnecessary physical examination and worry.

Introduction

Mesalamine is indicated for the treatment of ulcerative colitis and Crohn's disease [1]. The exact working mechanism of mesalamine is not fully understood, but it appears to have anti-inflammatory properties. The drug blocks interleukin-1 and tumour necrosis factor- α . Mesalamine also inhibits the cyclo-oxygenase pathway, leading to inhibition of prostaglandin E in inflamed intestine. Blocking of the lipoxygenase pathway also inhibits the production of leukotrienes [2]. The most common adverse drug reactions (ADRs), as described in the Summary of Product Characteristics (SmPC), are headache, rash and gastrointestinal symptoms, including diarrhoea, nausea, vomiting and abdominal pain [1]. Mesalamine is also associated with the renal ADRs of renal failure, interstitial nephritis and haematuria [1, 3]. In the period from August 2009 to April 2015, the Netherlands Pharmacovigilance Centre Lareb received two case reports of red-brown urine discolouration in association with mesalamine [4]. Both cases were reported by patients and the urine discoloured after contact with the toilet bowl. This discolouration could worry patients and/or encourage healthcare professionals to undertake further examination. This article describes these two reports and summarises the available literature.

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