

Short communication

Recurrent venous thrombosis including cerebral venous sinus thrombosis in a patient taking sildenafil for erectile dysfunction

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Abstract

Acquired or hereditary prothrombotic risk factors may lead to cerebral venous sinus thrombosis (CVST), particularly when other predisposing factors coexist. A 57-year-old man experienced right leg deep venous thrombosis, severe thrombosis of the haemorrhoid plexus and CVST over a 12-month period during which he was taking sildenafil regularly twice a week. Sildenafil is a phosphodiesterase 5 (PDE5)-inhibitor used for erectile dysfunction (ED). A slight reduction in antithrombin III and free protein S levels was demonstrated. After suspension of sildenafil and six months on oral anticoagulants, clinical improvement was obtained. Recurrent venous thrombosis, including CVST, may complicate prolonged treatment with PDE5-inhibitors in subjects at risk. Periodic monitoring of clotting factors is recommended in these subjects.

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1. Introduction

Cerebral venous sinus thrombosis (CVST) is a potentially lethal condition, presenting with a broad spectrum of symptoms and signs [1]. Recurrent sinus thrombosis occurs in 2% of patients and about 4% of them have an extracranial thrombotic event within a year. Recurrence of venous thrombosis may increase the risk of severe complications [2].

Common conditions leading to cerebral venous occlusion in adults are related to acquired or hereditary hypercoagulation status. Hereditary prothrombotic conditions such as mutations of Leiden factor V, protein C, protein S, antithrombin III and homocysteine, as well as mutations of the prothrombin gene, account for more than 10% of cases. The risk for a carrier of any of these conditions to develop

CVST may be increased by concomitant predisposing factors including hypotension, dehydration, hormonal states (pregnancy, obesity), malignancy and drugs such as oral contraceptives, L-asparaginase and ecstasy [1].

We describe the case of a subject with slightly reduced plasma levels of antithrombin III and protein S who developed recurrent episodes of venous thrombosis including CVST over a 12-month period of use of sildenafil, a phosphodiesterase 5 (PDE5)-inhibitor (PDE5i).

2. Case presentation

2.1. History

A 57-year-old man presented at our institution with a two-week history of bilateral blurred vision and inconstant occipital headache, starting 1h after an acute episode of gastroenteritis with diarrhoea and vomiting that the patient ascribed to a dose of sildenafil (100 mg) taken three hours before. Symptoms typically appeared in the morning on

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