Intravenous immune globulin and thromboembolic adverse events : about a new case report

(Poster: 23)

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Introduction

- Intravenous immunoglobulin(IVIg) is an efficient biological agent to manage various immunodeficiency states, inflammatory diseases,and infections.
- Its adverse reactions are being increasingly studied.
- The risk of adverse thromboembolic events has been reported in0.5% to15%of patients treated with IVIg.

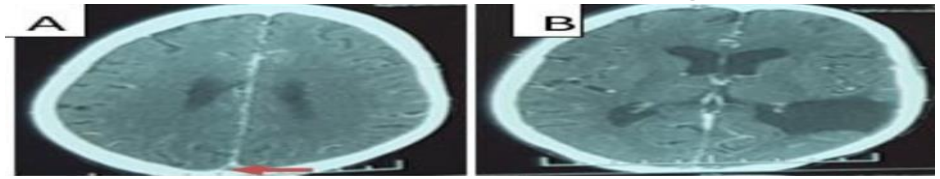
➔ We report a new case of IVIg with thromboembolic adverse.

Case presentation

A 58-year-old woman,with no medical history, admitted for **multiple autoimmune syndrome** including anti-synthetase syndrome associated to Sjögren's syndrome, Hashimoto's thyroiditis, autoimmune hepatitis and primary biliary cholangitis.

➔ The patient was treated with high-dose corticosteroids and immunosuppressants (azathioprine),and also **underwent 2 g/kg IVIg treatment over 2days due to severe muscle weakness that affected the respiratory and oropharyngeal muscles.**

- The initial progress was positive with respiratory status and dysphagia both improving, as well as a reduction in proximal muscle weakness.
- However, four days after the administration of IVIg, the patient suffered an episode of status epilepticus and a cerebral MRI revealed a cerebral venous thrombosis (Figure1).



Cerebral CT scan (A, B: axial plane, C: Sagittal plane) showing a venous thrombosis of superior sagittal sinus

Of note, the patient was receiving prophylactic anticoagulation.

➔ We retained a cerebral venous thrombosis complicating IVIg administration, after ruling out the other causes of venous thrombosis as the neoplastic aetiologies; nephrotic syndrome hyperhomocysteinemia, and antiphospholipid antibodies.

*After a brief hospitalization in the intensive care unit, the, the patient's condition improved. She was administered anticoagulant treatment (consisting of low molecular weight heparin and rivaroxaban taken over six months with no records of bleeding), in conjunction with an anti-epileptic medication.

We also obtained also a good outcome of her anti-synthetase syndrome with oral corticosteroids associated with Azathioprine

Conclusion

* The administration of IVIg significantly increases blood viscosity **by promoting the aggregation of erythrocytes and activation of platelets**, while inducing arterial vasospasm.

*Laboratory assessments revealed that at the plasma constituents, such as coagulation factor XIa, copurified with IgG or **otherwise are not wholly removed in some IVIg manufacturing processes**.