

Microangiopathy in patient with multiple sclerosis in therapy with beta-interferon

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Background

A 49-year-old man was hospitalized for fever, haemolytic anemia and thrombocytopenia. In medical history had multiple sclerosis in treatment with interferon beta1b (IFN-1b).

Case history

Thrombotic microangiopathy was revealed by ADAMTS13 activity lower than 5%. Because of anemia and thrombocytopenia, IFN-1b was interrupted and caplacizumab was started¹. After 21 days of caplacizumab, was obtained resolution of PTT but haemolytic anemia hadn't resolved. Haematological malignancies were excluded. 2 set of blood culture resulted positive for *Streptococcus mitis oralis*, echocardiogram showed infective endocarditis on tricuspid valve and was started antibiotic therapy. CT angiography revealed pulmonary embolism but no deep vein thrombosis therapy with low-molecular-weight-heparin was started. CT PET-scan revealed multiple muscle abscesses, metastatic foci of infective endocarditis. Nevertheless, it was persistence of haemolytic anemia with positive direct Coombs test, with mild

anemia. Because of the worsening of hemodynamic status, cardiac surgery was performed. Anticoagulant therapy with warfarin was started. Steroid tapering was done and the burden of abscesses was improved.

Discussion

PTT is a thrombotic microangiopathy classified in idiopathic or secondary. It may be possible that this pathology is caused by using IFN-1b or by endocarditis. A relation between PTT and using IFN-1b was described.²

References

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