Angioimmunoblastic T-cell lymphoma, combined with antiphospholipid syndrome and autoimmune thrombocytopenia (Case Report)

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Introduction

Combined bleeding and thrombophilic conditions pose a major challenge in haematostaseology. Combined angioimmunoblastic T-cell lymphoma, antiphospholipid syndrome and autoimmune thrombocytopenia can cause many therapeutic problems.

Case report

We present a report on a 68-year-old Caucasian woman who suffered from an indolent angioimmunoblastic T-cell lymphoma for 2 years. During progression of the lymphoma, symptoms of a possibly pre-existing antiphospholipid syndrome appeared, requiring anticoagulation therapy despite a concurrent tendency to bleeding.

Her medical history included a splenic infarction 6 years before, splenic and mesenterial venous thromboses resulting in portal hypertension with esophageal varices, as well as cerebral posterior ischemia without residual damage. The patient had 1 living son, but had experienced 2 miscarriages.

Despite thrombocytopenia due to lymphoma activity and autoimmune mechanisms, we opted for chemotherapy using the “CHOP” schedule with cyclophosphamide, vincristine, daunorubicin and prednisone, combined with rituximab to overcome autoimmune thrombocytopenia. Continuous therapeutic anticoagulation was given despite low platelet counts.

Arterial thrombosis of the right lower leg occurred shortly after treatment of the autoimmune thrombocytopenia with intravenous immunoglobulins. In contrast, after surgical removal (thrombendarterectomy), post-operative bleeding complications required lengthy secondary healing of the wound, preventing rapid recovery. Another episode of thrombosis as well as pulmonary embolism occurred shortly after the initiation of immunosuppressive treatment with rituximab. Due to an additional heparin-induced thrombocytopenia Type II, confirmed by a HIPA test and cross-reacting with danaparoid, phenprocoumon and argatroban were the anticoagulants administered during the whole course of the disease. CHOP chemotherapy could be administered for five cycles as planned. However, infectious complications (pneumonia, facial zoster infection, candida esophagitis, pulmonary empyema with subsequent bilobectomy) warranted intensive clinical therapeutic intervention. Bleeding from surgical wounds (thrombendarterectomy) and gastrointestinal bleeding from esophageal varices were life-threatening to the patient on several occasions. On recovery from these events, recurrent vascular occlusions in the right leg led to painful critical ischemia requiring amputation of the leg.

Conclusions

Antiphospholipid syndrome has been described both in association with Non-Hodgkin lymphomas and as a separate entity. In our patient, due to her personal history of miscarriages and splenic infarctions, an underlying thrombophilic diathesis is likely, clinically apparent as an antiphospholipid syndrome. Her angioimmunoblastic T-cell lymphoma alone or in combination led to thrombocytic conditions preventing us from histologic confirmation of the disease when progressive lymphadenopathy occurred. However, this had previously been performed, and there was no other evidence of a different malignant condition having evolved since then. It has been reported that autoimmune phenomena can occur within the context of Non-Hodgkin lymphomas [1]; however, data on a small series of patients suffering from both entities independently from one another has been reported by a French group [2]. The concurrent heparin-induced thrombocytopeinia, even cross-reacting with other anticoagulants, is most likely a third independent problem appearing in our patient. As to the
Combined bleeding and thrombosis in AILD, APS and ITP

...role of rituximab, it is well known to be effective in the treatment of autoimmune disorders e.g. thrombocytopenia, despite its “off-label” use in this context. Moreover, a beneficial effect of rituximab has also been reported to improve severe antiphospholipid syndrome, whether they are present in association with lymphomas [3, 4] or separately [5]. It also has to be noted that although usually associated with major systemic complications such as pleural effusions or infections due to immunosuppression [6], the angioimmunoblastic T-cell lymphoma was not the leading cause of clinical problems in our patient. Admittedly, infectious complications such as facial zoster infection, candida esophagitis and a pleural empyema required antimicrobial therapies or even surgery in the case of the latter. However, it was possible to administer five cycles of CHOP polychemotherapy without major delays. Whether a reversible posterior leucencephalopathy has to be attributed to rituximab remains a subject of discussion, but this also presented only one more difficulty in the therapeutic management and was overcome without severe residual neurological changes. On the other hand, the underlying antiphospholipid syndrome was a cause of intolerable pain due to repeated thrombotic complications in the patient’s right leg, which eventually had to be amputated. After 18 months of continuous bleeding and thrombotic complications following progression of the lymphoma, our patient died postoperatively due to multorgan failure, having succumbed to increasing physical frailty due to multiple bleeding and thrombotic episodes.

In conclusion, patients with antiphospholipid syndrome require anticoagulation therapy despite conditions leading to a bleeding diathesis, such as lymphomas with low platelet counts. Moreover, the latter do not protect against fatal embolic complications.

References


