HIV and venous thromboembolism risk: About 3 cases with review of the literature

Mohamed El Amraoui, Rachid Frikh, Naoufal Hjira, Mohammed Boui
Dermatology-Venereology, Mohammed V Military Teaching Hospital, Rabat, Morocco

❖ Introduction :

Thromboembolic disease is increasingly reported during infection with the human immunodeficiency virus (HIV). It interests the venous territory with predilection.

❖ Materials and methods:

Retrospective study, conducted over a period of two years (July 2014-July 2016), within the dermatology-venereology department of the Mohammed V Military Teaching Hospital in Rabat. The study consisted of the exploitation of patient's hospital records and the register of new HIV-positive cases.

❖ Results:

Of a total of 58 new HIV cases, 3 patients presented venous thromboembolic events.

Case N° 1: A 40-year-old man, followed for retroviral infection for 8 years, with poor treatment adherence, was admitted for febrile dyspnea. Chest X-ray showed well-circumscribed right basal opacity and thoracic CT was in favor of massive, bilateral pulmonary embolism with infarction and superinfection of the right lower lobe.

Case N° 2: A 50-year-old patient with a history of repeated STIs was hospitalized for left femoro-popliteal thrombophlebitis with cachexia and general impairment. The report showed a retroviral infection at the AIDS stage.

Case N° 3: 55 year old man, followed for retroviral infection at the AIDS stage under triple therapy. Presented an elongated TCA with evidence of an anti-phospholipid antibody type anticoagulant lupus positive.

❖ Discussion :

The risk of venous thromboembolism in HIV-infected patients has been described since the 1990s and is 2 to 10 times higher than in the general population.

This pro-thrombotic state of HIV infection is multifactorial. Some risk factors have been demonstrated such as low CD4 count, clinical AIDS stage, protein S and / or protein C deficiency. Other factors are still controversial such as anti proteases, the presence of active opportunistic infections and the presence of antiphospholipid antibodies.

Physicians who care for people with HIV need not only to treat opportunistic infections and malignancies, but also to be alert to the risk of thromboembolism.

The drug interactions between Warfarin and antiretrovirals are possible and require particular caution given the risks of overdose and therefore bleeding.

❖ Conclusion :

Retroviral infection is a risk factor for venous thromboembolic complications for many reasons. Antiretrovirals have significantly improved the prognosis of this particular infection, but at the cost of complications including thrombogenic terrain and direct thrombogenic risk of anti proteases.

❖ References:

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Figure 1: Chest X-ray showing well-circumscribed right basal opacity

Figure 2 and 3: Thoracic CT showing massive and bilateral pulmonary embolism with superinfection of LID