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Sticky platelet syndrome (SPS) in patients with AIDS: a cross-sectional study

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Purpose of the study

Today, use of antiretroviral (ARV) therapy in patients with AIDS is associated with longer survival [1]. However, several new complications have been described in the last few years, mainly cardiovascular events. Several abnormalities have been related to cardiovascular complications: endothelial dysfunction, dyslipidemia, insulin resistance, or prothrombotic state. However, none of these entities totally explain cardiovascular complications. The aim of this research was to determine the frequency of SPS associated with ARV therapy.

Methods

We performed a cross-sectional study of patients with AIDS who received ARV for at least 6 months. We studied two groups of patients depending on the use of protease inhibitors. SPS was evaluated with a functional assay according to the recommendations described in the literature [2]. Results are expressed as % of platelet aggregometry. Characteristics of the patients are expressed as median and ranges. We used a X^2 test to determine if there were differences between the groups in terms of frequency of SPS.

Summary of results

We studied 100 patients with AIDS: four women and 96 men. For the whole group, mean age was 45 yrs (range 22 to 77). Mean time of treatment with ARV drugs was 90 months (range 8 to 177). We found that 73% of the patients had criteria to be considered carriers of SPS. Sixty-nine percent of the patients had type 2 SPS (only with epinephrine), 27% had type 1 SPS (with epinephrine and ADP), and only 4% of the patients had type 3 SPS (with ADP). The analysis of results according to the group of study showed that 54.8% of patients with SPS were receiving protease inhibitors (p = 0.239).

Conclusion

SPS was recently described as a relatively frequent cause of either venous or arterial thrombotic events. To date, no single cause of thrombophilia can explain the growing incidence of vascular events associated to ARV in patients with AIDS. A few years ago, our group informed a large series of venous thromboembolic events in patients with AIDS in which none of the thrombophilic causes described in the general population was found significantly. Therefore, we attempted to investigate other causes of thrombophilia that may be affecting patients with AIDS. We have found that SPS is a very frequent condition in patients with AIDS receiving ARV therapy for at least 6 months. Moreover, we found that protease inhibitors are not associated with the appearance of the syndrome in this population. A controlled study about this association is warranted.

References

1. The DAD Study Group: **Use of nucleoside reverse transcriptase inhibitors and risk of myocardial infarction in HIV-infected patients enrolled in D:A:D study:a multi-cohort collaboration.** *Lancet* 2008, **371:**1417-26.
2. Mammen EF: **Ten years' experience with the sticky platelet syndrome.** *J Clin Appl Thromb & Hemostas* 1995, **1:**66.