

Endovascular Procedures to treat HIV patients with associated Arterial Disease

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Endovascular Procedures

Atherosclerotic and thrombotic disease associated with human immunodeficiency virus (HIV) infection has been studied, showing that HIV patients have 50% increased cardiovascular risk compared with the world population, contemporary, despite efforts, we cannot eradicate HIV and most patients will require lifelong treatment [1,2]. That modifies the arterial physiology inducing a variety of vasculopathies, as arterial aneurysms or occlusive disease [3-5]. Authors agree that endovascular therapy for the HIV-associated patients has good short-term results, [5-9] although guidelines for endovascular surgery in HIV-infected patients are currently non-existent, open surgical management, is characterized by increased morbidity, mortality and poor limb salvage rates, however there is also no comparative study between surgical and endovascular options in the context of HIV [5,6]. In another hand results in endovascular first approach had good outcomes in HIV patients with artery aneurysms but were poor with occlusive disease [5]. We must keep in mind that thrombosis as a manifestation of HIV has already been reported characterizing a hypercoagulable state and that thromboembolic events may become more frequent in this group [2,9,10]. Thrombotic emergency has a raised risk of mortality and anticoagulation alone may not solve the problem, pharmacomechanical thrombolysis with recombinant tissue plasminogen activator and endovascular tools for rapid clot removal utilizing percutaneous mechanical device as Aspirex TM S-Straub Medical Aspirex® or Rotarex® must be used for complete thrombus removal [10]. To treat vessels occlusion a successful percutaneous pharmacomechanical thrombectomy have been reported in patients infected with HIV [11].

Currently new endovascular devices, contribute to the technical development and improvement of our results in the general population but there are no structured guidelines advising on the respective roles of surgical and endovascular treatment for the management of vascular pathology in HIV patients [5,6,12]. Another important point of view is that endovascular technics have the advantage of reducing invasiveness, actually, the risk of HIV transmission should be considered and concerns regarding HIV transmission during any surgical procedures must be remembered [12].

For the future we already knows, in relation to the treatment of critical limb ischemia that it can interfere with both, the survival prognosis as in the rescue of members, patients with chronic HIV infection also. A member treated means reducing pain and improving quality of life fully, amputation may be an alternative to reduce pain, but decreases or prevents, in most cases, the opportunity for social rehabilitation and individual autonomy of patients [13].

In conclusion, besides the varied form of presentation and the small number of patients there are currently no long-term follow-up of those

patients, but we can affirm that there is an extensive documentation of the association between vascular disease and HIV infection, however the applicability of these resources in this group of patients, which differs from classic atherosclerotic plaque, requires more time observation, although already supported by the literature we can consider the endovascular procedures an option for these patients.

References

1. Mary-Krause M, Cotte L, Simon A, Partisani M, Costagliola D, et al. (2003) Increased risk of myocardial infarction with duration of protease inhibitor therapy in HIV-infected men. *Aids* 17: 2479-2486.
2. Coyle TE (1997) Hematologic complications of human immunodeficiency virus infection and the acquired immunodeficiency syndrome. *Med Clin North Am* 81: 449-470.
3. Euringer W, Südkamp M, Rylski B, Blanke P (2012) Endovascular treatment of multiple HIV-related aneurysms using multilayer stents. *Cardiovasc Intervent Radiol* 35: 945-949.
4. Padayachy V, Robbs JV (2012) Carotid artery aneurysms in patients with human immunodeficiency virus. *J Vasc Surg* 55: 331-337.
5. Pillay B, Ramdial PK, Naidoo DP, Sartorius B, Singh D (2016) Endovascular Therapy for Large Vessel Vasculopathy in HIV-infected Patients. *Eur J Vasc Endovasc Surg* 52: 343-351.
6. Van Marle J, Tudhope L, Weir G, Botes K (2002) Vascular disease in HIV/AIDS patients. *S Afr Med J* 92:74-78.
7. Tsoetsi SC, Mulaudzi TV, Sikhosana MH, de Vries JPPM (2015) Endovascular interventions for human immunodeficiency virus-associated iliac artery aneurysms. *Vascular* 23: 570-574.
8. Machado R, Silveira D, Almeida P, Almeida R (2016) Abdominal aortic aneurysm and human immunodeficiency virus infection, a new indication for endovascular aneurysm repair?. *Angiologia e Cirurgia Vascular* 12: 110-115.
9. Witz M, Lehmann J, Korzets Z (2000) Acute brachial artery thrombosis as the initial manifestation of human immunodeficiency virus infection. *Am J Hematol* 64: 137-139.
10. Reis PO, Roeveer L, Nascimento MR, Sandri Pd (2016) Thrombectomy and angioplasty as treatment for acute superior vena cava syndrome. *Transl Surg* 1: 112-114.
11. Bush RL, Bianco CC, Bixler TJ, Lin PH, Lumsden AB (2003) Spontaneous arterial thrombosis in a patient with human immunodeficiency virus infection: Successful treatment with pharmacomechanical thrombectomy. *J Vasc Surg* 38: 392-395.
12. Smit S (2010) Guidelines for surgery in the HIV patient HIV/AIDS continues to have a profound impact on all aspects of surgery. *Continuing Medical Education* 8: 356-358.
13. Norgren L, Hiatt WR, Dormandy JA, Nehler NR, Harris KA, et al. (2007) TASC for the management of peripheral arterial disease – (TASC II). *J Vasc Surg* 45: S5-67.

