

## CORRESPONDENCE

### The Changing Incidence of Femoral Artery Pseudoaneurysm

We read with interest the article by Norwood and colleagues.<sup>1</sup>

The management of femoral artery pseudoaneurysm has evolved in recent years and percutaneous ultrasound guided thrombin injection is now recommended as the standard of care. Its efficacy is highlighted by successful pseudoaneurysm thrombolysis in 96% of cases and good patient tolerance.<sup>2,3</sup>

As described by Norwood, potential reasons for a change in femoral artery pseudoaneurysm incidence may be related to an increased number of interventional cardiological procedures performed coupled with the newer anti-platelet agents now employed.

We have recently undertaken a review of 87 patients with 89 iatrogenic pseudoaneurysm treated at our centre between January 1997 and June 2002.<sup>4</sup> Thrombin injection was introduced as a treatment modality from July 1999. Prior to this, compression therapy and conventional operative repair were utilised in the management of pseudoaneurysm. In the two years (1997–1998) before the introduction of thrombin therapy, 17 (89%) of 19 lesions were repaired surgically. In the two years (2000–2001) after its introduction, 21 (41%) of 51 required operation. While there was no significant increase in the total number of arterial catheterisations, there were significantly more pseudoaneurysms treated after July 1999; the point at which thrombin injection was introduced as a treatment option.

Findings of an increased number of pseudoaneurysms referred and treated together with a constant incidence of surgical repair for pseudoaneurysm suggest that a lower threshold for treatment by thrombin injection exists; and may account for the increased incidence seen in our series and that of Norwood and colleagues.

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### Pseudoaneurysm of the Femoral Artery in a HIV-infected Man

Arterial pseudoaneurysms are extremely rare findings in human immunodeficiency virus (HIV) infected patients. However, prolonged survival and the accumulation of cardiovascular risk factors (i.e. atherosclerosis, arterial blood hypertension, dyslipidemia) observed in patients on highly active antiretroviral regimens (HAART) can lead to an increased risk of vascular complications.<sup>1–3</sup>

We report here the case of a 56-year-old bisexual man, HIV-infected since June 1991, never followed at any HIV care centre until November 1997, when he developed cerebral toxoplasmosis. After hospitalization, HAART containing stavudine, didanosine and indinavir was started with immunological and virological improvement (November 1997, CD4+: 9 cell/mm<sup>3</sup>, HIV-RNA: 66460 copies/ml, measured by NASBA technique; July 1998, CD4+: 187 cell/mm<sup>3</sup>, HIV-RNA: 4340 copies/ml). HIV-RNA plasma levels became undetectable in December 1998 and since then plasma viremia remained below detection limits;

CD4+cell count have been stable above 250/mm<sup>3</sup> since November 1999. In the following years, the patient experienced a progressive worsening of metabolic parameters refractory to fibrates- statine- and sulfonylureas-containing therapy (October 2000: triglycerides: 1014 mg/dl; total cholesterol: 215 mg/dl; HDL cholesterol: 20 mg/dl; glucose: 155 mg/dl) and developed a progressive lipoatrophy. Moreover, arterial blood hypertension was diagnosed and in December 2000 enalapril was started; a carotid ultrasound examination was then performed and no alterations were found. In January 2001, indinavir was replaced by efavirenz with a reduction of triglycerides (291 mg/dl) and glucose (121 mg/dl), whereas cholesterol remained stable. In May 2003, efavirenz was replaced by atazanavir due to persistent hyperlipidaemia. Immunovirological and metabolic parameters remained unaltered (CD4: 275 cell/mm<sup>3</sup>; HIV-RNA < 50 copies/ml; triglycerides: 277 mg/dl; total cholesterol: 184 mg/dl; HDL cholesterol: 23 mg/dl; glucose: 237 mg/dl).

In March 2004, the patient was admitted to our clinic for cough and fever: right basal pneumonia was diagnosed by chest radiography and *Streptococcus Pneumoniae* isolated in both blood and sputum culture; antibiotic treatment with intravenous ceftriaxone was started with rapid clinical improvement. During hospitalization, a pulsatile mass was detected in the right inguinal region and a color-doppler ultrasound examination revealed a pseudo-aneurysm of the right femoral artery. During the surgical exploration a 2 cm laceration of a pulsatile hematoma was identified in the anterior wall of the right femoral artery close to the artery bifurcation (Fig. 1(a)). A bovine pericardium patch was inserted to repair the damaged wall (Fig. 1(b)). Cultural examinations on surgical samples for fungi and bacteria were negative.

Seven days later, an hemorrhage suddenly developed and an emergency surgery was executed to suture a 2–3 mm laceration located on the same site.

Six days later, another hemorrhage developed and a second emergency operation was performed. At macroscopic pathologic examination, a complete destruction of the commune, superficial and deep femoral arteries (7 cm of length) was observed; the artery showed soft consistency and several necrotic areas. The necrotic tract was removed and substituted with a prosthesis in PTFE-e. Microbiological and pathological examinations of perianeurismatic fluid and artery confirmed the presence of several necrotic areas, but the cultural examinations for bacteria, mycobacteria and fungi were still negative. During hospitalization, a color-doppler ultrasound

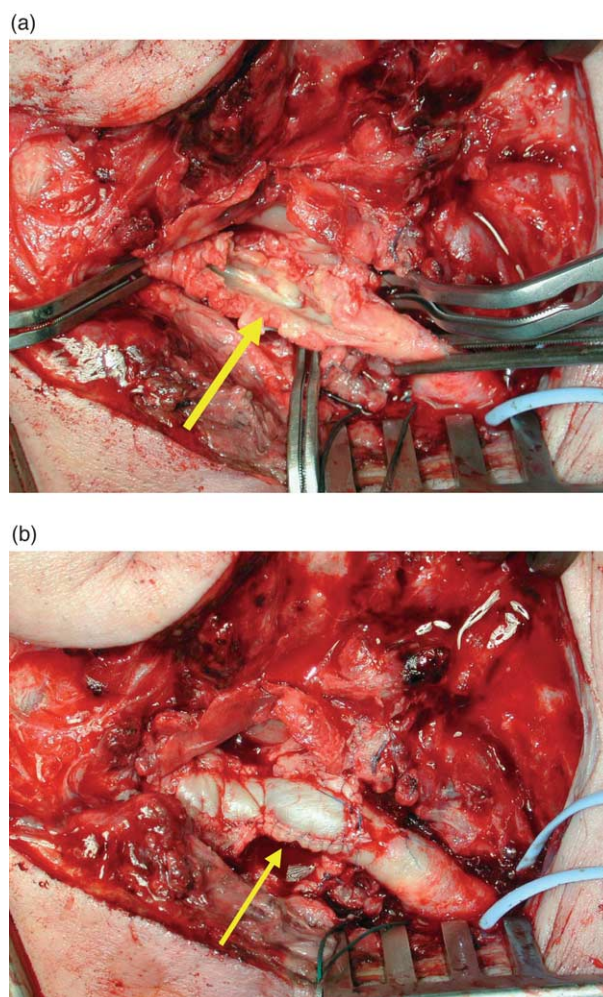


Fig. 1. Pulsatile hematoma of the femoral artery pre (a) and post (b) surgical intervention.

examination of carotid vessels was performed, showing a bilateral thickening of the tunica intima of the common carotid arteries.

The possible role of antiretroviral drugs in inducing such alterations was finally considered and stavudine and didanosine were replaced by zidovudine and lamivudine, whereas atazanavir was maintained.

Several reports have recently emphasized the higher risk of HIV infected patients to develop cardiovascular pathologies.<sup>4,5</sup> A modification of dietary habits and lifestyle has to be carefully evaluated in this population. A periodical vascular screening should be performed by ultrasound examinations<sup>6</sup> and, when possible, a modification of antiretroviral therapy should be considered, especially for patients with metabolic abnormalities and lypodistrophy.

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## Current Treatment Options for Treating Primary Hyperhidrosis

We read with interest the comprehensive review article by Nyamekye.<sup>1</sup> Some of the complications of treating hyperhidrosis using endoscopic thoracic sympathectomy, however, have not been fully discussed. In a recent review article by Ojimba and Cameron,<sup>2</sup> significant complications of this procedure highlighted include death, (though as highlighted by the author never actually reported in the literature), bleeding, neuralgia and rebound sweating. The other problem, which has been highlighted is compensatory sweating which the authors have reported is probably more prevalent than actually reported. The patients who died from anaesthetic complication were those

\* In order to avoid possible confusion between the terminology used by the Authors and that suggested in #7, in this letter, the veins of the lower limb are designated with the original Latin terms.

who had a double lumen endotracheal tube to allow both sides to be operated on at the same operation, which lead to hypoxia of the brain. Our experience is to use a similar endotracheal anaesthesia and but to only to perform this operation on one side at a time. As well as reducing the possible anaesthetic risk also allows the patients to experience any side effects especially the compensatory sweating. If this is troublesome then the patient may have no wish to have the other side done.

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## Letter to the Editor, RE: EJVES 2004;28:104–107

I read with great interest the article from Dr MacKenzie and coll. entitled 'The effect of Long Saphenous Vein stripping on deep venous reflux' (EJVES 2004; 28: 104–107) which confirms that radical surgery of varicose veins enhance deep veins hemodynamics. The authors evaluated deep venous hemodynamics at the thigh by insonating only the *Vena Femoralis*.<sup>\*</sup> Their findings would be further enhanced by extending Duplex evaluation to the *Vena Femoralis Communis*, due to its closer hemodynamic interdependency with of the proximal *Vena Saphena Magna*.<sup>1</sup>

The authors reported a 'surprisingly common failure to obtain complete stripping' of the *Vena Saphena Magna* after its stripping to the knee. In 62% of limbs, the postoperative Duplex demonstrated remnants of various length '...of the *Vena Saphena Magna* removed in the thigh'.

This intriguing and apparently paradoxical finding could be explained by the particular anatomy of thigh superficial veins. The classic studies of Glasser,<sup>2</sup>