Cessation of Endovascular Treatment in Buerger’s Disease Patients with Unusual Pain

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I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

V I do not have any potential conflict of interest
Introduction

- Thromboangiitis Obliterans (TAO)
  : Nonatherosclerotic segmental occlusions of the distal lower extremity arteries
  : Pathologic study
    - Perivascular inflammation involving small and medium-sized arteries, veins, and nerves, with preservation of the internal elastic lamina
    - Differentiating this process from necrotizing forms of arteritis
  : Ischemic symptoms caused by stenosis or occlusion of the distal small to medium-sized arteries and veins
  : Typical angiographic findings
    - Rich typical “Corkscrew collaterals” without arterial wall calcification
Introduction

- Treatment of Thromboangiitis Obliterans (TAO)
  - To reduce pain at rest and avoid amputation
  - Discontinuation of tobacco use
    - Even a few cigarettes a day can cause disease progression
  - Vasodilators like Ca channel blocker, anticoagulants, prostaglandin analogs
    - Limited effect
  - Surgical reconstruction to restore blood flow in TAO
    - Sometimes bypass graft are technically challenging in the presence of poor distal runoff
Introduction

• Treatment of Thromboangiitis Obliterans (TAO)
  
  Graziani L et al reported the result from the present study demonstrated that the endovascular procedure was technically successful in 100% of their cases, which supports the hypothesis that extended endovascular recanalization is an effective procedure for treating TAO disease.
  
  Therefore, many interventionists could be trying to do endovascular treatment in TAO disease, even though the efficacy, long-term data, and particularly indication/contraindication for TAO is not established.

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Introduction

- Currently, we have faced two cases of symptomatic TAO patients and tried to recanalize their stenotic and occlusive lesions with endovascular techniques. However, we could not obtain the successful revascularization due to tremendous pain during the revascularization procedure.
- Therefore, we would like to introduce our uncommon cases and assume why it happened.
Case 1

- M/42
- Wound in left forefoot
- Smoking 1p/day for 22 yrs
- Weak pulse in Lt DP/PTA
Case 1
Case 1
Case 2

- M/46
- Wound in left 1st toe
- Pain in both feet
- Smoking 1p/day for 27 yrs
- No pulse in Lt DP/PTA
- Dx of Buerger’s dz 10yrs ago
Case 2
Case 2
TAO involves 3 phases: acute, subacute, and chronic. The acute phase is comprised of an occlusive, highly cellular, inflammatory thrombus and the chronic phase is characterized by organized thrombus and vascular fibrosis that may mimic atherosclerotic disease.

We do not know why those patients had massive pain during the endovascular revascularization procedures. We just assume that the disease status in those cases might be quite different from chronic stage of TAO.

Therefore, it could be hard to say that all TAO patients can be treated by endovascular strategies even though in most cases it can be done.
Thank you for your attention!!
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