The treatment of the abdominal aorta pseudoaneurysms combine with inferior vena cava thrombosis and Behcet’s disease.

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Case

Abstract: Male, 40 years old

Complain: Low back pain for 2 months with the swelling of the right lower extremity for 6 days.

History: The patient had a low back pain without any reason two months ago, non-intermittent claudication, diagnosed as lumbar disc herniation by another hospital, and took the analgesia treatment. He had a swelling of right lower extremity since 6 days ago, the swelling spread from proximal to distal extremity, then came to our hospital for further treatment.
Case

Physical examination:

<table>
<thead>
<tr>
<th></th>
<th>Right</th>
<th>Left</th>
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</thead>
<tbody>
<tr>
<td>Above the knee</td>
<td>60cm</td>
<td>52cm</td>
</tr>
<tr>
<td>below the knee</td>
<td>43cm</td>
<td>39cm</td>
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</tbody>
</table>
Case

Examination: Color Doppler ultrasonography

**Thrombosis** in distal inferior vena cava bilateral common iliac vein and right external iliac vein.

Coagulation test:

**D-dimer:** 8.69 mg/L

Fibrin degradation products: 17.8 ug/ml
Primary diagnosis

- Inferior vena cava thrombosis
- Deep venous thrombosis of lower extremities
Plans?

- Anticoagulant therapy:
  - LMWH?
  - Warfarin?
  - Rivaroxaban?

- Proactive treatment-surgery?
  - IVC filter to prevent the fatal PE?

—-etiological diagnosis?
Etiological diagnosis:

Detail PMH:
- Recurrent multiple **dental ulcer** for 12 years;
- Recurrent **perianal ulcer** for 3 years;
- Recurrent **erythema nodosum** in bilateral lower extremities

- Rheumatic disease?
  - Postpone emergency operation!!!
Case

Recheck color Doppler ultrasonography:
- Inferior vena cava thrombosis;
- Iliac vena thrombosis;
- Abdominal aorta pseudoaneurysm

Laboratory exam:
- ESR: 95 mm/h
- CRP: 81.8 mg/l
Case

Lower abdominal aorta pseudoaneurysm and inferior vena cava thrombosis
Recurrent oral ulcer;
Recurrent genital ulcer;
Skin lesions, including erythema nodosum, folliculitis, dermatitis as acne etc;
Oculopathy, including uveitis, keratohealcosis, hypopyon etc;
Acupuncture positive;

Behcet’s disease can be diagnosed with the first condition plus two of the other conditions.
Final diagnosis

- Abdominal aorta pseudoaneurysm
- IVC thrombosis and DVT of lower extremities
- Behcet's disease
In the endless struggling......

- **How to treat?**
  - Conservative therapy?
  - Surgery?

- **What is the first step?**
  - Thrombosis?
  - Behcet's disease?
  - Abdominal aorta pseudoaneurysm?
PlanA

Treat Abdominal aorta pseudoaneurysms first?
— The difference between conservative therapy and surgery?
— EVAR or open surgery; benefits and risks?

Comprehensive consideration:
- The rupture risk of aneurysm (diameter, shape and etc.);
- Perioperative risk;
- Risk of internal medicine complication
Plan B

- Treat DVT first?
  — Anticoagulant therapy or IVC filter?

Abdominal aorta pseudoaneurysm is one of the contraindication of anticoagulation
is it safe--LMWH?
is it safe--IVC filter for patient with Behcet's disease?
Keep it Simple and Safe!

- About the Behcet's disease:
  
  Cyclophosphamide (CTX): 600mg/2 weeks
  
  Prednisone: 10mg/QD
Treatment

- IVC thrombosis and DVT of lower extremities:
  - **non-interference**

  Strict bed rest and immobilization
  Elevation of the extremities
  **Non-anticoagulate**, just reduce the swelling
Treatment

• Abdominal aorta pseudoaneurysm:

  – **closely monitor**
    
    blood pressure and heart rate;
    
    clinical symptoms and signs;
    
    the size of abdominal aorta pseudoaneurysm
Treatment outcome

The good outcomes of the Behcet’s disease.

ESR

![Graph of ESR over time]

CRP

![Graph of CRP over time]
Treatment outcome

- IVC thrombosis and DVT of lower extremities
  - Color Doppler Ultrasound: the thrombosis were stable.
- Blood Coagulation Test

D-dimer
Treatment outcome

Abdominal aorta pseudoaneurysm been well-controlled
The opportunity of surgery

Opportunity of surgery?
According to the related papers:
—Behcet’s disease was relatively stable
—ESR and CRP were almost normal

Method of surgery?
Open operation—high risks of complications
Endovascular therapy—significant advantage of the covered stent,
low complications and mortality.

Endovascular therapy
Post operation treatment

- Treatment of Behcet’s disease:
  - Cyclophosphamide (CTX): 600mg/2 weeks;
  - Prednisone: odd day:10mg/QD, even day:15mg/QD;
  - Immunosuppressant: adalimumab 40mg IH /2 weeks
Post operation treatment

- Treatment of abdominal aorta pseudoaneurysms and thrombosis
  - Avoid the strenuous activity,
  - regular check up of ultrasound and CT
  - Stretch socks, symptomatic treatment of PTS
Postoperation examination

- Abdominal aorta CTA: 3 months after the operation
Postoperation examination
Abdominal aorta CTA: 9 months after the operation
Postoperation examination
Abdominal aorta CTA: 16 months after the operation
Postoperation examination

**ESR**

**D-dimer**
Summary

• It is safe and effective to use stent-graft in the treatment of aorta pseudoaneurysms when the Behcet’s disease was been well controlled.
Thank You!

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