1 Year Result Of Stent Graft For Carotid Artery Pseudo-Aneurysm In Behcet’s Disease Patients

H Lotfy, W Shaalan, A Elemam, A Naga

Prof Dr Hassan Lotfy
Vascular and Endovascular Consultant
Alexandria University - Egypt
Speaker name:
Prof Dr Hassan Lotfy

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)

☒ I do not have any potential conflict of interest
Behçet syndrome

• The syndrome carries the name of the Turkish dermatologist Hulusi Behçet (1937).

• Multisystem disease of unknown etiology.

• Prevalence estimates from Japan, Korea, China, and the Middle East vary from 13-20 cases per 100,000 population.
Manifestations

• Recurrent aphthous ulcers, genital ulcers, uveitis or retinal vasculitis

• Skin lesions, arthritis, GI lesions, CNS involvement, and

• **vascular lesions**, including aneurysms and thrombosis.
Vascular complications

The basic pathology is **vasculitis**.

- **Venous:**
  - Migratory superficial thrombophlebitis or
  - DVT

- **Arterial:**
  - Occlusions may present with symptoms related to ischemia.
  - Arteritis may involve the aorta or its branches and lead to **aneurysm** formation.
Surgical resection of aneurysms with graft placement should be considered if feasible because of the high risk of aneurysmal rupture. However, complications of arterial surgery, such as aneurysms at the anastomotic site and local thrombus formation, commonly occur.

- Ocular lesions, oral aphthosis and genital aphthosis are each assigned 2 points
- Skin lesions, central nervous system and vascular manifestations are each assigned 1 point
- The pathergy test, when used, was assigned 1 point

A patient scoring $\geq 4$ points is classified as having BD.
Study design

• **Retrospective** study

• Behcet's patients treated by *stent graft exclusion* between 2008 and 2017 at Alexandria university Hospitals were included.

• All study subjects met the **international** study group criteria for diagnosis of Behcet's disease.

• None of them had any **previous open** vascular repair of their aneurysms.
Methods

• All patients were managed by endovascular deployment of stent grafts.

• At day 2 postoperative all patients had CDU scan to verify exclusion of the whole pseudo aneurysm and thrombosis of its lumen.

• After 1 year all cases had CTA to detect any further aneurysmal formation or endoleaks and measure regression of the size.

• All patients were subjected to rheumatological consultation for proper medical control prior to intervention.
Results

- 9 patients were included in the study.
- The mean age (±SD) was 38 (±5.2).
- 6 patients were males and 3 were females.
- 6 cases (67%) ICA
- 3 cases (33%) CCA
- The mean pseudo-aneurysm size (±SD) was 3.3 cm (±1.2).
- Technical success was 89%.
Complications

• 1 patient had a false aneurysm at the site of groin puncture, Rx: f/u with CDU / 3 months and was not operated for his 2.2 cm groin pseudo-aneurysm.

• 1 patient had SFA thrombosis. Rx: conservatively after refusal of surgical thrombectomy.
Results

• **CDU** at day 2 post-op revealed complete exclusion and thrombosis of the false aneurysm lumen in all cases.

• **CTA** also revealed complete thrombosis in the pseudo-aneurysms lumen with a mean regression in size of **1.8 (±0.6) cm**.
• After 1 year, primary patency rate was 88%, only 1 had an occluded stent. This patient was asymptomatic with rich intra cerebral collateral.

• One case had a recurrent pseudo-aneurysm at the distal margin of the stent graft. This was a small one (1.8 cm) with no signs of refilling of the previously excluded lumen, thus follow up with CDU / 3 months was done with no further increase in size.
Conclusion

• Endovascular management of carotid pseudo-aneurysm in Behcet's patients has a high technical success and good mid-term primary patency rates.

• It clearly avoids the hazardous complications of surgery.

• We think it should be the preferable first line of treatment.
Fleuncy Stent Graft
9 x 40 mm
1 year later...
Thank you
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