Single-Center Clinical Experience with Barricade™ Coil System

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Disclosures

Consultant for Blockade.
Barricade Coil System

• Bare Platinum Coils / Electrolytic Detachment
• Barricade Framing Coils
  • Complex shape
  • Available in 10 and 18
• Barricade Filling Coils
  • Helical shape
  • Available in 10
• Barricade Finishing Coils
  • Helical and complex shape
  • Available in 10
Series: Inclusion/Exclusion

• All patients treated with Barricade Coils were prospectively included in this series.
• Inclusion/Exclusion criteria:
  – Included:
    • Patients >= 18 ans
    • Aneurysms treated with coiling or remodeling technique
  – Excluded:
    • use of an adjunctive device (stent, flow diverter, WEB)
    • Dissecting and fusiform aneurysms
Population

- From October 2013 to December 2015,

98 patients (110 anévrismes)

Adjunctive devices

10 patients (13 anévrismes)

88 patients (97 anévrismes)
Population

- Gender:
  - M: 29 (32.9%)
  - F: 59 (67.1%)

- Age:
  - 30 – 83 years
  - Mean: 52 +/- 13 years

- Aneurysm status:
  - R: 57 (58.7%)
  - UnR: 40 (41.3%)
Population

• Previous treatment:
  • No: 85 (87.6%)
  • Yes: 12 (12.4%)

• Location:
  • ICA: 36 (37.1%)
  • Acom: 31 (31.9%)
  • MCA: 16 (16.5%)
  • PC: 14 (14.4%)

• Mean aneurysm size: 8 +/- 5 mm
• Mean neck size: 4 +/- 2 mm
Techniques

• Treatment feasibility: 97/97 (100%)

• Techniques:
  – Coiling: 77 (79.4%)
  – Remodeling: 20 (20.6%)
Procedural events

• TE events: 13 (13.4%)
  – Clotting near the neck: 4
  – Distal emboli: 8
  – Parent vessel occlusion: 1
  – Clinical worsening: 2 patients (2.3%)

• Intraoperative rupture: 5 (5.2%)
  – Clinical worsening: 0 (0.0%)
Procedural morbi-mortality

Morbidity: 2.3%
Mortality: 0.0%
Post-operative anatomical results

- Complete occlusion: 81.4%
- Neck remnant: 13.4%
- Aneurysm remnant: 5.2%
Conclusions

• In this preliminary experience
• Barricade coils were easy to manipulate
• Safety is similar to other coils
• Efficacy has to be evaluated in short, mid and long-term follow-up
• French Registry started in March 2016
Conclusions

• Limits of Barricade coils:
  – Delivery pusher delamination: no more observed after pusher modification
  – MRI blooming effect: changes of the detachment zone are underway.
  – Detachment system with cables.
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