The Magellan™ Robotic System Has Distinct Advantages In Performing Difficult Embolization Procedures: What Are They

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Disclosures

• Hansen – Consultant, Stock Holder

The Magellan Robotic System Components

Remote Navigation of Wire and Magellan Catheter

Intravascular Reshaping

Relax leader bend
**ROVER Registry Design**

**Robotic Vascular and Endovascular Registry (ROVER)**
- Post-market registry
- Data collection: retrospective/prospective
- Multicenter, single arm, non-blinded
- Number of subjects: 500
- Length of follow-up: 14 day and 30 day

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**Manual to Robotic Conversions**

<table>
<thead>
<tr>
<th>Manual to Robotic Conversions</th>
<th>N/Description</th>
<th>Success Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Conversions (reported in the database)</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Treated w. Magellan (post conversion to robotic procedure)</td>
<td>15</td>
<td>75%</td>
</tr>
<tr>
<td>Reason for Conversion to Robotic Procedure (top 5)</td>
<td>Complexity of Arterial Anatomy</td>
<td></td>
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<tr>
<td></td>
<td>FEVAR Complexity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Radio Embolization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coil, Other Embolic Material Placed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unable to Cross Bifurcation</td>
<td></td>
</tr>
<tr>
<td>Attempted Treatment but not successful</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>(5): 1 patient: lesion could not be crossed 4 patients: target could not be reached (length)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Procedural Outcomes, 20 Targets After Conversion From Unsuccessful Manual Treatment**

Treatment Success 15*/20, 75%

- Note 5 pts,
  - (1) lesion could not be crossed
  - (4) target could not be reached
Other Applications

Good Sam Experience
- CTO crossing
- Carotid Intervention
- Visceral Stenting
- Foreign body removal
- Intra-Cranial Intervention
- UFE
- Y-90

The Role of Robotics in Treating Carotid Artery Stenosis

Overview
Examines the risk factors associated with carotid artery stenting
- High risk for embolic stroke
- Stability, precision and reduction of wall touches with Magellan™
  - Potential means to address inherent clinical complications

Conclusion
- Magellan may facilitate arch navigation, CCA cannulation and lesion crossing
- Magellan may reduce learning curves and reduce interactions with vessel wall

Challenge: Patients have varying anatomy and often high presence of plaque
- Need to reduce emboli (prevent stroke)
- Patient presented with long stenosis of Left Internal Carotid Artery

Strategy: Place carotid stent with filter in place.

Robotic catheter facilitates navigation through aortic arch to ICA and provides stable platform for stent delivery.
Robotic Carotid Stenting Case History

In 12 robotic carotid procedures, there was 100% technical success and no complications observed.

Femoral Access Site Complications

In 28 robotic procedures with femoral access, there were no complications observed.

Conclusion

-Precise
-Stable
-Safe