Abrupt Vessel Closure in a Tight Calcific Distal Left Main Coronary Intervention

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• Case scenario
• Abrupt vessel closure
• Left main PCI
• Take home message
CLINICAL DATA

- M T M
- 66 years old
- Type 2 DM, HTN, Ex smoker
- High risk UA
- ECG: AF, ST T wave changes
- ECHO DOPPLER: RSWMA in LAD

LAO, RCA
In-hospital outcome

• Clinical stable
• Pain free
• Stable hemodynamics
• Electerically stable
• Discharged in 48 hours

Follow-up

25th February 2018
• Clinical: stable
• ECG: AF
• ECHO: No RSWMA, EF 54%
• Drugs: Compliant to treatment
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Abrupt vessel closure

• Definition
• Incidence: decreased form 3% to <0.3%
• Mechanisms: dissection, thrombosis and spasm
• Outcome: death, MI, Arrhythmia
• Management: drugs, stents, CABG
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The Expanded Heart Team

- General practitioner
- Geriatrician
- Referring physician
- Clinical Cardiologist (non-interventional)
- Nephrologist
- Interventional Cardiologist
- Cardiac surgeon
- Rehabilitation Specialist
- Diabetologist
- Neurologist

Where is the patient?

Gruntzig’s 3rd PTCA


Note: The patient expired suddenly about 4 months after this procedure.

MACCE to 5 Years by SYNTAX Score Tercile *High Scores ≥33*

<table>
<thead>
<tr>
<th></th>
<th>CABG</th>
<th>PCI</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death</td>
<td>14.1%</td>
<td>20.9%</td>
<td>0.11</td>
</tr>
<tr>
<td>CVA</td>
<td>4.9%</td>
<td>1.6%</td>
<td>0.13</td>
</tr>
<tr>
<td>MI</td>
<td>6.1%</td>
<td>11.7%</td>
<td>0.13</td>
</tr>
<tr>
<td>Death, CVA or MI</td>
<td>22.1%</td>
<td>26.1%</td>
<td>0.40</td>
</tr>
<tr>
<td>Revasc.</td>
<td>11.6%</td>
<td>34.1%</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

**Why LM PCI?**

- Results at least as good as surgery in patients with Syntax score < 32.
- Even better for ostial, mid shaft LM, when distal LM can be treated with one stent.
- Results have improved since Syntax with better experience, strategy, new generation DES and leaving less residual syntax score.
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How to Improve Left Main PCI Outcomes

- Use best in class DES
  - Thienopyridine pre-loading
  - Statin pre-loading
  - Bivalirudin anticoagulation
- Optimal pharmacotherapy
- IVUS/FFR to assess the intermediate LM lesion
- FFR to avoid unnecessary stenting, but also for ischemia-based optimal/complete revascularization
- IVUS guided LM stenting
- Optimal LM stent technique

Adapted from G. Stone
Take home message

• Significant unprotected left main disease is not rare
• It constitute about 3-4% of patient undergoing coronary angiography
• PCI using 2nd generation DES is a good option in therapy of Unprotected LM disease in:
  1. Acute MI
  2. Emergency bailout in complicated procedures
  3. Very high surgical risk patient
  4. Patient not accepting surgery

Take Home Message

• Interventional cardiology is highly developing subspecialty
• We can deal with high risk patient and lesion profile with accepted success and complication rate
• Early diagnosis of complications and rapid management is mandatory to safe patient life
• Patient life is dependent on The Main branch
THANK YOU