Fourteen Years Experience in a Two-step Strategy for the Treatment of Acute ST-Segment Elevation Myocardial Infarction by Percutaneous Coronary Intervention Based on a Minimalist Immediate Mechanical Intervention with Deferred Stenting

Immediate Angiographic and Clinical Outcomes
A Single Centre Study

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METHODS

Figure 1. Flow chart of patients

2074 primary PCI

446 PCI with a TIMI flow grade > 0 at initial coronary angiogram

1628 PCI for TIMI 0 flow grade at initial coronary angiogram

15 guidewire failure

1613 guidewire success

1100 One-step strategy

976 immediate stenting

124 balloon PCI

513 Two-step strategy (MIMI)

Second step

Surgery

Medical

Stenting
Primary PCI
TIMI 0
- Guide
- ± Dilatation au ballon de taille croissante

TIMI < 3 or artery dissection
Immediate rescue stenting

TIMI 3
MIMI
Immediate stenting

Conditions for Intmediat Stenting:
- No large thrombus
- No complex lesion
- No indication for surgical revascularization
- No doubt on a significant underlying stenosis
RESULTS

Among the 492 STEMI with a 2-step strategy, the final strategy was:

- **medical** in 11%
- **surgery** in 35%
- **Deferred stenting** in 54% at a mean of 4.8 ± 2.8 Days

Post stent TIMI < 3:

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<tr>
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<td>9%</td>
<td>2%</td>
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In-hospital death:

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CONCLUSION

- This study suggests, with 15 years experience, that a 2-step strategy for acute STEMI PCI based on a MIMI approach followed by deferred stenting or, if more suitable, medical/surgery management is possible and safe.

- Deferred stenting seems to achieve better immediate angiographic and clinical outcomes than immediate stenting.

**Advantages:**

- Avoid no-reflow
- Time may influence the choice of stents with more appropriate dimensions than those taken in emergency
- Discuss more appropriate medical or surgical alternative management.
- Avoid unnecessary stent implantation in patients with non significant underlying lesions.

- Not for all patients