MINOCA
Myocardial Infarction with Non Obstructive Coronary arteries
By: Nashwa Ali

What is the mortality risk of;

- Patient with extensive anterior STEMI..
- complicated by heart failure and cardiogenic shock..
- followed by cardiac arrest..

In non-PCI capable center
Clinical scenario:

- 54 year old, male patient.
- Hypertensive, smoker & non diabetic.
- Presented to our ER at 01:00am in Al Minya Health Insurance Hospital with severe typical anginal pain.
- His symptoms started 45 minutes before presentation.
- He was very anxious with profuse sweating and cold extremities.

- SBP: 70mmhg.
- HR: 90 b/m.
- Heart ex.: gallop rhythm
- Chest ex.: bilateral basal crepitus.
- High JVP.
ECG:

Modes of patient presentation, components of ischaemic time and flowchart for reperfusion strategy selection
Initial management:

- 300mg of ASA.
- 300mg of clopidogrel.
- Thrombolytic (streptokinase) was started...

After around 5 min
• VF....
• Cardiac arrest .....so

CPR

• CPR lasted for 15 min and now
• Pt is deeply comatosed....
• With no BP on +ve inotropes...
• On mechanical ventilator.
• And ECG:
Will you continue streptokinase ?!!!

Contra-indications to fibrinolytic therapy

- Relative
  - Transient ischaemic attack in the preceding 6 months.
  - Oral anticoagulant therapy.
  - Pregnancy or within 1 week postpartum.
  - Refractory hypertension (SBP >180 mmHg and/or DBP >110 mmHg).
  - Advanced liver disease.
  - Infective endocarditis.
  - Active peptic ulcer.
  - Prolonged or traumatic resuscitation.

ECG after 90 min:
After 15 hours:

- Patient was fully conscious.
- Weaned from +ve inotropes ....
- Weaned from mechanical ventilator...
- Bed side echo:
  - Moderately impaired LV systolic function.
  - EF = 48%.
  - RWMA
  - Trivial TR
- Transferred for CA;

**Fibrinolytic therapy (continued)**

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Class</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interventions following fibrinolysis</td>
<td>Class</td>
<td>Level</td>
</tr>
<tr>
<td>Emergency angiography and PCI if indicated is recommended in patients with heart failure/shock.</td>
<td>I</td>
<td>A</td>
</tr>
<tr>
<td>Rescue PCI is indicated immediately when fibrinolysis has failed (&lt; 50% ST-segment resolution at 60-90 min) or at any time in the presence of haemodynamic or electrical instability, or worsening ischaemia.</td>
<td>I</td>
<td>A</td>
</tr>
<tr>
<td>Angiography and PCI of the IRA, if indicated, is recommended between 2 and 24 hours after successful fibrinolysis.</td>
<td>I</td>
<td>A</td>
</tr>
<tr>
<td>Transfer after fibrinolysis</td>
<td>Class</td>
<td>Level</td>
</tr>
<tr>
<td>Transfer to a PCI-capable centre following fibrinolysis is indicated in all patients immediately after fibrinolysis.</td>
<td>I</td>
<td>A</td>
</tr>
</tbody>
</table>
Will you call it MINOCA ?!!!!

Take home messages:

• Early reperfusion do save lives.
• Do your best and don’t lose hope...
• Remember that

Guidelines were made for a reason