PAH Reperfusion Procedure – ACUTE STEMI
Cardiology

1 Purpose

To outline the management of patients presenting to PAH with Acute STEMI.

2 Procedures

MONDAY to FRIDAY (07:00 – 18:00):

PRE-HOSPITAL DIAGNOSIS of STEMI via QAS

ALL STEMI – QAS will call the PAH Interventional Cardiologist from the pre-hospital environment to determine reperfusion therapy of choice (PCI or pre-hospital fibrinolysis)

- If determination is for PCI:
  - QAS will proceed to PAH ED.
  - Interventional Cardiologist will notify ED on DECT 7215.
  - ED Consultant to meet patient at Triage, confirm diagnosis and determine need for any critical intervention (i.e. intubation) and otherwise escort patient to Catheter Lab.
  - Ensure relatives are directed to Catheter Lab (with patient if possible)

- If determination is for pre-hospital fibrinolysis:
  - QAS will administer fibrinolysis pre-hospital and transport to PAH ED
  - Failure of reperfusion at 90 minutes requires contact with the Interventional Cardiologist (1800 450 468) to discuss rescue PCI.
PAH ED DIAGNOSIS of STEMI (e.g. self-presenting patients):

- ALL STEMI – ED Consultant to contact Interventional Cardiologist (1800 450 468) to discuss reperfusion treatment.
  - To facilitate optimal communication with Interventionalist note prior to call:
    - Is this patient appropriate for emergency cath lab management?
    - Time and nature of symptom onset
    - Haemodynamic assessment- in particular hypotension and heart failure/pulmonary oedema, and immediate treatment plan
    - Whether defibrillation has been required
    - The presence of arrhythmia
    - Accurate assessment of ECG, current recording and evolution
    - Relevant medical history including important co-morbidities like dementia, renal impairment, coagulopathy, cancer and stroke
    - Potential issues for access such as morbid obesity and PVD
    - Potential logistical issues such as likely need for anaesthetics, difficulty lying flat, consent issues

AFTER HOURS and WEEKENDS:

PRE-HOSPITAL DIAGNOSIS OF STEMI via QAS:

QAS will contact the Interventional Cardiologist to discuss reperfusion therapy of choice (PCI or pre-hospital fibrinolysis).

- If determination is for PCI:
  - Interventional Cardiologist will:
    - Activate Catheter Lab call-back (via CCU RN)
    - Notify ED consultant or registrar after-hours (possibly via CCU RN) on DECT 7215
    - Assess patient in ED, interview relatives, supervise preparation of patient for PCI and escort patient to Catheter Lab – ONLY after given OK by Senior Catheter Lab RN
  
  - ED staff will prepare patient:
    - Ensure Aspirin (300mg) and clopidogrel (600mg) loading given by QAS (administer if not – discuss with Interventionalist if prefers ticagrelor 180mg or clopidogrel 600mg)
    - Clothes and underpants off, exam gown only
    - Both groins clipped
    - IV cannula with 3-way adaptor and IV fluids
    - DO NOT START IV HEPARIN INFUSION
    - Have patient ready to transport to Catheter Lab – transport monitor and defibrillator and assist with transport to lab
  
  - If need for PCI is uncertain:
    - Patient will be reviewed in ED by ED staff and the Interventional Cardiologist.
If pre-hospital fibrinolysis given by QAS:
- QAS will transport to PAH.
- Failure of reperfusion at 90 minutes requires contact with the Interventional Cardiologist (1800 450 468) for rescue PCI.

PAH ED DIAGNOSIS of STEMI (e.g. self-presenting patients):

- ED Consultant (or ED Registrar if overnight) to contact the Interventional Cardiologist (1800 450 468) to discuss treatment.
  - To facilitate optimal communication with Interventionalist note prior to call:
    - Is this patient appropriate for emergency cath lab management?
    - Time and nature of symptom onset known
    - Haemodynamic assessment- in particular hypotension and heart failure/pulmonary oedema
    - Whether defibrillation has been required
    - The presence of arrhythmia
    - Accurate assessment of ECG, current recording and evolution
    - Relevant past medical history including important co-morbidities like dementia, renal impairment, coagulopathy, cancer and stroke
    - Potential issues for access such as morbid obesity and PVD
    - Potential logistical issues such as likely need for anaesthetics, difficulty lying flat, consent issues
  - Preparation for Catheter Lab if required as per above “Pre-hospital Diagnosis of STEMI”

OUT OF HOSPITAL CARDIAC ARREST (with ROSC and STEMI on 12 lead ECG):

- If GCS 15 – QAS will follow above procedures
- If GCS 14 or less – QAS will call Interventional Cardiologist to discuss activation of Catheter Lab (procedures as above).

CARE OF PATIENTS IN THE CATHETER LAB:

The Interventional Cardiologist is to determine the need for airway or circulatory support for the patient during the reperfusion procedure in the Catheter Lab and contact the following:

Weekdays: 07:30 – 18:00

Contact the Intensive Care Consultant

After hours and weekends:

Contact the Cardiac Anaesthetist on-call
3 Consultation

Department of Emergency Medicine
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