



SCGH CODE ECMO



NO

MEETS
ECMO
CRITERIA?

YES

ACTIVATE
ECMO

ETT
Insert ETT if not already
Confirm placement
HAND VENTILATE

AIRWAY / BREATHING

LUCAS FOR CPR
NO SHOCKS TO BE DELIVERED

CIRCULATION

N/S 1L STAT
ADRENALINE
6mg in 100mL NS
50mL / hr = 50mcg / min

FLUID / INFUSION

SHAVE GROIN
BIFEMORAL DRAPE

PREPARATION

US GUIDED CANNULATION
Allow max 30 sec without
LUCAS for cannulation and
guidewire insertion
17 Fr Left, 21 Fr Right

PROCEDURE

<30 SEC

**CONSIDER CEASING
CPR IF NO ECMO
WITHIN 90 MINS**

ECMO INCLUSION CRITERIA
OUT-OF-HOSPITAL CARDIAC ARREST
REFRACTORY TO STANDARD ACLS TREATMENT
16-65 YEARS
INDEPENDENT LIVING
WITNESSED ARREST
CPR COMMENCED WITHIN 10 MINUTES OF ARREST
COLLAPSE TO ARRIVAL IN ED < 45MIN
NO MAJOR COMORBIDITIES
LIKELY 1^o CARDIAC OR RESPIRATORY ARREST OR
OTHER REVERSIBLE CAUSE

ECMO EXCLUSION CRITERIA
ASYSTOLE IS FIRST CHECKED RHYTHM
ETCO₂ <10MMHG IN ED
BOUNDARIES OF CARE / DNR ORDER IN PLACE
TERMINAL ILLNESS DUE TO MALIGNANCY /
CHRONIC DISEASE
SIGNIFICANT NEUROLOGICAL / NEUROMUSCULAR
IMPAIRMENT
KNOWN SYMPTOMATIC CHRONIC ORGAN FAILURE
MULTIPLE PAST CORONARY REVASCULARIZATIONS
CIRRHOISIS (JAUNDICE / ENCEPHALOPATHY
/ ASCITES)
ESRF (DIALYSIS)
CARDIOMYOPATHY
CHRONIC LUNG DISEASE (NYHA III OR IV)
SEVERE PULMONARY HTN
MAJOR TRAUMA / ACTIVE HAEMORRHAGE

ACTIVATE CODE ECMO TEAM
0800-1700
ED DC AND ED US CONSULTANT TO DECIDE ACTIVATION
PERFUSIONIST (TIME CRITICAL)
CARDIOTHORACIC CONSULTANT
ICU CONSULTANT
CARDIAC ANAESTHETIST
CARDIOLOGY CONSULTANT
1700-0800
CARDIOTHORACIC SURGEON TO DECIDE ACTIVATION
ED DUTY CONSULTANT
PERFUSIONIST (TIME CRITICAL)
ICU CONSULTANT
CARDIAC ANAESTHETIST
CARDIOLOGY CONSULTANT

**COMMENCE
ECMO**

**IDEAL TARGET
<60 MIN**