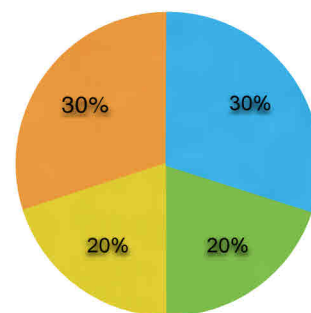


## Advanced Life Support

History: This patient has collapsed and had a cardiac arrest.

Task: Assess and treat.



● examination      ● communication      ● clinical      ● procedure

Marking criteria	Not Completed	Partially Completed	Completed
Introduces self and identifies members of present team			
Assigns team members to tasks, (chest compressions, ventilation, defibrillation, IV access, drugs)			
As patient arrives: takes hand over from EMT/paramedic and moves patient to trolley quickly (as appropriate)			
Shake and shout			
Opens airway			
Assess breathing and circulation, simultaneously			
Calls for crash team, if not already assembled			
Starts CPR 30:2			
Attaches defibrillator			
Confirms arrest rhythm			
VF/pulseless VT: Applies gel pads, Asks for oxygen to be moved away, Delivers one shock at 360 J or biphasic equivalent, Safe defibrillation, CPR two minutes, Confirms VF delivers second shock at 360J safely, CPR two minutes, Adrenaline 1mg before third shock, Amiodarone before fourth shock			
IV access, bloods taken, ABG, intubation during CPR			
If rhythm change, continues CPR to end of 2 minutes then checks for pulse			
Asystole/PEA: CPR for 2 minutes, Atropine 2mg for Asystole and if PEA with rate <60 b.p.m.			
If ROSC: Asks for full monitoring (pulse, NIBP, pulse OX, RR), Supports ventilations, orders post-arrest investigations and summons appropriate teams			
If ROSC: considers therapeutic hypothermia			
Suggests need speak to family			
Overall			

## Advanced Life Support

### Level 1 Understanding (basic sciences)

What are the reversible causes of cardiac arrest also known as the four H's and 4 T's.

Hypoxia, hypothermia, hypovolaemia, hyper/hypokalaemia

Tension pneumothorax, cardiac tamponade, thromboembolic, toxic/metabolic,

### Level 2 Understanding (applied sciences)

What is the sequence of shocks in relationship to drug administration?

Shock,

Shock,

Adrenaline,

Shock,

Amiodarone,

Shock,

Adrenaline,

Shock,

Shock,

Adrenaline

Shock,

Shock,

Adrenaline

Shock etc.

### Level 3 Understanding (advanced sciences/management)

What is the role of non-adrenergic agonists in the cardiac arrest?

In many countries the use of vasopressin is common, it is thought that it may increase coronary perfusion pressure better than pure adrenergic agonists (e.g. adrenaline).

When is thoracotomy and open cardiac compressions indicated?

Penetrating chest trauma with loss of output within 5 minutes of arrival or in the department when a doctor with that skill to provide this procedure is present.