Ventricular Fibrillation Scenario

Clinical Setting and History

Highly anxious patient has just arrived in the anaesthetic room prior to an ORIF of his fractured right ankle. He is 58yr with a past 20 year history of hypertension, treated with ramipril and bendrofluazide. His pre-op ECG showed left sided strain with no acute changes and his biochemical profile suggested a degree of dehydration with an elevated urea but normal creatinine. As you prepare to establish IV access he collapses.

Clinical Management

Check patient breathing/circulation/no response: **precordial thump**
Cardiac arrest

(VF) Establish basic life support and ask ODP to get help and defibrillator
As help arrives, detail individuals to undertake CPR, airway, IV access, drug preparation, and other jobs
Check rhythm via ECG leads/adhesive defibrillation pads/paddles and confirm as VF
1st shock (150J biphasic/360J monophasic)
2 min CPR (ratio 30:2)
Establish definitive airway control/ventilation/oxygenation
Establish IV access

(VF) After 2 min, check monitor and confirm rhythm (?adrenaline 1mg)
3rd shock (150J biphasic/360J monophasic)
Further 2 min CPR

(VF) After further 2 min, check monitor and confirm rhythm
Amiodarone 300mg IV
4th shock (150J biphasic/360J monophasic)
Further 2 min CPR

(VF) After further 2 min, check monitor and confirm rhythm
(Adrenaline 1mg IV)
4th shock (150J biphasic/360J monophasic)
Further 2 min CPR

(NSR) After further 2 min, check monitor and confirm rhythm **(NSR)**
Check patient (signs of restoration of cardiac output/spontaneous respiration)
Establish ventilatory support
Organise post arrest investigations
Consider surgery/disposal **(ICU)**

Equipment requirements

A. VF arrest:
'Skillsmaster', table, defib, green tubing, facemask, AMBU bag, BOC mask, venflon, iV, drugs (adr/atropine/amiodarone/lignocaine). ALS algorithm on wall.