

CMG 31 – ELECTRIC SHOCK

(Revised: April 2019)



LOW VOLTAGE (<1000 volts)

Appliance in house or main supply to house.

Pull out plug, pull conductor away from patient, pull patient clear, switch off at mains.

METHOD:

- grasp clothes if dry
- avoid contact with skin or conductor
- use dry fibre rope or dry blankets or similar non-conducting material

HIGH VOLTAGE (>1000 volts)

High tension power lines, substations, transformers, lightning strike.

- Request assistance from electricity authority
- Use short steps to approach victim
- Retreat immediately if tingling is felt

CONDUCTED ENERGY WEAPONS (e.g. Taser)

These weapons fire at up to 50,000 volts, but only a few milliamps. High voltage ensures the pulse reaches its target; low amperage prevents sustained damage.

ICP	DO NOT BECOME A VICTIM YOURSELF!	AP
ICP	If in cardiac arrest – treat by specific CMG Consider prolonging treatment of cardiac arrest secondary to electrocution or lightning strike – these patients are often salvageable with prolonged treatment (note that lightning strike patients may transiently display fixed, dilated pupils – resuscitation should continue despite this)	AP
ICP	Consider all potential injury mechanisms from the electric shock, and manage as per appropriate CMG: • direct effect of the electric current (e.g. cardiac injury or arrhythmia, deep tissue/organ injury, etc.) • burns resulting from conversion of electric current to thermal energy (e.g. entry and exit burns, clothing that has caught fire, etc.) • trauma from a fall (consider especially potential spinal injury)	AP
ICP	Electrical burns usually cause greater tissue damage than the appearance of the skin would suggest. Therefore, ALWAYS transport the patient to hospital.	AP
ICP	Monitor ECG and treat arrhythmias as per appropriate CMG	
ICP	Manage hypotension as per CMG 14	AP