Drowning Injury

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Drowning

In 2013 there were a total of 381 drownings and water-related deaths from accidents or natural causes in the UK. The 0-19yr olds accounted for 12 percent of deaths (46), of which more than half were teenagers aged 15 to 19. 10 children under 4 yrs drowned (WAter Incident Database – WAID 2013)

Children are more likely to die following drowning than adults.

Important interventions at scene are early institution of CPR, an ABC approach, warming and right lateral decubitus position in the spontaneously breathing victim or rapid sequence induction and intubation in the apnoeic patient.

Emergency Department management should focus on correction of hypoxia, acidosis and hypothermia. Consider early intubation with a cuffed endotracheal tube as vomiting and subsequent aspiration are common.

If the patient is ventilated, deliver PEEP starting at 5 cm H_2O and increasing as necessary to manage pulmonary oedema and avoid hypoxia.

Aggressive fluid resuscitation should correct acidosis. Inotropic support may be required.

If core temperature is below 32^oC, use active warming measures. Above 32^oC, warm passively.

Rate of warming should be 1°-2° per hour until core temperature is 33-36^oC.

If patient is in Ventricular Fibrillation with core temperature below 30^oC, only 1 defibrillation should be delivered. If there is no response continue CPR and warming until temperature rises above 30^oC before defibrillating again.

Consider other injuries (especially c-spine), intoxication and the possibility of seizure causing drowning.

Please see NWTS regional Guideline for Management of Paediatric Drowning Regional Guidelines A-Z | North West & North Wales Paediatric Transport Service (nwts.nhs.uk)