

HEAT RELATED ILLNESS

CREATED BY STRATA5.CO.UK

THOSE AT EXTREMES OF AGE AND INDIVIDUALS WHO PARTICIPATE IN STRENUOUS EXERCISE ARE MORE VULNERABLE

IN BRITAIN MOST DEATHS ARE IN PEOPLE OVER THE AGE OF 70 AND OCCUR IN THE FIRST FEW DAYS OF A HEAT WAVE

AGE **70+**



MORTALITY INCREASES DURING HEAT WAVES BUT ALSO DECREASES IN THE WEEK FOLLOWING A HEAT WAVE

HEAT STROKE

ENCEPHALOPATHY,
ANHIDROSIS,
CORE BODY TEMP
ABOVE

40°

SYSTEM / CLINICAL FEATURE

- SKIN - OFTEN HOT AND DRY (ANHIDROSIS), OCCASIONALLY SWEATING
- MUSCULOSKELETAL - RHABDOMYOLYSIS
- RENAL - OLIGURIA AND RENAL FAILURE
- CARDIOVASCULAR - HIGH OUTPUT CARDIAC FAILURE, DYSRHYTHMIA, HYPOTENSION
- COAGULATION - DISSEMINATED INTRAVASCULAR COAGULATION WITH HAEMORRHAGE
- GASTROINTESTINAL - VOMITING, HEPATIC NECROSIS, PANCREATITIS
- RESPIRATORY - ACUTE RESPIRATORY DISTRESS SYNDROME
- NEUROLOGICAL - CONFUSION, HALLUCINATION, ATAXIA, SEIZURES, COM

A PATIENT MAY PRESENT WITH HEAT STROKE AND A BODY TEMPERATURE BELOW 40°C, PARTICULARLY IF COOLING HAS OCCURRED DURING TRANSPORT TO HOSPITAL



DIFFERENTIAL DIAGNOSIS

SEPSIS E.G. PNEUMONIA, UTI, MENINGITIS, ENDOCARDITIS
TROPICAL INFECTION, E.G. MALARIA, TYPHOID
ENDOCRINOPATHY, E.G. THYROID STORM, PHAEOCHROMOCYTOMA
STATUS EPILEPTICUS
INTRACEREBRAL HAEMORRHAGE ESP. THALAMIC HAEMORRHAGE
ALCOHOL WITHDRAWAL
ANTICHOLINERGIC TOXICITY
SALICYLATE TOXICITY
ILLCIT DRUG USE, E.G. COCAINE, AMPHETAMINE
NEUROLEPTIC MALIGNANT SYNDROME
MALIGNANT HYPERPYREXIA

MANAGEMENT

INVOLVES ACTIVE COOLING,
INTRAVENOUS FLUIDS,
INVASIVE MONITORING & FULL SUPPORTIVE
CARE IN AN ICU SETTING

TARGET CORE TEMPERATURE
WHEN COOLING

38.5°