



Decompression illness may occur anytime within 24 hours of a dive.

Decompression illness encompasses two disease processes:

- **Decompression sickness (DCS or “the bends”)** – as a result of rapid pressure reduction (i.e. rapid ascent from depth), the nitrogen that had been dissolved in the tissues forms bubbles that are then caught in the tissues or bloodstream.
- **Arterial gas embolism (AGE)** – air trapped within the alveoli (usually as a result of breath-holding during ascent) expands, causing pulmonary barotrauma, rupturing capillary walls and allowing gas bubbles to enter the arterial circulation. Bubbles become trapped in small arteries (significantly in the brain) and interrupt circulation.

Symptoms of decompression illness include:

NEUROLOGICAL

- motor/sensory deficit
- paralysis
- confusion
- seizure
- unconsciousness

RESPIRATORY

- dyspnoea
- pneumothorax /
subcutaneous emphysema
- haemoptysis
- APO
- cyanosis

CARDIAC

- chest pain
- cardiac arrest

OTHER

- pain in the joints
- pruritis (blotchy rash)
- itchiness
- tremors
- lymphoedema

**DCS and AGE symptoms can be clinically indistinguishable from one another,
but prehospital management is identical.**

continues over

CMG 25 (cont) – DIVING EMERGENCIES



ICP	If in cardiac arrest – treat as per CMG 4	AP
ICP	Posture supine – do not sit patient up (if unconscious – posture left lateral)	AP
ICP	Oxygen therapy – highest concentration practicable (continue throughout contact time, regardless of apparent clinical improvement)	AP
ICP	Check/monitor for pneumothorax (occasionally a barotrauma related pneumothorax can tension – be prepared to decompress)	AP
ICP	Patients are always dehydrated – rehydrate promptly as per CMG 14	AP
ICP	Treat hypothermia as per CMG 11	AP
ICP	Ascertain (and document) dive profile (depth and duration of dive/s, number and sequence of dives, breathing mixtures, decompression stops and any uncontrolled ascent)	AP
ICP	Remember to check dive partner	AP
ICP	Monitor (and document) symptom progression	AP
ICP	Analgesia as per CMG 2	AP