Decompression Illness

Applies to the Whole Blood and Components Donor Selection Guidelines only

**Obligatory**

Must not donate if:

a) Undergoing investigation or treatment or are still symptomatic

b) The illness has been complicated by conditions that exclude the donor from donation.

**Discretionary**

If recompression treatment ended more than 24 hours previously, the donor feels well enough to have returned to work / normal daily activities, neither steroid nor anticoagulant drugs have been taken within the previous 7 days, and:

a) Muscle (e.g. limb pain), skin (e.g. lymphatic swelling), or mild neurological symptoms (such as weakness or numbness) have stabilised and the donor has been discharged, accept.

b) Arterial gas embolism has responded fully to recompression treatment, with no evidence for myocardial or cerebral ischaemic event (heart attack/stroke), accept.

**See if Relevant**

Anticoagulant Therapy
Cardiovascular Disease
Central Nervous System Disease
Disabled Donor
Epilepsy
Investigations
Nonsteroidal Anti-Inflammatory Drugs
Self-Catheterization
Steroid Therapy
Vertigo

\Continued
Decompression illness incorporates “Decompression sickness” (the bends) and arterial gas embolism. Most events reported by potential donors are likely to relate to diving incidents. The symptoms are caused by bubbles of inert gas (either nitrogen or helium) forming within the tissues (skin, muscle, nerves), or within the circulation, due to inappropriately rapid ascent from depth. This can lead to a broad spectrum of symptoms from mild muscle cramps at one end, to paralysis, heart attack or stroke at the other.

Treatment is a combination of repressurising the patient, and increasing the inspired partial pressure of oxygen, which facilitates the gradual removal of the retained inert gas. Additional treatment with nonsteroidal anti-inflammatory drugs (NSAIDs), steroids and anticoagulants may sometimes be used.

Complete relief of symptoms occurs in 50 to 98% of individuals depending on the severity, and period of time between development of symptoms and treatment. Donors who have suffered significant medical problems (heart attack, stroke, paralysis etc.) would be deferred on the basis of this outcome.

Donors with milder symptoms which have either resolved completely, or are considered by the treating physician to have improved as much as they are going to, can be accepted as long as they meet the above criteria, and they have felt well enough to return to normal activities of daily life (housework, employment, driving etc.).

Reason for change
This is a new entry.

Further Information

The supporting paper, JPAC 12-68 Decompression illness, leading to this Change Notification can be found in the Document Library/Supporting Papers of the JPAC website: http://www.transfusionguidelines.org.uk/Index.aspx?Publication=DL&Section=12&pageid=7528

Dr Sheila MacLennan
Professional Director - Joint UKBTS/HPA Professional Advisory Committee

Direct Dial: (0113) 820 8638  sheila.maclennan@nhsbt.nhs.uk