

Revocation and Determination

of

Statement of Principles concerning

DEEP VEIN THROMBOSIS

ICD-9-CM CODES: 451.1, 451.81, 451.83, 451.89, 453.2, 453.8

Veterans' Entitlements Act 1986

1. The Repatriation Medical Authority under subsection **196B(2)** of the *Veterans' Entitlements Act 1986* (the Act):
 - (a) revokes Instrument No.31 of 1997; and
 - (b) determines in its place the following Statement of Principles.

Kind of injury, disease or death

2. (a) This Statement of Principles is about **deep vein thrombosis and death from deep vein thrombosis**.
- (b) For the purposes of this Statement of Principles, "**deep vein thrombosis**" means an aggregation of blood factors, primarily platelets and fibrin with entrapment of cellular elements, present in the deep venous system, and causing vascular obstruction at the point of its formation, but excluding retinal, cerebral, pulmonary, hepatic, renal, portal and mesenteric thrombosis, attracting ICD-9-CM code 451.1, 451.81, 451.83, 451.89, 453.2 or 453.8.

Basis for determining the factors

3. The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that **deep vein thrombosis and death from deep vein thrombosis** can be related to relevant service

rendered by veterans, members of Peacekeeping Forces, or members of the Forces.

Factors that must be related to service

4. Subject to clause 6, at least one of the factors set out in clause 5 must be related to any relevant service rendered by the person.

Factors

5. The factors that must as a minimum exist before it can be said that a reasonable hypothesis has been raised connecting **deep vein thrombosis** or **death from deep vein thrombosis** with the circumstances of a person's relevant service are:
 - (a) undergoing surgery requiring a general, spinal or epidural anaesthetic within the 60 days immediately before the clinical onset of deep vein thrombosis; or
 - (b) suffering trauma to the affected vein within the 60 days immediately before the clinical onset of deep vein thrombosis; or
 - (c) being immobile and experiencing the application of continuous external pressure to the affected vein lasting at least eight hours, within the 30 days immediately before the clinical onset of deep vein thrombosis; or
 - (d) suffering from a significant head injury, a spinal cord injury, or a fracture to the spinal column, pelvic bone, femur or tibia within the 60 days immediately before the clinical onset of deep vein thrombosis; or
 - (e) suffering from congestive cardiac failure at the time of the clinical onset of deep vein thrombosis; or
 - (f) suffering from a malignant neoplasm at the time of the clinical onset of deep vein thrombosis; or
 - (g) for deep vein thrombosis in the lower limbs or pelvis only,
 - (i) suffering from paralysis of either or both lower limbs at the time of the clinical onset of deep vein thrombosis; or
 - (ii) suffering from a non-malignant pelvic neoplasm causing venous compression at the time of the clinical onset of deep vein thrombosis; or

- (h) suffering from systemic lupus erythematosus at the time of the clinical onset of deep vein thrombosis; or
- (j) suffering from dysfibrinogenaemia at the time of the clinical onset of deep vein thrombosis; or
- (k) suffering from Buerger's disease at the time of the clinical onset of deep vein thrombosis; or
- (m) suffering from Behçet's disease at the time of the clinical onset of deep vein thrombosis; or
- (n) suffering from homocystinuria caused by cystathionine β -synthase deficiency at the time of the clinical onset of deep vein thrombosis; or
- (o) undergoing a course of the combined oral contraceptive pill for a period of at least three weeks within the 90 days immediately before the clinical onset of deep vein thrombosis; or
- (p) being pregnant or being within the 90 days immediately postpartum at the time of the clinical onset of deep vein thrombosis; or
- (q) suffering from protein C deficiency, protein S deficiency or antithrombin III deficiency at the time of the clinical onset of deep vein thrombosis; or
- (r) suffering from a myeloproliferative disease at the time of the clinical onset of deep vein thrombosis; or
- (s) for men and for premenopausal women, undergoing treatment with tamoxifen within the 90 days immediately before the clinical onset of deep vein thrombosis; or
- (t) for men and for premenopausal women, undergoing treatment with chemotherapy within the 90 days immediately before the clinical onset of deep vein thrombosis; or
- (u) suffering from paroxysmal nocturnal haemoglobinuria at the time of the clinical onset of deep vein thrombosis; or
- (v) inability to obtain appropriate clinical management for deep vein thrombosis.

Factors that apply only to material contribution or aggravation

6. Paragraph 5(v) applies only to material contribution to, or aggravation of, deep vein thrombosis where the person's deep vein thrombosis was suffered or contracted before or during (but not arising out of) the person's relevant service; paragraph 8(1)(e), 9(1)(e), 70(5)(d) or 70(5A)(d) of the Act refers.

Inclusion of Statements of Principles

7. In this Statement of Principles if a relevant factor applies and that factor includes an injury or disease in respect of which there is a Statement of Principles then the factors in that last mentioned Statement of Principles apply in accordance with the terms of that Statement of Principles.

Other definitions

8. For the purposes of this Statement of Principles:

“antithrombin III” means a protein of normal plasma and extravascular sites that inactivates thrombin and thus inhibits blood coagulation;

“Behçet's disease” means a chronic, inflammatory, multi system, autoimmune disorder presenting with recurrent oral and genital ulcerations as well as ocular involvement;

“being immobile” means:

- (a) permanent gross diminution or complete loss of the ability to move ones lower limbs; or
- (b) a temporary gross diminution or complete loss of the ability to move ones lower limbs extending over a continuous period of at least eight hours.

Immobility may be caused by a situational state, for example, cramped car travel as a passenger, or by a range of physical or mental disorders. Many of these are listed as part of other factors in this statement, other examples include severe depression or dementia or any organ failure, for example, cardio-respiratory failure, which may be associated with immobility;

“Buerger's disease (thromboangiitis obliterans)” means a nonatherosclerotic, segmental, inflammatory, occlusive vascular disease affecting the small and medium-sized arteries and veins;

“chemotherapy” means treatment of a malignant or proliferative disease with one of the following chemical agents:

- (i) cyclophosphamide; or
- (ii) methotrexate; or
- (iii) fluorouracil; or
- (iv) prednisone; or
- (v) doxorubicin; or
- (vi) fluoxymesterone; or
- (vii) thiotepa; or
- (viii) vinblastine;

“combined oral contraceptive pill” means a compound containing both oestrogen and progestogen;

“congestive cardiac failure” means a clinical syndrome due to heart disease, resulting in congestion in the peripheral circulation with or without congestion of the lungs, and is characterised by breathlessness and abnormal sodium and water retention;

“cystathionine b-synthase deficiency” means a reduced level of the cystathionine β -synthase enzyme in the body. The deficiency of this enzyme leads to increased concentrations of methionine and homocystine in body fluids and to decreased concentrations of cysteine and cystine;

“death from deep vein thrombosis” in relation to a person includes death from a terminal event or condition that was contributed to by the person’s deep vein thrombosis;

“dysfibrinogenaemia” means a condition where there is both normal and mutant concentrations of fibrinogen in the blood plasma. Fibrinogen is a sterile fraction of normal human plasma, which in solution, has the property of being converted into soluble fibrin when thrombin is added and is administered by intravenous infusion to increase the coagulability of the blood. Dysfibrinogenaemia is usually an inherited condition but can occur in liver disease, Acquired Immuno Deficiency Syndrome and lymphoproliferative disorders;

“fracture” means an acquired break or rupture in a bone;

“homocystinuria” means the condition consequent to an error of sulphur amino acid metabolism due to absence or deficiency of the liver enzyme cystathionine synthase. This disorder produces an elevation in plasma methionine and homocystine and is characterised by elevated levels of homocysteine in the urine;

“ICD-9-CM code” means a number assigned to a particular kind of injury or disease in the Australian Version of The International Classification of

Diseases, 9th revision, Clinical Modification (ICD-9-CM), effective date of 1 July 1996, copyrighted by the National Coding Centre, Faculty of Health Sciences, University of Sydney, NSW, and having ISBN 0 642 24447 2;

“malignant neoplasm” means a cancer of any part of the body, excluding non-metastatic non melanotic malignant neoplasm of the skin. The cancer may be present but undiagnosed at the time of the clinical onset of deep vein thrombosis;

“myeloproliferative disease” means a family of disorders characterised by increased blood cell production which arise in a clonal manner from abnormalities at the level of the haematopoietic stem cell. Specific disorders include chronic myelogenous leukaemia, polycythemia vera, idiopathic myelofibrosis and essential thrombocytosis;

“non-malignant pelvic neoplasm” means a benign tumour arising within the pelvis, such as an ovarian cyst, a uterine fibroid or a hydatidiform mole;

“paralysis of either or both lower limbs” means loss or impairment of motor function of either or both lower limbs, occurring in conditions such as stroke or spinal cord injury;

“paroxysmal nocturnal haemoglobinuria” means a chronic acquired blood cell dysplasia in which there is proliferation of a clone of stem cells producing erythrocytes, platelets and granulocytes that are abnormally susceptible to lysis by complement; it is characterised by the presence of free haemoglobin in the urine, intravascular haemolysis and_venous thrombosis;

“protein C deficiency” means a deficiency of a vitamin K dependent plasma protein that, when activated, inhibits the clotting cascade at the levels of factor V and factor VIII;

“protein S deficiency” means a deficiency of a vitamin K dependent plasma protein that inhibits blood clotting by serving as a cofactor for activated protein C;

“relevant service” means:

- (a) operational service; or
- (b) peacekeeping service; or
- (c) hazardous service;

“significant head injury” means trauma to the head of such a degree that it results in either a skull fracture or loss of consciousness with retrograde amnesia or leakage of blood and/or cerebrospinal fluid from the external auditory canal or from the nostril;

“spinal cord injury” means damage to that part of the central nervous system which is lodged in the vertebral canal, producing weakness or paralysis of the upper and/or lower limbs, which can sometimes be permanent, and which would usually require hospitalisation for treatment;

“systemic lupus erythematosus” means a connective tissue disease in which cells are damaged by pathogenic autoantibodies and immune complexes;

“tamoxifen” means a nonsteroidal anti-oestrogen used in the treatment of malignant neoplasms, such as breast cancer and metastatic melanoma, and to stimulate ovulation in infertility;

“terminal event” means the proximate or ultimate cause of death and includes:

- a) pneumonia;
- b) respiratory failure;
- c) cardiac arrest;
- d) circulatory failure; or
- e) cessation of brain function;

“the application of continuous external pressure” means continued pressure from any external source, including that from the cross bar of a chair, for example, a deck chair, or when an immobile individual is lying or seated in bed with a pillow propped under the partially flexed knee;

“trauma to the affected vein” means injury to the affected vein such as:

- (i) injection, cannulation or incision of the affected vein; or
- (ii) therapeutic radiation of the part of the body surrounding the affected vein; or
- (iii) a crush injury to the affected vein.

Application

9. This Instrument applies to all matters to which section 120A of the Act applies.

Dated this *Twenty-ninth* day of *June* 1998

The Common Seal of the)
Repatriation Medical Authority)
was affixed to this instrument)
in the presence of:)

KEN DONALD
CHAIRMAN