Certification after Cerebrovascular Events: Stroke & Transient Ischaemic Attack

Class 1 & 2

Applicants for Class 1 and Class 2 certification with a diagnosis of stroke, transient ischaemic attack (TIA) or reversible ischaemic neurological deficit (RIND) should be assessed as unfit.

The basis for this is that a review of epidemiological studies has shown that the risk of a future event (including a further vascular event, stroke or seizure) will always exceed 1% per annum, usually by a considerable margin, even in individuals under 45 years of age and those with 'paradoxical embolism'. Therefore, this precludes all Class 1 and unrestricted Class 2 certification.

Class 2 (OSL)

Existing Class 2 certificate holders **may** be considered for recertification by their aeromedical examiner (AME) if there is no residual impairment likely to affect flight safety and there are no other significant risk factors, including:

- age >70
- diabetes
- uncontrolled hypertension
- coronary artery disease
- atrial fibrillation
- heart failure
- anticoagulation or underlying coagulation defects if associated with an increased risk of spontaneous bleeding or thrombosis

Note: Any one of these risk factors will preclude certification.

Assessment

- review of neurological reports including risk factor control must be satisfactory
- cardiological review to include ischaemia testing (nuclear myocardial perfusion scintigraphy (MPS), SPECT, PET, stress echocardiogram (dobutamine or exercise), or MRI perfusion scan)
- echocardiogram (if not undertaken as part of ischaemia testing)
- 24hr ECG recording
- carotid artery imaging - should show no stenotic lesions ≥50%
- thrombophilia screening if indicated in accordance with British Society for Haematology guidelines
- visual field mapping should be normal
- a medical flight test is required to assess functional capacity with particular reference to cognitive functions and any physical disability

Recertification

Unfit for 12 months then permanent OSL.

Follow-up

Annual cardiological review is required to include cardiovascular risk assessment (flow chart in cardiovascular system guidance material), and review and investigation of risk factors. Other investigations may be required, depending on assessment findings.

LAPL

Applicants for LAPL certification should be assessed by an AME.

Applicants can be considered for certification if there is no residual impairment likely to affect flight safety and there is satisfactory control of risk factors.

Assessment

- review of neurological reports satisfactory
- cardiological review to include ischaemia testing (nuclear myocardial perfusion scintigraphy (MPS), SPECT, PET, stress echocardiogram (dobutamine or exercise), or MRI perfusion scan)
- carotid artery imaging should show no stenotic lesions ≥50%
- visual field mapping should be normal
- a medical flight test is required to assess functional capacity with particular reference to cognitive function and any physical disability

Recertification

Unfit for 3 months, then OSL or OPL for a minimum of 12 months after the index event. For unrestricted certification there should be no significant residual disability and low risk (<2% per annum) of recurrence.

Follow-up

Annual cardiological review is required to include cardiovascular risk assessment (flow chart in cardiovascular system guidance material), and review and investigation of risk factors. Other investigations may be required, depending on assessment findings.

Carotid or Vertebral Artery Dissection

The following co-existing conditions are unacceptable for recertification:

- smoking
- uncontrolled hypertension
- coronary artery disease
- previous stroke or TIA
- anticoagulation or underlying coagulation defects
- autosomal dominant polycystic kidney disease
- osteogenesis imperfecta type

Assessment

- review of satisfactory neurological and cardiological reports including risk factor control
- selective arterial angiogram to exclude arterial disease in the carotid or posterior cerebral circulations
- ischaemia testing (nuclear myocardial perfusion scintigraphy (MPS), SPECT, PET, stress echocardiogram (dobutamine or exercise), or MRI perfusion scan)
- coronary angiography, if the cause was likely to have been atheromatous or there are any symptoms suggestive of peripheral vascular, carotid or vertebral artery disease
- formal visual field mapping, if vertebral artery dissection
- a medical flight test is required to assess functional capacity with particular reference to cognitive function and any physical disability

Recertification

- unfit Class 1 for 12 months after recovery, then long-term OML
- unfit Class 2 for 6 months after recovery, then OSL for a minimum of 6 months, and then consider unrestricted Class 2
- unfit LAPL until clinical recovery, then OSL or OPL for a minimum of 6 months, and then consider unrestricted LAPL

Follow-up

Annual cardiological review is required to include cardiovascular risk assessment (flow chart in cardiovascular system guidance material), and review and investigation of risk factors. Other investigations may be required, depending on assessment findings.