Issued February 2000
Revised May 2002

GUIDELINES FOR FLIGHT SURGEONS

LIMITED USE OF SSRI/SNRI MEDICATION IN CF AIRCREW

BACKGROUND

1. Depressive illnesses are not uncommon in the general population, with a lifetime prevalence of 5- 20% depending on the population studied, and it is likely that the prevalence in the aircrew population is within this range. Because of various factors including the stigma associated with psychiatric diagnoses, the prolonged grounding period required for pharmacologic treatment, and the delay in returning to flight duties even after treatment is completed, aircrew are generally reluctant to come forward to discuss depressive symptoms with their Flight Surgeon, and depression is infrequently diagnosed. Depressive symptoms are often camoflaged beneath somatic complaints, or self-treated with available drugs such as alcohol. This situation often results in aircrew trying to "tough it through" a significant depressive illness, with resulting significant degredation of performance.

2. Once medically diagnosed and pharmacologic treatment has been initiated, current therapeutic guidelines recommend up to a year of treatment with antidepressant medications, which for aircrew is followed by a further period of up to three months of observation before a return to flight duties is recommended. Fifteen months off flying duties for most aircrew means a significant retraining period before being operationally qualified again. This amounts to quite a chunk out of an operational tour, complicated by the fact that since the aircrew is not on MPHL, a replacement can not be posted in against his/her position.

3. Further, if an aircrew recovers from one episode of depression and is unlucky enough to be one of the 50% who suffer a second episode sometime later, the current psychiatric recommendation is to treat again with medications, but then to leave the individual on life-long prophylactic medication. Given the current aeromedical approach, this essentially means the end of a flying career.

4. Previous anti-depressive medications generally had side-effects quite incompatible with flying duties including fatigue, drowsiness, and marked anti-cholinergic effects including dry mouth. In the past decade, increasing experience has been gained with a new generation of anti-depressants including selective serotinin reuptake inhibitors (SSRIs), selective noradrenalin reuptake inhibitors (SNRIs), and other related medications whose effect is to modulate the action of neurotransmitters in various parts of the brain whose imbalance is thought to be a causative factor in depression.

5. There is an increasing consensus of medical opinion that it is possible to define conditions which would to allow the use of anti-depressive medications in aircrew in certain very specific and limited circumstances which would not compromise flight safety or operational effectiveness, and would allow the preservation trained aircrew resources.

6. A symposium discussing this issue was held at the 1999 Annual Scientific Meeting of the Aerospace Medical Association, and although the position taken by formal licencing agency representatives such as the FAA was that it was “against regulations”, much of the input focussed on the depth of the problem in aircrew, the operational considerations, and the requirement for specific guidelines to consider the limited use of such medications

7. With this information and repeated requests for SSRI use in aircrew from Flight Surgeons, the Central Medical Board including the 1CAD Flight Surgeon and the Medical Advisor to the CAS recommended that CMB convene a Symposium to discuss the possible use of SSRI medication in CF aircrew. This Symposium was held at DCIEM 6 December 1999, with presentations by Dr. S. Kennedy, Professor of Psychiatry at the University of Toronto, Dr. Chris Flynn, previous USAF Chief of Psychiatry at the USAFSAM Aeromedical Consult Service and currently NASA Flight Surgeon and Chairman of the International Space Station Human Behaviour and Performance Working Group, and Dr. Marvin Lange, ex-CF aircrew and previous Chief of Psychiatry at NDMC and currently the psychiatric consultant to the Civil Aviation Medicine Aviation Medical Review Board.

8. Based on the information presented at the seminar and the following discussions which addressed flight safety and operational concerns in the various aircrew roles, the Central Medical Board has recommended the following policy regarding the use of SSRI/SNRI medications in CF aircrew, based on accredited medical opinion.

a. Indications For Use

(1) Major depression (or recurrence) including post-partum

(2) Uncomplicated illness

(a) No psychosis

(b) No suicidal behaviour

(c) No significant anxiety component

AIRCREW ELIGIBILITY FOR RETURNING TO FLYING DUTIES

ELIGIBLE UNDER SPECIFIC PROTOCOL	ELIGIBLE WITH CASE MANAGEMENT AT WING	INELIGIBLE FOR FLYING DUTIES ON SSRIs
Pilots – transport pilots, strategic airlift only; martime patrol pilots on non-ASW missions only	Flight Nurses	All other pilot roles
Navigators	Flight Med As	SAR Techs
Flight Engineers	Flight Surgeons	
AECs/ACOPs		
AMTOs/AMTs		
AESOPs		
Flight Attendants		
Loadmasters		

PROTOCOL

9. Eligible aircrew will be managed initially at Wing/Base level by the Flight Surgeon with a psychiatric consultation to provide assessment and treatment recommendations. At this stage, the aim is to provide optimal clinical management and support. During initial treatment , aircrew will be grounded and geographically restricted to allow appropriate treatment and follow-up (G4 (T6) – requires specialist follow-up; unfit deployment, A7 (T6) – unfit aircrew duties). During this period, the Flight Surgeon should liaise with the Head/Central Medical Board regarding the individual's status and potential consideration for return to flying duties.

10. Recommended Medications

a. Sertraline

b. Bupropion

11. For consideration for return to flight status, the above two medications are recommended based on side-effect profiles including lack of drowsiness and CNS depression. If in the opinion of the psychiatrist providing clinical management a different medication is preferable on clinical grounds, priority should clearly be given to providing optimal clinical management.

12. Six months following resolution of clinical symptoms of depression as confirmed by the attending Flight Surgeon and psychiatric consultant, consideration can be given to return to flight duties. This will require the following:

a. Referral to DCIEM/Medical Assessment Section for

(1) Clinical aeromedical review

(2) Neurocognitive testing (Cogscreen Aeromed)

b. Referral to Dr. Marvin Lange at the Royal Ottawa Hospital. This referral ideally should be co-ordinated with the visit to DCIEM. Appointments with Dr. Lange can be arranged by contacting his secretary at 613.722-6521 extension 6306, indicating the referral is for a CF aircrew for SSRI flight status assessment.

It is imperative that these referrals be accompanied by a detailed clinical referral letter from the attending Flight Surgeon as well as copies of all consultation information from the consultant clinical psychiatrist.

c. Ops assessment and Command endorsement. This should be arranged once a “good-to-go” decision has been approved from the Central Medical Board based on the above assessments.

13. Once these conditions have been satisfied, aircrew may be returned to restricted duties. A CF2033/CF2088 should be raised and forwarded to DCIEM/CMB, to include the Ops assessment and Command endorsement.

GEOGRAPHIC & OPERATIONAL FLYING RESTRICTIONS WHILE ON TREATMENT

14. While on treatment with SSRI/SNRI medications for treatment/control of depression, aircrew should be assigned the following temporary restrictions:

a. Air Factor

(1) Pilots

a. A3(T6) – restricted to fly with or as copilot, restricted to strategic transport operations or non-ASW Aurora operations only with a pilot/copilot not on SSRI/SNRIs

(2) Other Aircrew

a. No operational flying restriction required

b. Geographic

(1) G4 (T6) – requires medical follow-up at minimum of three monthly intervals, unfit deployments exceeding 8 weeks. Annual follow-up at DCIEM/CMB and by Dr. Lange required while on medication.

OTHER AIRCREW – MANAGEMENT AT THE WING

15. Flight Nurses, Flight Med As and Flight Surgeons once stabilized on treatment may be returned to A4 status with the same temporary G4 geographic restrictions as noted above ie requires regular follow-up at minimum three monthly intervals, unfit deployment.

16. Neurocognitive Laboratory Assessment Of SSRIs:

17. In parallel with this limited introduction of of SSRIs in aircrew, DCIEM will undertake a study of the neurocognitive effects of one or more selected SSRI medications in a controlled laboratory environment. This, along with information gained from the restricted clinical use in aircrew, will hopefully allow more in-depth conclusions to be made as to the potential for use in other aircrew such as pilots in other operational roles, or for other clinical indications.