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(Room 5)

16:30 - 17:25 WS #51: Essential Reporting and Prescribing For Pilots

17:35 - 18:30 WS #61: Essential Reporting and Prescribing For Pilots

Essential Reporting and Prescribing for Pilots ?

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Disclaimer

- No financial or other conflicting interest in any of my presentations
- My own views not necessarily CAA's



So what if your patient happens to fly ?



Your patient is a pilot

- ➔ General principles
- ➔ Cases
- ➔ Doctors legal obligations

Your patient travels by air

- ➔ General Principles
- ➔ In-flight emergencies

Pilots, not all subject to the same standards



CAA medical certificate, by a designated & delegated Medical Examiner

- ➔ Class 1: Commercial
- ➔ Class 2: Private
- ➔ Class 3: Air traffic Controller (ATC)

Non CAA medical certificate, by GP

- ➔ NZTA DL9 Cl 2 with passenger [P] endorsement → Recreational pilot (RPL)
- ➔ Medical Declaration: Self regulating organisations e.g. gliders, microlights, hang gliders etc.

General principles



Flying is foreign to the individual (3 D + time)

- Can't stop the aircraft ! – need for planning ahead, multitasking (piloting / navigation / radio communication).
- Must have good **cognitive function & judgment**
 - Fatigue (workload - Jet lag - poor sleep e.g. due to sleep apnoea, pain, worries)
 - Medication / drug and alcohol
 - Mental Health, behaviour issues
 - Aging

General principles



→ Requires sufficient physical function for the task

- Vision
- Hearing
- Limb function
 - Range of movements
 - Power and coordination
 - No distracting / incapacitating pain

General principles



- Must have low risk of incapacitation (sudden, subtle)
 - Epilepsy, PTE
 - CVA
 - Migraine
 - Vertigo
 - Eustachian tube / sinus dysfunction
 - Asthma (unstable or severe) / COPD
 - Pneumothorax
 - Coronary Artery Disease → ACS
 - Tachy / brady arrhythmia
 - Hypotension &
 - Vasovagal syncope
 - Renal lithiasis
 - Cholelithiasis
 - DVT → P . E
 - etc

Case

J Blogg, male - age 60



- ✈ Flies twin engine aircraft for the local Air ambulance
- ✈ Total hip replacement on 1 July 2016
- ✈ Reports to you that he is fine, wants to work seeking clearance certificate from you
- ✈ What do you do ?
- ✈ What do you write ?

Medical Certificate



➔ Typical certificate

“Mr J Blogg has been unable to work since 1st July 2016. He has recovered well and will be fit to work on 15 August 2016”.

➔ Problem:

- CAA Medical certificate has been suspended
- CAA doctor or Aviation Medical Examiner needs to make a decision to clear him back to flying
- CAA Cannot make that decision without adequate medical information
- Can you make an aviation medicine decision or recommendation ?



What would you want to know
if you were in my place ?

J Blogg – Total hip replacement



✈ Cognitive:

- Sleep ?
- Medication ?

✈ Function ?

- Range of movement
- Muscle power

✈ Incapacitation ?

- Risk of dislocation
- DVT → PE



Medical Certificate



Suitable certificate

“Mr J Smith underwent left shoulder surgery on 1 July 2016.

He has near full range of movement and full power,

He is free of pain during the day, he sleeps well with the help of two Paracetamol tabs taken at night for some residual nocturnal pain”.

Or

Copy of consultation
notes



Agricultural pilot - mid 40s - Accident



Agricultural pilot - mid 40s



- ➔ S: patient seeks clearance to work as a Pilot. Aircraft accident one week ago.
- ➔ O: Moving well, no apparent pain, BP 136/74. chest and heart ok. Bruising only to leg and pelvis, abdomen ok. Chest X-ray reviewed , no finding.
- ➔ Plan: Copy notes to patient for aviation doctor.

GP notes - comments



- Notes quite detailed
- Considered chest injury
 - No Pneumothorax !
- Did not give an opinion regarding flying clearance
 - Not qualified to do so
 - Avoids conflict
- Did not clearly indicate if head injury (CT scan?)
- Did not clearly address psychological status (PTSD ?)

Treating / Prescribing to pilots



- **Concern with conditions**
 - Seizure risk (head injury, history of seizure, cancer)
 - Migraine
 - Vertigo
 - Ischaemic heart disease
 - Rhythm disturbance i.e AF, tachyarrhythmia, heart block
 - Renal stones
 - Depression
 - Drug / alcohol
 - Etc.
- **Concern with medication**
 - Psychoactive medication
 - Medication that can lead to impairment - primary effect
 - Antihypertensive (trial period), Warfarin, Dabigatran, Sulphonylurea
 - Can lead to Impairment - side effects
 - Alpha blockers, Steroids, Anticholinergics, Isotretinoin, Champix; etc

Case 3 – Female – Age 35



- Jane Dow attends
 - Poor sleep
 - Anxiety
 - Depressed mood, 1 month
 - Not suicidal
 - Relationship difficulties
 - Mother just passed away
- Rx: Fluoxetine +/- CBT

Certification issues:

- Is condition likely to:
 - Impair concentration ?
 - Impair judgment ?
- Is the medication tolerated ?

CAA wants to know !

Pilot obligation - s27C (paraphrased):



- ➔ If a licence holder is aware of or has reasonable grounds to believe any change in his / her medical condition
- ➔ that may interfere with safe flying, the licence holder must:
 - Advise the Director of CAA
 - May not exercise the privileges related to the certificate.

What are your obligations ?



S27C of the Civil Aviation act (paraphrased):

- If a medical practitioner is aware of or has reasonable grounds to believe that a person is a licence holder, and
- is aware, or has reasonable grounds to **suspect** that the licence holder has a medical condition
- that **may** interfere with safe exercise flying, the registered medical practitioner **must**, as soon as practicable:

What are your obligations ?



- ➔ Inform the licence holder (your patient) that you will advise the Director of Civil Aviation
- ➔ Advise the Director of the condition
- ➔ Indemnified Act:
Not subject to any civil or criminal liability.



CAA Action



- Require information
- Can impose conditions (e.g. Isotretinoin → no night flying)
- Can suspend the medical certificate
 - And after 10 working days
 - Can disqualify
 - Can do all of the above

Cases of non reporting



Case 1

- ✈ Angina – continued flying

Case 2

- ✈ Pulmonary embolism
- ✈ Near death
- ✈ Impaired LVF – continued flying

Case 3

- ✈ Mental health issues

(GermanWings Pilot > 150 deaths)

What needs to be reported ?



- ✈ Most conditions
- ✈ General Direction lists exceptions to the need to report (under preparation)

Ethical Issues



- Ethical dilemma, choosing between:
 - Best treatment,
and
 - Treatment that is acceptable for certification ?
e.g.: Not giving optimum treatment for diabetes, to avoid Sulphonylurea or Insulin
- Reporting to third parties: NZMC guidelines. No advocacy !

Take Home Message



- ➔ When treating, or when reporting
 - Cognitive & Judgement (mental health, behaviour etc)
 - Function
 - Risk of incapacitation
- ➔ Obligations to report
 - Conditions that **may** affect flight safety
- ➔ CAA docs available for advice: 04 560 9466
med@caa.govt.nz

Questions / Discussion ?



www.caa.govt.nz → Medical
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