

CASE REPORT

PROFESSIONAL PILOT BECOMES UNFIT TO FLY ON AIRPLANE – BURNOUT?

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INTRODUCTION

Specialists in aero-medical activity examine and evaluate the fitness for work of professional and non-professional pilots. During this they apply a European Union law, the Commission Regulation (EU) No. 1178/2011.

This case report presents the work-related musculoskeletal disease of a pilot which could have been the result of chronic stress, disturbed biorhythms and loss of motivation (burnout) and which ended in leaving the profession.

THE CASE

A 28 year-old commercial pilot presented herself for an out of turn examination. According to her medical history she began her aviation career in March 2010 as an amateur pilot, then, with many years of study and practice she reached the pinnacle of the profession, flying commercial large jetliners in 2013. By 2017 she completed 1400 flight hours. Her spouse was also a pilot, they would have liked to have a baby, but she felt tired, exhausted and because of this she was unable to get pregnant. She reported no major illnesses.

She reported for examination on 08.06.2017 when she received a temporarily unfit qualification due to regular radiating pains which radiated from the neck in the direction of the head or the scapulae and the arms. Due to her work schedule she could not attend regular physiotherapy therefore she asked to be put on sick leave. Treatments started but there were only partial improvements in her complaints, they did not cease. Cervical disorder as well as CIV-CV disc protrusion were the cause of her complaints. Prolonged sedentary work was not recommended for her during a neurological outpatient examination as this could trigger or exacerbate her complaints.

Findings of the neurological examination on 03.07.2017:

“She has neck pain, no upper limb radiation, no numbness.” Aflamin, Mydeton, physiotherapy, physical therapy, and cervical spine MRI were recommended. No deviation was reported in her neurological status.

Findings and opinion of the repeated neurological examination on 24.08.2017:

„She still has neck pain, manual therapy helps somewhat. In the meantime, cervical MRI was performed (02.08.2017) which showed CIV and CV discopathy, straightening of lordosis on the upper tract.”

A diagnosis of Cervicobrachialgia l.u. was suggested, the cervical spine deviation was described as a posture anomaly, while the CIV-CV deviations were described as disc protrusions.

The recommendation included the following: “Further rest, refraining from overtaxing the spine. Since radiating neck pains are very likely to get worse with sedentary work, this should be avoided. Further physiotherapy and manual therapy are recommended.”

During the examinations the pilot said that her work was very exhausting, she could not have enough rest. Although she spent many years studying, invested much energy, time and money into becoming a pilot, she had come to realize that perhaps this was not what she wanted to do after all. She felt that her hectic lifestyle and schedule made it more difficult for her to have a baby.

I decided to give her enough time to make this important decision and I also felt it was important that the decision be made by her. Her illness did not necessarily mean that she would have to stop flying since she could have regained her pain-free status with successful rehabilitation. Interestingly however, her condition did not improve even after several months of treatment and rest, she had symptoms of almost the same strength and type even after 3-4 months. However, several months of rest made her realize how much she preferred this lifestyle to working at night and dawn, the continuous fatigue and the double pressure of great responsibility.

She therefore made a decision to stop flying.

She received an unfit qualification based on the following points of the law:

AMC MED B065.

“..Applicants shall have no established medical history or clinical diagnosis of any neurological condition which is likely to interfere with the safe exercise of the privileges of the applicable licence(s). ..”

As well as:

MED.B.005

“Applicants for a medical certificate shall be free from any:

(2) active, latent, acute or chronic disease or disability; ..”

Although workplace cervical spine problems are seemingly not of the same origin, the relationship between musculoskeletal disorders and psychosocial factors is increasingly being recognized. Psychosocial factors include workplace environment, environment outside the workplace as well as the worker’s personality. Interactions may develop between these that can negatively affect the worker’s health or performance. Psychosocial factors have been reported to cause musculoskeletal disorders, pains which are the direct or indirect effect of stress.

However, the work of a specialist in aero-medical activity is not just about diseases, diagnoses and the application of paragraphs that come up but also the human fates behind the individual cases. The aero-medical activity specialist sometimes must look behind the diagnoses, noticing the individual, listen to their personal problems and help them find a solution.

Professional pilots study for many years, spend a lot of money on their training since they are very motivated to reach their goal. But what happens when they reach their goal and can fly the biggest planes but also encounter the downsides of the profession: lots of overnights, little rest, responsibility, exhaustion, difficulty of keeping up with social, human relationships because of unfavourable schedules? What happens if motivation is lost? And what happens if it is the body that indicates this first? The likelihood of developing burnout arose in connection with this case.

BURNOUT

Burnout as an expression was first described by Freudenberg (1974). According to this burnout is physical, emotional, mental exhaustion arising as a result of chronic emotional stress, which entail the feeling of hopelessness and incompetence and which is characterized by negative attitudes towards others.

Manifestation: emotional emptiness, loss of emphatic capability, cognitive impairment and physical exhaustion.

Causes of burnout:

- High emotional work demand of job;
- Helplessness, weakness, inability to solve problems;
- Insufficient information: description of tasks not clear, priorities change, they are not clearly defined;
- Conflicts: anomalies of interpersonal relationships, lack of understanding;
- Overload: time-pressure;
- Boredom: routine tasks, lost time;
- Lack of feedback: no feedback, how am I doing?
- Punishment: criticism, lack of recognition;
- Alienation: isolation from others, lack of trust in management;
- Randomness: how do they value my work? Emphasis on popularity and not performance;
- Personal conflicts: family conflicts.

Another grouping of burnout causes:

1. Lot of stress leading to emotional exhaustion
2. Little motivation for work, low workplace satisfaction, leading to reduced performance
3. Deteriorated workplace relationship qualities cause dehumanization (25% of teachers show signs of burnout after five service years)

Burnout occurs: in “human oriented” professions (doctors, nurses, social workers, psychotherapists, teachers and lawyers, policemen, transport workers).

Primarily highly qualified, dedicated, talented individuals are affected who lost their enthusiasm and dedication due to a high degree of burnout.

Symptoms of burnout: headache, gastrointestinal disorders, hypertension, muscle stiffness, loss of appetite, high susceptibility to diseases, sleep disorders, elevated cortisol levels, coronary heart disease risk factors (elevated total cholesterol, LDL-cholesterol, TG, glucose, HS level), ECG deviations.

The symptoms of burnout are strikingly similar to the “being fed up” that has been known for many years in Hungarian occupational health.

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