Original Article

Fear of flying: A case report

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During an armament phase training, a young Iskara pilot had an unnerving experience. He presented with symptoms of anxiety, which were aggravated on the days of solo sorties. He vomited in the cockpit on two occasions. Organic abnormality was ruled out at Station Sick Quarters and Military Hospital. There was a reluctant admission by the individual about his fears to continue fighter flying. A diagnosis of 'Fear of flying' (FOF) was made. Aviation psychiatrist referred him to IAM, IAF Bangalore for management. A prolonged hospitalisation and detailed psychiatric evaluation led to a diagnosis of Neurotic Depression. This case is discussed to analyse the intricacies of the presentations and the final diagnosis. Somatization of an illnes including the gains in case of psychophysical condition is highlighted. Role of Squadron Medical Officer for an early diagnosis of FOF is also highlighted.

Keywords: Stress, neurotic depression, somatisation of illness.

Fear of flying (FOF) can be broadly classified into disorders, stemming from a pre existing disorder, overwhelming situational stress including exhaustion, and effects of motivation [1]. A case report is being discussed to improve our understanding about FOF, as well as to highlight the role of various medical agencies involved in handling such a case.

Brief narrative

A 23 years old fighter pilot undergoing Jet Phase II training on Iskra aircraft suffered a brief illness during armament phase training. He had sore throat, yet he continued flying, till he had an unnerving experience in the cockpit. Thereafter, he developed nausea especially when he had to proceed for a solo sortie. There were two episodes of vomiting in the cockpit during taxying, leading to abandoning the mission. He seeked help of his superiors and was evaluated at Station Sick Quarters and Military Hospital. In the absence of any psycho-pathological ailment, and admission by the individual about anxiety while flying, a diagnosis of FOF was made. He was referred to Institute of Aerospace Medicine (IAM) Indian Air Force, Bangalore for further management.

At IAM, he was managed on lines of FOF and he responded favourably to desensitisation therapy. He was found fit to return to his unit, after being

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found to have low motivation for fighter flying. An administrative disposal was recommended. Within a couple of days, while awaiting finalization of medical board proceeding, he was readmitted to Command Hospital (Air Force) Bangalore with vague symptoms. He was diagnosed as a case of neurotic depression. He was treated with antidepressants and anxiolytics to which he has shown a favourable response.

At present, the individual has opted out of flying branch on his request. He is in low medical category A4G3.

Details of the case

This pilot suffered from an episode of sore throat. During the next sortie, after having abstained from flying for three days, he became anxious and had a strong urge to abandon the mission. This seemed to be an "unnerving" experience, where he was restless and anxious about his safety in the cockpit. He abstained from flying for another three days. He remained nauseated and anxious, with his thoughts fixed on his capability to perform in the cockpit. He vomited in the cockpit on resumption of duty and abandoned the sortie. He was treated for upper respiratory tract infection and advised not to fly till symptom free.

After a break of about ten days, prior to proceeding on solo sortie he vomited after the preflight met briefing. He admitted to his supervisors about his lack of confidence in flying solo sorties due to his poor physical condition. He was counselled by a group of instructors, and managed to fly an uneventful sortie. During the second sortie of the day he felt uneasy, tired and weak, and landed back without completing the mission. Two days later, he vomited in the cockpit during taxying out.

The patient, along with his flight commander, reported to the Sick Quarters. He was interviewed in depth about his symptomatology and flying performance. He was assessed as an above average pilot, who had stood seventh overall in his course, as per the flight commander. In view of his symptoms of nausea, poor appetite, vomiting and tiredness and physical finding of a just palpable heptomegaly, he was admitted to military hospital. A detailed workout ruled out hepatic or any other pathology. He admitted his lack of confidence in fighter flying to the treating physician. In the absence of any pathology, but persisting symptomatology and a candid admission by the patient about his safety in the cockpit, a diagnosis of FOF was made. He was discharged with advice to report to the local aviation medicine specialist for further disposal.

Family History The patient lost his father, an IAF test pilot, in an aircraft accident. He had financial constraints at home, with strained relationship with his elder brother, who had an unsuccessful marriage. The mother, who was working, was the sheet anchor of the family. She had lots of socioeconomic pressures, because of her role of bread winner after husband's death.

Personal History He was a graduate in Physics. He was a social drinker and smoked 1-2 cigarette per day. He admitted being timid and reserved in nature. He had adjusted to the service life but lacked friends.

Psychiatric Examination The patient appeared anxious and restless throughout the interview. He was cooperative. He was hesitant and apprehensive talking about flying. He was reluctant to comment about his performance in air and about his future. He admitted to nurture negative thoughts about his control over himself, especially during a sortie when he felt weak, nauseated and absolutely helpless. He did not have depressive

thoughts or suicidal intent. He had poor motivation to continue flying fighter aircraft. There was no sleep disturbance, but he had poor appetite.

The patient was admitted at CH (AF) Bangalore, but remained under the care of Aviation Psychiatrist at IAM. After a detailed evaluation, he was given desensitization therapy and counselling. He seemed to be responding favorably to this, till his discharge from hospital after about one and a half months of stay. He was readmitted within a week with complaints of negative feelings, vague fearfulness, palpitation and uneasiness. Further evaluation led to the diagnosis of neurotic depression. He was treated with antidepressants, anxiolytics and counselling. He was discharged in low medical category A4G3 (T24), with advice to continue antidepressants.

The patient was found symptom free during the next review medical board. He was taken off the antidepressants. He had a favourable executive report. He was found to have improved significantly on evaluation. His category was extended for another twenty-four weeks for further observation.

Discussion

This is a case of FOF, who was finally diagnosed as a case of neurotic depression. He responded favorably to the conservative management. He had been taken off from flying duties, and seemed to be adjusting well in his new role.

There is exposure to real dangers during flying. A fearful response to these dangers is rational and pathologic [2]. A young pilot, with a healthy motivation, may not comprehend the inherent dangers initially. Gradually the reality of the dangers dawn on him. This reality is countered with continued denial, suppression, rationalization, intellectualization, and a new concentration on increasing skill and knowledge [3].

However, real fear about real danger must be distinguished from any anxiety about flying which arises from a basic, punitive anxiety (3). This is a neurotic component. In the case of our patient, even when he was not exposed to the dangers of flying solo, the thoughts of a solo sortie kept him tense, he lost his appetite, and he vomited in the cockpit. Despite a favourable response to the desensitization therapy, he was readmitted with complaints suggestive of an anxiety reaction. It is important to understand that fear is an instinctive reaction but anxiety is a neurotic reaction. Hence, even though the patient admitted to his FOF, the stimulus defines the difference between the fear and neurotic anxiety; in his case, a symbolic threat viz., thoughts of flying evoked an exaggerated anxiety reaction.

A healthy motivation to fly plays a significant role in countering the fears associated with dangers of flying. This patient had his father as a motivation to join fighter stream that he lost when he was only two years old. There were conflicts in the build up of a healthy motivator, when his mother advised him not to join fighter stream. Encountering the dangers of fighter flying, and an 'unnerving' experience shook his confidence in his capabilities. There was renewed pressure by his mother to give up fighter flying during his illness. Apparently his motivation to fly was not so healthy as to counter his own anxieties related to his performance in the cockpit. His anxieties were exaggerated by maternal anxieties about his safety; hence there was an apparent conflict between the image and reality, and between fears and anxieties. The neurotic component of his personality with not so healthy motivation led to physical manifestation of deep-rooted anxieties of flying also.

Therefore, this patient presented with psychophysiologic symptoms, thereby somatizing his illness. His symptoms, and not a consciously recognized emotion, were cited as reasons not to fly. He was afraid that recurrence of the symptoms in the cockpit might jeopardize his safety in the air. In all possibility, he had encountered an "acute onset of reality", what he described himself as an "unnerving" experience, but had not revealed as to what had exactly happened. These fears had been augmented by an element of primitive anxiety, especially if his previously effective defenses were too weak to counter his fears. Since fear and anxiety present with the same symptoms and signs, an inexperienced aviation physician may attribute the presentation to rational fear rather than to on increased proportion of irrational anxiety. It is important from the management point of view that once the symptoms are full blown, no therapeutic intervention can help a patient regain his motivation to fly. And this is amply evident in this case.

This patient had symptoms suggestive of hypochondriasis viz. nausea, vomiting, poor appetite and weakness. He used physical symptoms to communicate psychosocial distress. Underlying depression is common among patients with somatic symptoms who try to draw attention to their psychological distress. Such patients are usually hypervigilant to various body functions [4]. They are typically emotionally constricted. If somatization is suspected, the first task is to determine if there is an identifiable psychiatric diagnosis. Inquiries should be made for the symptoms of major depression, panic disorder and obsessive-compulsive disorder. If suggestive symptoms are present, for example depression in this case, the patient responds favorably to the specific treatment. This is evident in this case where our patient had shown improvement.

An important factor that facilitates somatization and needs to be considered, is the gains of illness. Primary gain usually refers to psychogenic psychiatric symptoms, such as hypochondriasis being the physical symptoms of underlying depression. Secondary gains reflect the benefits of illness that can occur to either physical and/or psychiatric illness. For example, a change of aircraft stream as was desired initially by the patient or being grounded permanently which was an acceptable socioeconomic compromise.

Tertiary gains are those that accrue to persons other than the patient such as family members. In this case it is the mother who did not want his son to fly fighter aircraft from the beginning. Question about the fitness to continue to fly and recurrences of symptoms of FOF are interrelated. The recurrence of the symptoms shall depend upon the personality make-up, development of the defence mechanism to dangers of flying, motivation and support of the family and peer group. In this case, he had neurotic traits, with not so healthy a motivation to fly, apparently defence mechanism are not adequately developed and there are difficulties at home, and by his own admission he lacked friends. Such a person, even if responding favourably to therapy is not fit for flying at all. It must be informed here that this assessment is in concurrence with what the patient had opted for.

To touch upon the role of squadron medical officer and aviation medicine specialist, One must be candid to admit that one was poorly prepared to handle such a case. The exposure to aviation psychiatry during the advanced course in aviation medicine is very limited, so is the practical experience in handling such cases. The knowledge of psychology especially the tools/inventories for assessment of a person is still poorer. To

add to a poor knowledge is lack of infrastructure to carry out any tests in the field. For example, MMPI is a wonderful inventory to assess the prevailing mood state of a patient, but is not available anywhere else other than the psychiatric centres. But for the abundance of initiative and basic knowledge about psychiatry, this patient would not have reached IAM as soon as FOF was suspected. We may see a pilot with similar process underway, and suspect that repressed anxiety may be the true cause. We must seek help of three basic questions, which may help sort it out. "What do you think will happen if you continue to fly with this problem? [3] "Will you fly when we get you well? [3] It is imperative that attention needs to be paid not only to the answer out also to how it is said. If it is an unconditional "sure" "of course" or "that is silly question", underlying anxiety about flying is unlikely. However, if the answer is given after a hesitation or with any equivocation at all, suspect anxiety. "What do you think about these symptoms?" [3] If the answer is unworried or indifferent, and yet he has just said that he is too sick to fly, he may be telling that he does not want to fly any more.

Conclusion

Pilots progress through a series of attitudinal changes during their career [2]. If there are circumstances that overwhelmed defences or if defences developed that controlled anxieties but prohibited aviation duties; a diagnosis of FOF is likely. Considering the progression of personal adjustment FOF can be an adjustment problem as well as a manifestation of exhaustion, neurosis or psychosis. This case has been discussed to highlight FOF being a manifestation of underlying neurotic depression.

References

1. Sours JE, Ehrlich RE, Phillips PB. The Fear of Flying Syndrome: A Reappraisal. Aerospace Med. 1964; 35: 156-66.
2. Strongin TS. A Historical Review of the fear of flying among aircrewmen. Aviat Space Environ Med 1987; 58: 263-7.
3. Jones DR. Flying and Dangers, Joy and Fear. Avit Space Environ Med. 1986; 57: 131-6.
4. Ford CV. Illness as a lifestyle. The role of Somatization in medical practice. Spine 1992; 108: 338-43.