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Nightmares, sleep and cardiac symptoms in the elderly

In a recent issue of this Journal (2003;61:257-61) Asplund reported that in a group of elderly men and women increased nightmares were associated with an increase in irregular heart beats and spasmodic chest pain. In the description of the study, however, no definition of nightmares was presented. The conclusion of the study was based on a questionnaire survey with questions on sleep symptoms, nightmares and cardiac symptoms. As a consequence of this kind of study no conclusions can be made on the mechanism of the reported association.

In the discussion of their findings the sleep apnoea syndromes (SAS) should be mentioned.[1] In 1999 several articles including an editorial were published in this Journal concerning the obstructive sleep apnoea syndrome.[2] In recent decades, awareness of SAS has increased both in the public mind and among medical professionals.

Obstructive SAS is the most common type, occurring in 5 to 20% of adult men, although only about 20% of these individuals need treatment. In the elderly, prevalence of SAS is much more common than in middle-aged men and women.[3,4] Obstructive SAS is characterised by recurring episodes of upper airway obstruction during sleep resulting in episodes of apnoea and/or hypopnoea. This condition is usually associated with snoring and arousals with or without anxiety, resulting in marked sleep fragmentation. Increased daytime sleepiness is also an important symptom. The recurrent hypoxaemia and hypercapnia may lead to both pulmonary and systemic hypertension, cardiac arrhythmias and decreased survival due to cardiovascular effects.[1-4]

Since no definition of nightmares was given in Asplund's study, it may well be that subjects scored arousal events with heart beating or respiratory discomfort as nightmares. It is more likely that the findings presented in his study are caused by SAS-related arousals with feelings of discomfort and SAS-related cardiovascular sequelae.

Patients suspected of sleep-disordered breathing have to be referred to a sleep clinic for evaluation. Depending on the severity of the complaints and the results of polysomnographia, patients have to be treated to relieve their symptoms and to improve their prognosis.

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REACTION FROM AUTHOR

In an informative comment on my study on nightmares and cardiac symptoms in the elderly, Dr van Vliet *et al.* point out that the sleep apnoea syndrome (SAS) is likely to explain the experience of nightmares in a proportion of the participants of the study and that persons with suspected sleep-disordered breathing (SDB) should be referred to a sleep clinic for evaluation. Some of these persons would benefit from treatment of their SDB. I agree with all that. SDB may still be an overlooked condition, although it has received considerably increased interest in recent years. Recognition of SDB is important, as treatment of the condition is often rather simple and leads to improvement in sleep, health and quality of life. Alleviation of SDB by continuous positive airway pressure (CPAP) also has a favourable influence on nightmares, as has been shown in sufferers of post-traumatic stress disorder.[1]

However, even if the incidence of heart diseases is increased in SDB sufferers, I have found no support for the idea that SDB may be present in more than a minor proportion of the total group of elderly men and women with cardiac diseases. Furthermore, the origin of nightmares is multifactorial, and only a proportion of them will be explained by SDB.

Dr van Vliet *et al.* do not mention how their comments on SAS should be interpreted when applied to a study of nightmares. Nor do their references shed any light on this issue. The report now under discussion addressed the possible relation between cardiac symptoms and nightmares. It was not restricted to an analysis of nightmares in elderly persons with *nocturnal* cardiac symptoms. Thus the opinion that a significant proportion of the increase in nightmares in elderly men and women with cardiac diseases might have been induced by SDB is neither supported nor refuted by the results of the study in question but this does not seem very likely. I still believe that the relationship between cardiac diseases and nightmares is worthy of attention and should be a subject of further study.

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1. Krakow B, Melendrez D, Pedersen B, et al. Complex insomnia: insomnia and sleep-disordered breathing in a consecutive series of crime victims with nightmares and PTSD. Biol Psychiatry 2001;49:948-53.

RECTIFICATION

In the case report by F. van den Berkmortel *et al.*, in the Netherlands Journal of Medicine no. 1, a mistake was unfortunately made in the authors information on R. de Wit. Please find the correct details below:

Osteonecrosis in patients with testicular tumours treated with chemotherapy

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