



Case Report

Unexpected Penile Tumescence in the Elderly

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Abstract

Introduction: This is the first report of this kind in the literature. **Case presentation:** These elderly male white Caucasian subjects aged 95 and 85 presented with transient penile tumescence related to hypoxia. Both subjects are mentally fully competent. **Conclusion:** We review the history and physiology of penile tumescence and present two cases of unexpected transient penile tumescence in the elderly in the absence of sexual stimulation. These cases require no treatment. Students and trainees in neurology should be aware that not all patient's histories require pharmaceutical interventions. This is a new syndrome worthy of notice because of the increasing numbers of aged obese men prone to hypoxia, which may cause penile tumescence.

Keywords: Penile tumescence; CPAP; Hypoxia; Neurological education; Obesity; Ambient hypoxia; Sleep apnea; Sexual function

Introduction

Penile erection in the absence of sexual stimulation is a well-known normal phenomenon during the Rapid Eye Movement (REM) phase of sleep. It can also be triggered by hypoxia, for example during ambient hypoxia at altitude. Hypoxia can alter the release of Nitric Oxide (NO) and other vasoactive substances, which in turn affect penile perfusion to induce erection [1,2].

Discussion

We describe here a new syndrome. These cases require no treatment, as an awakening or normal breathing is enough to dispel symptoms. Erections and ejaculations were known to occur during sleep even before the Christian era. In the Middle Ages, sleep-related erections (SREs) were considered "rebellious manifestations of the male body, while it seemed to disobey its owner and showed up its perverted and sinful side". Masturbation was believed at the time to cause many ailments and diseases. Erectile dysfunction was ground for divorce. Members of Ecclesiastical juries sat at the defendant's bedside at night to ensure any SREs were not the

result of masturbation. In addition to our case reports, evidence that hypoxia can induce erection comes from accounts of high-altitude expeditions, such as one to Manaslu mountain in Nepal (8,156 m), where oxygen concentration is ~15.4 %, compared to ~21% at sea level [3]. It is not known if altitude-adapted people such as Sherpa experience hypoxia-induced erections or changes in sleep-related erections. Hypoxia-induced erection may also play a role in sexual gratification during self-induced hypoxia such as strangulation. Such self-induced hypoxia may result in accidental death [4].

Conclusion

We report two elderly subjects, both surprised by transient penile erections. In case number one, this was related to normal sleep aided by CPAP. In case number two the erection was related to short periods of hypoxia at altitude. Thus, both cases were connected by unexpected penile tumescence and transient hypoxia. This syndrome is worthy of notice because of the increasing numbers of men with obesity and advanced age, conditions that make them prone to hypoxia.

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committee, 5-2021. The subjects have consented to the publication of their story. All data and materials are available. The authors have declared that no competing interests exist. No funds were received for this study. OA and BL contributed equally to this work. We thank the subjects who are mentally fully competent for their willingness to share their stories.

References

1. Verratti V, Di Giulio C, Berardinelli F, Pellicciotta M, Di Francesco S, et al (2007) The role of hypoxia in erectile dysfunction mechanisms. *Int J Impot Res*. 19: 496-500.
2. van Driel MF (2014) Sleep-related erections throughout the ages. *J Sex Med*. 11: 1867-1875.
3. Verratti V, Falone S, Fanò G, Paoli A, Reggiani C, et al (2011) Effects of hypoxia on nocturnal erection quality: a case report from the Manaslu expedition. *J Sex Med*. 8: 2386-2390.
4. Chater AM (2021) Does intentional asphyxiation by strangulation have addictive properties? *Addiction*, 116: 718-724.