

Brief Report

Priapism caused by ‘All Nite Long’

R Miocinovic^{1*}, S Zafar¹, J Sferra¹ and M Wainstein¹

¹Department of Urology, Medical College of Ohio, Toledo, Ohio, USA

International Journal of Impotence Research (2005) 17, 469–470. doi:10.1038/sj.ijir.3901348;
published online 9 June 2005

Case presentation

A 47-y-old African American male presented to the emergency department with a chief complaint of having a painful erection for 48 h. He had no previous history of priapism. The patient had been treated with a 5-phosphodiesterase inhibitor without complications in the past. For financial reasons the patient discontinued his prescribed medication and substituted ‘All Nite Long’, a non-prescription remedy for erectile dysfunction. Two tablets were taken on the evening of intercourse. The patient awakened a few hours later with a painful erection that presented for the next 48 h. The patient was taking no other medications. On examination the glans and corpus spongiosum were flaccid, with the corpora cavernosa being firm and tender. A complete blood cell and reticulocyte count was normal, urine toxicology screen was negative, and hemoglobin electrophoresis was normal.

Aspirated blood from the corpora was dark and the partial pressure of oxygen was consistent with low-flow priapism. The erection did not subside with corporal irrigation with normal saline or with multiple injections of phenylephrine. A cavernoglanular shunt was then attempted with a large biopsy needle (Winter shunt) and subsequently with a scalpel (Ebbehøj shunt), without success. Detumescence was obtained via a proximal (Quackels) shunt.

Conclusions

To our knowledge, this is the second case of priapism resulting from the use of the non-FDA-approved alternative herbal supplement known as

‘All Nite Long.’ Tuckler *et al*¹ described a similar case of a 43-y-old white male developing priapism of 60-h duration after taking the same substance. ‘All Nite Long’ is composed of 16 different types of herbs and natural substances, including *Schizandra* fruit extract, Chinese wolfberry fruit extract, Horny Goat Weed (whole plant), *Tribulus terrestris* (TT) extract, Velvet bean extract, *Panax ginseng* root extract, *Jujube date* extract, Licorice root extract, Green Tea leaf extract, Fo-ti root extract, Asparagus tuber extract, Rehmannia root extract, 4-Androstenedione, Guarana seed extract, *Muira puama* bark extract, and Bioperine. Some of these herbs are well-known aphrodisiacs and have been used for over 2000 y in the Chinese and Indian systems of medicine.

Lamm *et al*² compared Horny Goat Weed to Viagra in a clinical trial and found that 13 of 20 men treated with this natural mixture experienced an increase in sexual satisfaction, desire, and activity (data not published). Although evidence exists suggesting that Horny Goat Weed functions as a calcium channel-blocking agent, the mode of action is unknown.³ Other studies have shown that TT extract protodioscin increases the levels of testosterone, luteinizing hormone, dihydrotestosterone, and dehydroepiandrosterone sulphate.⁴ Treatment of castrated rats with TT resulted in statistically significant increase in prostate weight and intracavernous pressure when compared to placebo.⁴ Androstenedione is produced by both the testis and the adrenal glands and serves as a direct precursor of testosterone. Whether androstenedione taken by mouth raises serum testosterone is unclear. King *et al*⁵ could not show any changes in serum testosterone concentrations by short- or long-term androstenedione administration. The Brazilian herb known as ‘potency wood,’ *Muira puama*, a product of tropical rain forests, reportedly enhances erectile function and orgasm in both men and women.⁶ The mechanism of action is not known. *Panax ginseng* has been shown to cause a dose-dependent relaxation of the corpus cavernosum in rabbits by release of nitric oxide.⁷

Plant-derived compounds are becoming increasingly popular for the treatment of sexual dysfunction. These may be sought for those situations in

*Correspondence: R Miocinovic, Department of Urology, Medical College of Ohio, 3000 Arlington Avenue, Toledo, OH 43614, USA.

E-mail: rmiocinovic@mco.edu

Received 4 April 2005; accepted 7 April 2005

which 5-phosphodiesterase inhibitors are contraindicated, or for financial reasons. Currently, the mechanism of action of plant-derived supplements is unclear and potential reactions poorly defined. There is not enough clinical evidence to support the use of herbal compounds in the management of erectile dysfunction.⁷ All patients consuming these compounds should be warned about the possible serious side effects.

References

- 1 Tuckler VE, Barton C, Litner J, Matinez J. Intractable priapism associated with herbal stimulants. *Abstracts of the 2003 North American Congress of Clinical Toxicology Annual Meeting* 2003.
- 2 Lamm S, Couzens GS. The Hormone Shop LCC [Internet]. Horny Goat Weed [updated 1/04/2004]. Available from: <http://www.thehormoneshop.com/hornygoatweed.htm>.
- 3 Cirigliano MD, Szapary PO. Horny Goat Weed for erectile dysfunction. *Altern Med Alert* 2001; **4**: 19–22.
- 4 Gauthaman K, Adaikan PG, Prasad RNV. Aphrodisiac properties of *Tribulus terrestris* extract (protodioscin) in normal and castrated rats. *Life Sci* 2002; **71**: 1385–1396.
- 5 King DS et al. Effect of oral androstenedione on serum testosterone and adaptation to resistance training in young men: a randomized controlled trial. *JAMA* 1999; **281**: 2020–2028.
- 6 Rowland DL, Tai W. A review of plant-derived and herbal approaches to the treatment of sexual dysfunctions. *J Sex Marital Ther* 2003; **29**: 185–205.
- 7 MacKay D. Nutrients and botanicals for erectile dysfunction: examining the evidence. *Altern Med Rev* 2004; **9**: 4–16.