

## The Role of Low Testosterone Associated with Erectile Dysfunction with Atopic Dermatitis

DOI: 10.1111/j.1743-6109.2012.02786.x

The article by Chung et al. reports that there is an association between atopic dermatitis (AD) and erectile dysfunction (ED) after adjusting for patient sociodemographic characteristics and comorbidities [1]. Although the authors mentioned that the exact mechanisms are not yet known, they proposed that atopic skin inflammation might lead to ED via altering endothelial function. In the study, 77.5% and 54.1% of the population were >40 and >50 years old, respectively. However, there were no records of testosterone levels, which play a significant role in erectile function and inflammatory process. Therefore, there are several points deserving further discussion in addition to their interpretation.

Atopy, production of specific immunoglobulin E (IgE) antibody, is the major risk factor for AD, and non-atopic individuals have a very low risk of developing AD. The IgE levels in atopic male subjects were significantly higher than in atopic female subjects after the age of 35 years [2]. In support of this observation, it was demonstrated that orchiectomy promotes, and testosterone inhibits, production of antigen-specific IgE in males [3].

More than 15 years ago, Ebata et al. measured serum levels of sex hormones in adult patients with AD [4]. In 40 male patients with AD, serum levels of testosterone, free testosterone, and estradiol were significantly lower and serum levels of luteinizing hormone were significantly higher than those in healthy controls. Therefore, the etiology of the AD may, in part, be a consequence of low testosterone.

Based upon the observations of Ebata et al. [4] (and others) there may be a variable decrease in testosterone concentrations in AD patients. As AD therapy is a long-term disease, it is important

to be aware that low testosterone levels may go unnoticed. Consequently, it may be important to evaluate the pretreatment testosterone status of the male AD patients especially >40 years old, as well as the erectile function. In this manner, we could treat both ED and AD with one drug.

ÖNDER CANGUVEN

*Associate Professor, Urology Clinics, Kartal Training and Research Hospital, Istanbul, Turkey*

*Financial Support and Conflict of Interest: None.*

### References

- 1 Chung SD, Keller JJ, Lin HC. Association of erectile dysfunction with atopic dermatitis: A population-based case-control study. *J Sex Med* 2012;9:679–85.
- 2 Barbee RA, Halonen M, Kaltenborn W, Lebowitz M, Burrows B. A longitudinal study of serum IgE in a community cohort: Correlations with age, sex, smoking, and atopic status. *J Allergy Clin Immunol* 1987;79:919–27.
- 3 Yamamoto T, Okano M, Ono T, Nakayama E, Yoshino T, Satoskar AR, Harn DA Jr, Nishizaki K. Sex-related differences in the initiation of allergic rhinitis in mice. *Allergy* 2001;56:525–31.
- 4 Ebata T, Itamura R, Aizawa H, Niimura M. Serum sex hormone levels in adult patients with atopic dermatitis. *J Dermatol* 1996;23:603–5.

## Castrati Singers—All for Fame: A Commentary

DOI: 10.1111/j.1743-6109.2012.02940.x

While the medical interest in the Italian castrati expressed by Hatzinger et al. [1] is certainly to be welcomed, their perspective is relatively narrow and negative. By looking only at a brief time period and a single region, they miss the historical overview of eunuchs and castrati that would shed light on their major points. As a consequence, their article perpetuates many negative stereotypes that are not supported by the extensive history of human castration.

Eunuchs and castrati are the oldest recognized gender outside the standard binary. The earliest recorded systematic human castrations were performed on the sons of slave weaving women in the Sumerian city of Lagash in the 21st century BCE. Their original task was to haul barges on the canals of the Tigris-Euphrates, alongside castrated donkeys. Soon it was discovered that their powerful, yet ethereal, voices produced excellent praise singers to the gods—the earliest castrati [2].

The idea of human castration and of castrati spread widely across the Eurasian landmass, and at various times there were castrated singers from Spain in the west to Korea in the east. The practice may have a single origin, as human castration was not practiced in the pre-Columbian New World and apparently did not appear in sub-Saharan Africa until much later than elsewhere in the Old World.

Hatzinger et al. [1] state that castration “was performed in strict secrecy as it was forbidden under canon law with the threat of excommunication,” yet there are surviving apprenticeship contracts requiring that the master provide for the castration of his pupil. There are petitions in government archives from boys requesting financial help in obtaining castration. We know of churches in Rome that arranged for the castration of choirboys. We even know the names of surgeons and their prices for performing castrations, so the surgery was hardly clandestine [3].

In early modern Europe, castration was performed as treatment for a number of maladies, ranging from hernia to gout to epilepsy (for the last of which it was still being performed well into the 20th century) [4]. The surgery appears to have been common enough and considered minor enough to have evoked little comment. The death rate seems to have been low, as it is generally not noted and the time for recovery was considered short [3].

While many professional surgeons were reluctant to perform castrations, a number of them apparently did so. In Italy, castrations were often performed by professional surgeons from Bologna and Padua who were in demand and traveled widely to castrate choirboys, some even traveling into the German states. Charles Burney, in his travels in Germany in 1772, noted that

Copyright of Journal of Sexual Medicine is the property of Wiley-Blackwell and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.