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JOURNAL ARTICLE

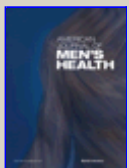
Relationship between sleep-related erections and testosterone levels in men

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In order to identify a possible threshold for a serum testosterone level below which sleep-related erections are impaired and to compare this threshold with the normal laboratory range of testosterone serum levels, we studied 201 men, including hypogonadal and eugonadal subjects. The protocol included nocturnal penile tumescence and rigidity monitoring and the assay of basal testosterone, prolactin, luteinizing hormone (LH), and follicle-stimulating hormone (FSH) serum levels. The subjects were assigned to eight groups according to their testosterone serum levels. Group 1 had testosterone between 0 ng/dl and 99 ng/dl; the following seven groups had testosterone levels increased by 100 ng/dl per group. The groups of subjects with higher testosterone serum levels showed almost constantly higher values for the erectile parameters we studied than the subjects with serum testosterone $<$ or $=$ 99 ng/dl. On the contrary, subjects with higher testosterone serum levels showed higher values for only some erectile parameters compared to the subjects with serum testosterone between 100 and 199 ng/dl, without any significant difference among the groups with testosterone serum levels in the normal range. Our data suggest that the serum testosterone threshold for sleep-related erections is lower than the low end of the normal laboratory male range and is about 200 ng/dl. Further efforts are needed to find the precise serum testosterone ranges related to normal sleep-related erections and to normal sexual behavior, the testosterone ranges of which will probably not coincide.

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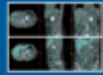


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