

# Two Views on Klinefelter Syndrome

## Comments on "Sexology and Social Work in a Case of Klinefelter (47,XXY) Syndrome"

Benjamin Goldberg

The use of an anti-androgen with an individual whose endocrine status is already compromised by low levels of testosterone is not an appropriate practice. It was difficult to understand Herzog and Money's (1993) statement that "This hormone [Depo-Provera], by putting the patient's own testes at rest, allows the blood level of testosterone to return to the level of prepuberty" (p. 162, italics added). Individuals with Klinefelter syndrome already have testosterone levels that are below prepubertal levels. The appropriate treatment for such individuals should include the use of testosterone even in the presence of sexual aggression (Mandoki & Sumner, 1991; Nielsen, Pelsen, & Sorensen, 1988; Sourial & Fenton, 1988).

## Reply to Goldberg

John Money

Grown men with Klinefelter (47,XXY) syndrome do not have a blood level of testosterone that is equivalent to that of prepuberty. If they did, they would not be grown men but, except for height, would remain at the developmental stage of prepuberty. The mean blood level of testosterone in a large random sample of men with Klinefelter syndrome is likely to be slightly lower than that in a random sample of control males, but the range is wide, and many men with the syndrome have a normal, not subnormal, level of testosterone (see, for example, Landau, 1989, p. 2178).

Depo-Provera as an adjunct to counseling in the treatment of pedophilia is efficacious, regardless of the base level of testosterone, and irrespective of karyotype. Its efficacy lies not only in lowering the blood level of testosterone, but also in its direct sexually calming effect of sexual pathways in the anterior hypothalamus. It is possible but not necessarily inevitable that treatment with Depo-Provera should be prolonged indefinitely. After a trial period of up to 2 years, the hormone may be

## References

- Herzog, D., & Money, J. (1993). Sexology and social work in a case of Klinefelter (47,XXY) syndrome. *Mental Retardation*, 31, 161-162.
- Mandoki, M., & Sumner, G. (1991, Summer). Klinefelter syndrome: The need for early identification and treatment. *Clinical Pediatrics*, 161-164.
- Nielsen, J., Pelsen, B., & Sorensen, K. (1988). Follow-up of 30 Klinefelter males treated with testosterone. *Clinical Genetics*, 33, 262-269.
- Sourial, N., & Fenton, F. (1988). Testosterone treatment of an XYY male presenting with aggression: A case report. *Canadian Journal of Psychiatry*, 33, 846-850.

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withdrawn, to be resumed again only if a relapse threatens.

Testosterone has never been known to cure or control pedophilia in men with or without Klinefelter syndrome. On the contrary, it may exacerbate the occurrence and frequency of pedophilic behavior, thus creating an ethical and legal problem for physicians and exposing them to a charge of malpractice. It is better to be treated with Depo-Provera and not be incarcerated than to be treated with testosterone in order to be kept in prison.

## Reference

- Landau, R. L. (1989). Hypogonadism. In L. J. De Groot (Ed.), *Endocrinology* (2nd ed.). Philadelphia: Saunders.

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