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Home | 1999 Archive | December 1999 | Moghetti et al. 84 (12): 4747-b

LETTER TO THE EDITOR

Authors' Response: Spironolactone But Not Flutamide Administration Prevents Bone Loss in Hyperandrogenic Women Treated with Gonadotropin-Releasing Hormone Agonist

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We thank Drs. Prezelj and Kocijancic for their letter (above) with regard to our above mentioned paper (1). These authors reported a decrease in bone mineral density in eumenorrheic hyperandrogenic women receiving cyclic treatments with spironolactone (days 1–21) and the progestational agent linestrenol (days 8–17) (2). Actually, their finding is not surprising and can be reconciled with our results.

In our opinion, data from Levy *et al.* (3) may offer a likely and intriguing explanation for these apparent discrepancies. These authors evaluated several indices of estrogen action in immature female rats given spironolactone with or without estradiol. They showed that spironolactone had estrogenic effects in the absence of endogenous estrogen, whereas it was antiestrogenic in the presence of estradiol, as is the case with tamoxifene.

This experimental model could explain why spironolactone may be bone-sparing in our hypoestrogenic women and bone-wasting in the normoestrogenic subjects studied by Prezelj and Kocijancic (1). Our preliminary data in women receiving spironolactone in the absence of concurrent GnRH-agonist treatment are consistent with this hypothesis. In these women spironolactone did not show any protective effect on bone mineral density. As a whole, these data are consistent with the hypothesis that spironolactone might be classed among the so-called selective estrogen receptor modulators and support our conclusions that this drug might prove a useful agent to prevent skeletal loss in hypoestrogenic conditions.

Footnotes

1 Received August 13, 1999. Accepted October 14, 1999. Address correspondence to: Janez Prezelj, Department of Endocrinology, University Medical Centre, Zaloska 7, 1525 Ljublijana, Slovenia.

Received September 22, 1999. Accepted October 14, 1999. Address correspondence to: Dr. Paolo Moghetti, Divisione di Endocrinologia e Malattie del Metabolismo, Ospedale Maggiore, Piazzale A. Stefani 1, I-37126 Verona, Italy.

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