Quinestrol is a synthetic estrogen homolog that exhibits anti-fertility and contraceptive activities. Quinestrol is an ER agonist and is also used in HRT. Quinestrol displays clinical benefit in improving symptoms of postmenopausal syndrome. In males, quinestrol decreases the weight of the testis, epididymis, seminal vesicle, and prostate, decreases sperm count, and decreases levels of testosterone, lutropin, and follitropin. In females, quinestrol decreases levels of follicle-stimulating hormone (FSH) and luteinizing hormone (LH), increases levels of progesterone and estradiol, and alters estrogen receptor expression. Quinestrol increases oxidative stress by decreasing activity of superoxide dismutase (SOD) and glutathione peroxidase and increasing levels of NO and malondialdehyde. In other animal models, this compound inhibits investigative reproductive behavior.

References


