

[P-43]**Estrogen Receptor Agonist 4,4',4''-(4-Propyl-1h)-pyrazole
-1,3,5-triyl)tris-phenol Causes Alterations of Morphology in the
Reproductive Organs of Male Mouse**

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The morphological modifications of mouse reproductive organs were investigated for animals treated with estrogen receptor agonist (PPT). Adult male mice were injected subcutaneously with PPT once per week. Controls received weekly injections of the castor oil vehicle. The animals were sacrificed by vascular perfusion on week 3, 5 and 8 post-treatment. The male reproductive organ was fixed and processed for glycol methacrylate light microscopy. PPT induced decreases of body, testicular, efferent ductule and epididymal weights with experimental time. Weight of adipose tissue attached epididymis was also decreased in treated group. Seminiferous tubular diameter was reduced 16.0% on week 3, 18.5% on week 5 and 52.7% on week 8 in the PPT-treated sections. While, the thickness of tunica albuginea was increased 10.3% on week 3, 67.1% on week 5, 187.1% on week 8 compared to the controls. On week 8, PPT treatment caused epithelial cell height in the efferent ductule and epididymis to shorten significantly. With decreased height of the epithelium, the nuclear shape was changed from nearly round or slightly columnar (controls) to a more flattened morphology. Spermatogenesis was not occurred in the seminiferous tubules, and sperms were not accumulated in the caudal epididymis on week 8 post-treatment. These results indicate that estrogen receptor agonist causes the morphological changes of male reproductive organ resulted in infertile.

Keyword: Estrogen receptor, Agonist, Male mouse