

Possible non contraceptive benefits of hormonal male contraception

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An ideal male contraceptive must be highly effective, safe, reversible, acceptable and affordable to men worldwide. Today, the only available contraceptives for men have been barrier methods, such as condoms and vasectomy. While the other benefit of condoms is to prevent sexually transmitted infections, it is not well accepted for regular use due to its failure rate of about 10%. Other contraceptive methods still in early stage of research attempt to either decrease sperm production or motility or block the ability of sperm to fertilize the ovum.

The development of tissue selective or androgen receptor modulators (SARMs) could lead to reduced side effects on the prostate, due to lack of interaction with the 5 α -reductase enzyme that converts testosterone T into dihydrotestosterone (DHT). MENTTM (7 α -methyl-19-nortestosterone) identified by the Population Council scientists, has been shown to be resistant to 5 α reduction in the prostate and 10-fold more potent than T on anabolic response. In addition, due to the lack of 5 α -reduction, its action is not amplified in the peripheral targets such as hair follicles where DHT has high affinity for androgen receptors and may cause androgenic alopecia in genetically predisposed subjects. Therefore, MENT may in theory prevent some form of male pattern baldness. In addition, MENT has been shown to efficiently promote myelin repair in experimental models of demyelination and should be studied as a future therapeutic option for men with multiple sclerosis. These non-contraceptive benefits warrant further development.

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