



Andrologia. 2011 Sep 26. doi: 10.1111/j.1439-0272.2011.01220.x.

Fertility suppression in male albino rats by administration of methanolic extract of Opuntia dillenii.

Bajaj VK, Gupta RS.

Source

Reproductive Physiology Section, Centre for Advanced Studies, Department of Zoology, University of Rajasthan, Jaipur, India.

Abstract

To control growing world population, there is a need for male contraceptive methods that are comparable to female contraceptives, but due to lack of knowledge or investigation, no sufficient safe and effective contraceptives were developed till now. In the present investigation, the effect of 100% methanol extract of Opuntia dillenii phylloclade on reproduction in male rats was studied. A first group (I) received vehicle alone to serve as control. The second group (II) was further divided into treated and recovery groups, and the plant extract at 50 mg kg body weight(-1) was administered orally for 30 days. Biochemical, haematological and histopathological analyses were carried out to reveal the effects on reproductive organs in the male rats. The weights of reproductive organs were recorded. It was found that the number of fertile males, number of inseminated females, number of litters delivered and testosterone levels were reduced significantly. Epididymal sperm count and motility were also significantly decreased. Biochemical parameters support the antifertility activity of O. dillenii i.e. decreases in protein, glycogen content and elevation in cholesterol level. Testes and sperm morphology were altered significantly. Haematological parameters have not shown any significant changes. It is concluded that 100% methanol extract of O. dillenii possesses antifertility effects on male reproduction without change in general physiology.

© 2011 Blackwell Verlag GmbH.

PMID: 21950638 [PubMed - as supplied by publisher]