

Editorial

## Herbal contraception for the women community: A safe and effective alternative

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Received: 06-30-2015

Accepted: 07-01-2015

Published: 07-08-2015

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### Introduction

Alternative medicine is becoming more popular day by day having no baleful effects as of the synthetic ones. Women community is the prime concern in relation to contraception and the most commonly used method of contraception is the taking of synthetic oral pill which has several detrimental effects, may lead to permanent sterility. *Hibiscus rosasinensis* is an ornamental plant having antifertility effect (Nidhi *et al.*, 2009). Previous studies revealed that there was no report on the histoarchitectural alterations in the ovary due to the effect of such herbal contraceptive. Therefore, this is a matter of top focus towards finding a safe and alternative herbal contraceptive in this realm.

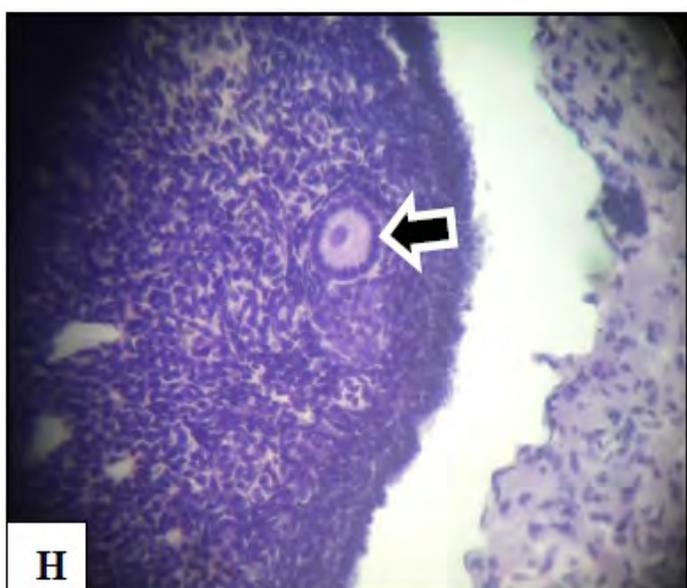
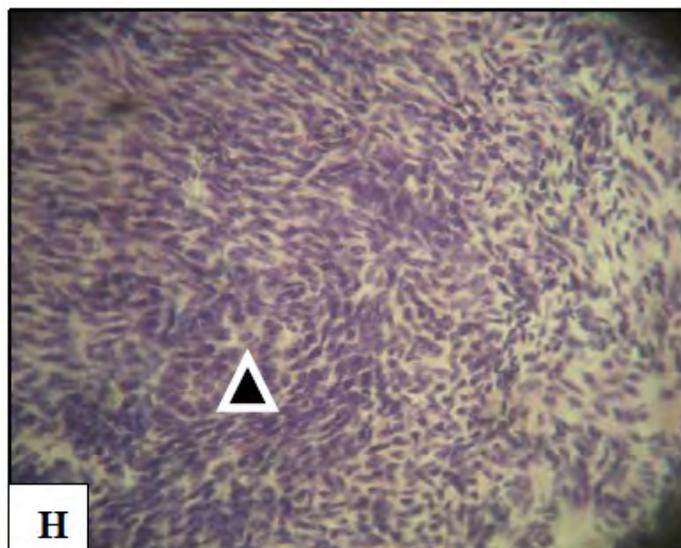
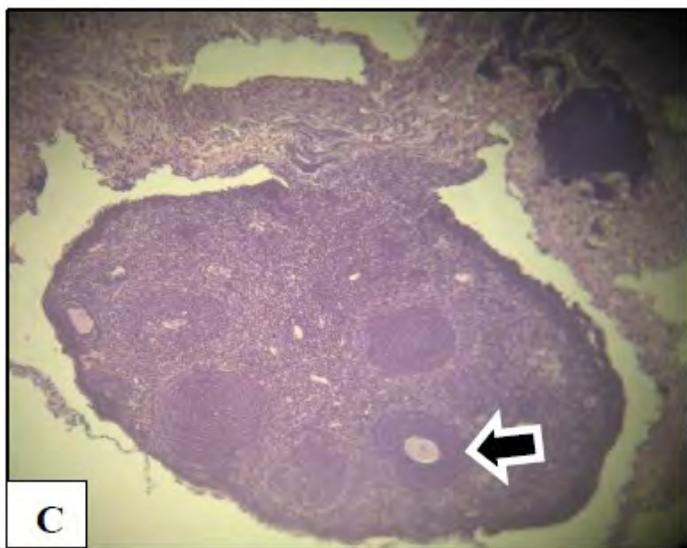
### Experimental outline

Twenty (20) Swiss albino mice (*Mus musculus*) of 40 (forty) days of age (purchased from ICDDR, Dhaka having good health and avg. bwt. 25-28 gm) were divided into two (2) groups (10 mice/group, 4 males and 6 females) as the control (C) and treated (H). The control group was supplied with standard mice pellet, whereas the treated group was given an aqueous extract of *Hibiscus rosasinensis* (@ 500 mg/kg bwt.)

orally by medical micro dropper. During the experiment, the uniformity of the management practices was maintained. The experimental tenure was 42 days and at the end of the experiment the ethical sacrifice of the female mice was done for sample collection from the ovary.

### Results and Discussion

Results revealed that the number of the ovarian follicles decreased accompanied with the distortion and derangement of the granulosa layer of the ovary in the treated group (H) (Figure 1). The aforesaid features of the treated ovaries indicated the antifertility effect of the aqueous extract of *Hibiscus rosasinensis*. In addition, in the treated group (H), the baleful histological alterations like the vacuolation, fat droplet deposition, sloughing off and hemorrhage in the granulosa layer were not found indicating that this extract is safe to be used for the women community as these changes are the common phenomena for the commercially available hormonal or synthetic pills. The findings of this research had the similarity with that of the Pekamwar *et al.*, 2013 and Upadhyay and Upadhyay, 2011.



**Figure 1.** Histological features of the control ovary (C) showing the normal (C) and decreased number (H) of the ovarian follicles (arrow), and the distortion or derangement (H) of the granulosa layer (arrow-head) (H&E X10 & X40).

### Conclusion

Therefore, this herbal extract of *Hibiscus rosasinensis* might be a safe and effective alternative of the commercial pills/contraceptive having no harmful histoarchitectural alterations in the ovary. Further research is in progress.

### References

1. Nidhi Mishra, Vijay Lakshmi Tandon and Ashok Munjal (2009). Evaluation of medicinal properties of *Hibiscus rosasinensis* in Swiss Albino mice. *International Journal of Pharmaceutical and Clinical Research*, 1(3): 106-111.
2. Pekamwar S.S., Kalyankar T.M., and Jadhav A.C. (2013). *Hibiscus rosasinensis*: A review on ornamental Plant. *World Journal of Pharmacy and Pharmaceutical Sciences*, 2(6): 4719-4727.
3. Sukirti Upadhyay and Prashant Upadhyay (2011). *Hibiscus rosasinensis*: Pharmacological review. *International Journal of Research in Pharmaceutical and Biomedical Sciences*, 2(4): 1149-1150.