**Conclusions**: Greater BMI, FBG, HDL, triglyceride levels and TC/HDL ratio characterised the young adults with pre/mild hypertension. The data suggests that hypertension in young adults is secondary to metabolic syndrome.

## REVERSIBILITY OF THE EFFECTS CAUSED BY FENUGREEK SEEDS AQUEOUS (FSA) EXTRACT ON THE ESTROUS CYCLE AND REPRODUCTIVE HORMONES IN THE RAT ANIMAL MODEL.

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**Introduction**: In evaluating the potential of fenugreek seeds aqueous (FSA) extract as a contraceptive, it is essential to assess the reversibility of its anti-fertility effects. Reversibility is defined as ability for an induced altered physiological state to return to the normal state.

**Objective:** The aim of the present work was to evaluate the reversibility of changes in the oestrous cycle and levels of reproductive hormones in female rats following withdrawal treatment of FSA extract.

**Methodology**: Twenty four mature Sprague Dawley female rats were randomly divided into three groups of 8 rats each. Group A was the control and given distilled water. Group B was treated with 500 mg/kg/day of FSA extract for 15 days. Group C was the reversibility group in which the female rats were also treated with 500 mg/kg/day FSA extract and further observed for 21 days for reversibility effects. Daily vaginal smear cytology was performed and blood samples were taken from all animals after 15 days.

**Results**: The abnormal oestrous cycles following FSA treatment were gradually returned to normal within the 21 days of observation post treatment withdrawal. Administration of FSA extract led to a decrease in the serum concentration of estrogen (P<0.001), progesterone (P=0.021), FSH (P=0.416) and LH (P=0.381) while serum prolactin concentration was significantly increased (P<0.001). After 15 days of treatment withdrawal, serum estrogen, progesterone, FSH and LH concentration were not significantly different (P $\ge$ 0.192) in compare to the control group.

**Conclusion**: Withdrawal of FSA extract treatment restored the abnormal oestrous cycle and reproductive hormones to the normal state.

## IS THERE ANY EFFECT (S) OF FENUGREEK SEEDS AQUEOUS EXTRACT ON THE REGULARITY OF ESTROUS CYCLE AND QUANTITY OF OVARIAN FOLLICLES OF FEMALE RATS?

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**Introduction**: The presence of diosgenin in fenugreek seeds is believed to be the active compound responsible for fenugreeks anti-fertility property.

**Objective**: The purpose of this study to evaluate the potential effects of fenugreek seeds aqueous extract (FSA) extract on the regularity of oestrous cycle and quantity of ovarian follicles.

**Methodology**: Thirty two healthy mature female rats were randomly divided into four groups of 8 rats each. The first group A was the control and received distilled water; the B, C and D received 250, 500 and 1000 mg/kg/day FSA extract, respectively, for 15 days. Daily vaginal smear cytology was examined and ovaries of the animals were removed after 15 days for histological study.

**Results**: The results showed a significant (P < 0.024) irregularity of oestrous cycle and reduction in relative ovarian weights of experimental animals treated by FSA extract in comparison to the control group. A reduction in the number of secondary follicles and corpora lutea was found in the treated groups as well as an increment in the number of antral follicles in all treated groups when compared with the control.

**Conclusion**: The observation of irregular oestrous cycle, significant decrease in the number of secondary and antral follicles, and significant increase in the number of atretic follicles demonstrated the potential anti-fertility effects of fenugreek seeds on the female rats were found in this study.

Clinical

## SUBDERMAL ETONOGESTREL: THE EFFECTS ON MENSES, GENERAL HEALTH, RELIGIOUS OBLIGATIONS AND SEXUAL RELATIONSHIP

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**Objective**: The aim of this study is to determine the effects of subdermal etonogestrel implant on menstrual pattern, body mass index (BMI), systolic and diastolic blood pressure (SBP and DBP), sexual relationship and religious obligations.

**Methodology**: A descriptive study was conducted at a family planning clinic between1st January 2010 to 31st December 2011 whereby all the women who had their subdermal etonogestrel removed during this period were included. A self-prepared questionnaire was filled up with the help of a research assistant, which looked into the menstrual cycles prior to and during the implant usage, the non-menstrual adverse events, effect of menses on religious obligations and sexual relationship and the overall acceptability of subdermal etonogestrel as a contraceptive method. Blood pressure (BP) and BMI were recorded at the time of removal, while BP and BMI at insertion were gathered from the case file.

**Result**: 50 patients were recruited in this study. The mean duration of use was 33.8 months ( $\pm 10.4$ ) and 78% had completed 3 years. The prevalence of menstrual disturbance whilst on subdermal etonogestrel implant was 78%. The mean differences of SBP, DBP and BMI at removal and prior to usage were statistically significant. There was no association between BMI and menstrual pattern whilst on implant. Practicing religious obligations and sexual activity were affected in 14.0% and 18.0% respectively. Overall satisfaction of subdermal implant was 92%.

**Conclusion**: Despite the high prevalence of menstrual disturbance, subdermal etonogestrel is well accepted. Changes in the mean of SBP, DBP and BMI were not clinically significant, but a significant proportion of the studied women had a significant increase in SBP, DBP and BMI. The performing of religious duty and sexual activity seem to be unaffected.

## LETHAL FETAL ANOMALIES: ARE WE ON THE RIGHT DIRECTION?

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**Objectives**: To review the gestational age at diagnosis, method of diagnosis, pregnancy outcome and maternal complications of prenatally diagnosed lethal foetal anomalies.

**Methodology**: A one year retrospective review of 25 women who had aborted or delivered foetuses with lethal anomalies in a tertiary hospital in 2011 based on patient medical records.