ence of chronic infiltration composed of cell-round elements. Also, there were pronounced sclerotic changes and obliteration of the lumen of the fallopian tube with a sharp gluing and deformated shape of the villi. In all cases there was a high proliferative activity of fallopian tube epithelium, which was characterized by the formation of true and false nipples. The proliferative activity in endometriotic foci of submucous location also remained.

Conclusion: Sclerotic changes developed in outcome of chronic inflamation are the typical factor that accompanies the oviduct endometriosis and creates favorable condition for the growth of ectopic lesions. Retaining the proliferative activity of endometriotic foci regardless the localization facilitates the proliferative activity of fallopian tube epithelium, and it confirms the maintaining of hormonal activity of ectopic site.

P-327

The effects of curcumin on sperm parameters and nitric oxide production in varicocelized rats

Izadpanah M*, Abbasi M*, Alizadeh R**, Heydari L***

*Department of Anatomy, Faculty of Medicine, Tehran University of Medical Sciences, Tehran, Iran; **Department of Anatomy, Faculty of Medicine, Iran University of Medical Sciences, Tehran, Iran; ***Department of Anatomy, Faculty of Medicine, Tehran University of Medical Science, Tehran, Iran

Objective: One of the proposed mechanism by which varicocele induces its damage is excessive release of nitric oxide (NO). Several studies have shown the role of NO in poor sperm quality in infertile patients with varicocele. Scientific studies have demonstrated the beneficial effects of curcumin on the sperm parameters. Curcumin as an anoxic antioxidant can reduce production of NO. The aim of this study was to determine the effect of curcumin on NO level and investigate if curcumin can improve sperm parameters in varicocelized male rats.

Methods: Thirsty male Wistar rats were randomly divided into 5 groups, (V1 and V2 (varicocele), T (treatment), Sh (sham) and C was control). In groups V1, V2, T and Sh, the left renal vein was partially ligated to induce varicocele. In groups V1 and V2, sperm parameters and NO level were evaluated 8 and 16 weeks respectively after varicocele induction. Groups T and Sh received 100 mg/kg curcumin and placebo respectively, daily for 8weeks after 2 months of induced varicocele. Sperm parameters (count, motility, viability and morphology), epididymis and testis weight and also NO concentration were measured.

Results: Sperm parameters (count, motility and viability) in groups V1, V2 and Sh were significantly low in comparison with control and treatment groups. The level of NO was significantly increased in serum of rats in groups V1 and V2, whereas group T rat serum in which curcumin was administered, showed decreased NO levels. The values of the epididymis and testis weight had no significant changes (P? 0.05) in all groups.

Conclusion: Administration of curcumin as a free radical scavenger, can decrease NO level and improve sperm parameters in varicocelized male rats.

Keyword: Varicocele, curcumin, sperm parameters, rat