Study Relation Between Level of Apoptotic Receptors (Fas, L-Fas) in Serum and Semen and Varicocele

Introduction and Objectives: There are 25% of young adults who have varicocele, and one of the complications of varicocele is infertility; usually resolved by treating varicocele. On the other hand Fas and L-Fas are cellular surface receptors which play a role in apoptosis prevalence that manages the elimination of damaged or altered cells and replaces the new cells in their places right after. We want to study the expression of these receptors in the patients who underwent surgery by the diagnosis of varicocele to see whether there is a connection between varicocele and Fas and L-Fas, and if it exists, how it would be.
Materials and Methods: Regarding this, several people were referred to Ghaem Urology clinic. There were 24 patients who have varicocele, abnormal spermogram and infertility, 24 patients who have varicocele, but have normal spermogram and all are fertile, and 24 patients who don't have varicocele, but were referred for hernia, kidney stone, hydrocele or BPH selected. After acquiring their consent, 5 cc of their blood and some of their semen will be taken to performing ELISA test.
Results: There is a significant relation between the level of Fas and L-Fas in serum (p.04). There is a notable correlation between the level of Fas and L-Fas. There is a significant negative correlation between level of Fas in serum, and level of it in semen (p<.001).There is not a significant relation between the level of L-Fas in serum and semen (p=.82). There is a negative relationship between degree motility and morphology of semen and level of apoptosis receptors.
Conclusion: Fas, L-Fas in serum and semen have relationship with varicocele. sFas is decreased in varicocele but in normal persons it is high. Fas, L-Fas are high in varicocele because of activation of apoptosis. When Fas and L-Fas are increased in semen, motility and morphology are decreased in it.