



Re: Varicocelectomy to “Upgrade” Semen Quality to Allow Couples to Use Less Invasive Forms of Assisted Reproductive Technology

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EDITORIAL COMMENT

Varicocele is the most common etiology of male-factor infertility. Varicocele repair is the simplest and the most cost-effective treatment way for infertile couples for natural conception. Recent data suggested that varicocele repair may reduce the need for invasive modalities of assisted reproductive technology (ART) for infertile couples. In this study, the authors tried to determine the degree of semen improvement after varicocelectomy and the effect of semen improvement on the need for ARTs. A total of 373 men who underwent varicocele repair were evaluated. Varicocelectomy was bilateral in 46.6% of patients and left in 53%. Radiographic embolization was performed in 18% of patients and 82% was operated by microsurgical procedure. Overall total motile sperm count (TMSC) increased from 18.22 ± 38.22 to 46.72 ± 210.92 ($p=0.007$). The most significant increase was observed in men with baseline TMSC <5 million and almost 60% of men were upgraded from *in vitro* fertilization (IVF) candidacy to intrauterine insemination or natural pregnancy. In conclusion, varicocelectomy has an important role in the treatment of male infertility and reduces the need for IVF treatment even in men with very low TMSCs.

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