

Re: Varicocelectomy versus antioxidants in infertile men with isolated teratozoospermia: A retrospective analysis

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Varicocelectomy is indicated in patients with abnormal semen parameters.¹ The treatment of varicocele in patients with isolated teratozoospermia (iTS) is controversial. There is limited evidence in the effectiveness of varicocele repair in this particular group because studies are generally of retrospective nature and consist nonhomogeneous patient groups.² Teratozoospermia often occurs in combination with asthenozoospermia (<32% progressively motile sperma), oligozoospermia (<39 million total spermatazoa or <15 million sperm/mL) and, thus, termed as oligo-astheno-teratozoospermia syndrome.³ However, iTS, which was shown as the only inadequate abnormality in analysis of semen, is also comparatively common finding (12%) in men suffering infertility.⁴ Low-sperm morphology rate in semen has also been associated with rising level of reactive oxygen species, and thus increases sperm nuclear damage. As shown in the studies in the literature, infertile men with iTS have high level of sperm DNA fragmentation (SDF) rate and deteriorated oxidative stress condition than fertile men. Nevertheless, the SDF rates of men with iTS compared to the patients with other defective semen parameters have not been comprehensively studied.⁵

In the present study, the authors compared the outcome of varicocelectomy with antioxidant therapy in patients with iTS. The improvement in semen parameters (including morphology),

SDF, and pregnancy rate in the varicocele group was higher compared to antioxidant group. The limitation of the study is lack of the control group and its retrospective nature.

This study and other well-designed, prospective, randomized trials will enable to conduct a meta-analysis which eventually change the guideline on performing varicocelectomy in patients with iTS.

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