

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

Peter N. Schlegel 

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In this issue of the *Turkish Journal of Urology*, an important article has been published on the influence of varicocele repair for isolated teratozoospermia. Varicoceles are known to have adverse effects on sperm quality, and varicocele repair has been demonstrated to be a valuable treatment for infertility in couples, where men have a clinical varicocele, abnormal semen parameters, and infertility.¹ However, the effect of varicocele repair on sperm morphology has been more difficult to elucidate. Meta-analyses have confirmed improvement in sperm concentration and motility, but morphology has not always shown substantial benefit from varicocele repair.² So, given that varicocele repair appears to be beneficial for sperm production and function, why have not studies been able to demonstrate this benefit previously?

First of all, sperm morphology assessment is subjective and significant intra- and interlaboratory variability exists in its application and measurement of “normal sperm morphology.” The introduction of “strict criteria” morphologic evaluation dramatically changed the measurement of this parameter as well, leading to both confusion and variability in what was being analyzed. Furthermore, sperm morphology is a biological variable that is subject to intraindividual variation, like every other semen parameter. Together, these

factors limited the ability of scientific studies to detect a benefit of varicocele repair on normal sperm morphology.

This published study will help form a framework to confirm the benefit of varicocele repair on sperm morphology. Unfortunately, the study was not a randomized controlled trial, but rather a longitudinal evaluation of men with comparators including infertile men treated with a relatively ineffective intervention, antioxidant therapy. The presence of a comparator group is helpful, but it does not provide the highest level of evidence for the benefits of varicocele repair on sperm morphology. Indeed, the benefits of varicocele repair on pregnancy rates were robust and clinically important. Additional high-quality publications will be critical to solidify our understanding of the relationship of varicocele repair for men in infertile couples with isolated teratozoospermia.

References

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Weill Cornell Medicine, New York, NY, United States

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Corresponding Author:
Peter N. Schlegel
E-mail:
pnschleg@med.cornell.edu

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