



# Re: Undergoing Varicocele Repair Before Assisted Reproduction Improves Pregnancy Rate and Live Birth Rate in Azoospermic and Oligospermic Men with a Varicocele: A Systematic Review and Meta-analysis

Kirby EW<sup>1</sup>, Wiener LE<sup>2</sup>, Rajanahally S<sup>3</sup>, Crowell K<sup>4</sup>, Coward RM<sup>5</sup>

<sup>1</sup>University of North Carolina Faculty of Medicine, Gillings School of Global Public Health, Department of Urology, North Carolina, USA

<sup>2</sup>UNC Gillings School of Global Public Health, Clinic of Biostatistics, North Carolina, USA

<sup>3</sup>University of Washington, Department of Urology, Washington, USA

<sup>4</sup>University of North Carolina Faculty of Medicine, Health Sciences Library, North Carolina, USA

<sup>5</sup>University of North Carolina Faculty of Medicine, Gillings School of Global Public Health, Department of Urology; University of North Carolina Fertility, North Carolina, USA

Fertil Steril 2016;106:1338-1343. doi: 10.1016/j.fertnstert.2016.07.1093.

## EDITORIAL COMMENT

This study evaluated 72 studies to answer the question how varicocele repair (VR) impacts pregnancy rates and live birth rates in infertile couples undergoing assisted reproduction wherein the male partner has oligospermia or azoospermia and 7 studies were found to be eligible for inclusion. The meta-analysis showed that VR improved live birth rates and pregnancy rates in oligospermic and combined oligospermic and azoospermic groups. Live birth rates were higher for patients undergoing intra uterine insemination after VR. Sperm recovery rates were higher in persistently azoospermic men after VR. According to this meta-analysis, in couples with male factor infertility-oligozoospermia or nonobstructive azoospermia and presence of a varicocele, VR may result in improved pregnancy rates and live birth rates. VR may also increase sperm retrieval rates in men with nonobstructive azoospermia with varicocele. However, in almost half of the patients with nonobstructive azoospermia the etiology is still unclear and there is tremendous effort in male reproductive genetics to explain underlying genetic problems. Therefore, before considering VR, genetic evaluation including peripheral karyotype and Y chromosome microdeletion analysis should be performed.

Emre Bakırcioğlu, MD