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INVITED COMMENTARY

Factors to consider for informed consent prior to vasectomy reversal

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The manuscript by Drs. Patel and Smith¹ presents an excellent summary on the preoperative work up for patients undergoing vasectomy reversal (VR), and describs factors that help predict success such as surgeon skill/experience, shorter obstructive interval, a partner's positive fertility history and younger female age.^{2,3} While intraoperative decision-making is discussed in the text, it is important to ask why, with all the research available, do some physicians still feel comfortable only offering a vasovasostomy (VV), irrespective of the microscopic characteristics of the vasal effluent. Driven by the increased difficulty of performing a vasoepididymostomy (VE), patients are still done a disservice by not being offered the options of both procedures. Although the introduction of the operative microscope has significantly improved patency rates with VR, a small minority of physicians still routinely offers macroscopic reconstruction. All these issues should be discussed preoperatively and informed consent should be obtained during the initial patient consultation.

Expanding on the topic of vasal reconstruction, physicians should perhaps offer patients counseling for "fertility options postvasectomy" rather than "vasectomy reversal consultations." This simple change in strategy would then be accompanied by discussions on percutaneous epididymal (PESA) or testicular sperm aspiration (TESA), testicular sperm extraction (TESE), or microepididymal sperm aspiration (MESA), concurrent with *in vitro* fertilization (IVF).⁴

Presentation of such options then leads into a discussion of cryopreservation at the time of VR. This is accomplished by using either the vasal or epididymal effluent obtained during the intra-operative fluid analysis or failing an appropriate sample (i.e., the presence of sperm heads and short tails), a TESE could be performed for the express purposes of cryopreservation. Indeed, in selected patients, discussion of concurrent VR coupled with sperm harvest for IVF could be the preferred option, especially given that costs for sperm harvesting as an isolated procedure can sometimes approach those for a VR.⁵

Partner's age is another critical discussion point in preoperative consultations. A proper informed consent should also include discussions on partner age and the fact that pregnancy rates in female partners >age 40 years tends to drop precipitously.⁶ As such, options such as IVF may be preferred in some patients in whom time is of the essence. Another interesting point for discussion includes that, in most cases, prevasectomy semen analysis remains unknown. Thus, the surgeon is left with the WHO population standards for semen analyses' guidelines postrepair, when some patients may never have been at these levels prior to vasectomy.

While VR has been an accepted and very successful modality for achieving fertility, practice patterns continue to evolve. Nevertheless, whatever the means of fertility attainment, the primary goal should always remain the desire to produce a live, healthy offspring for our patients, no matter what the technique employed.

REFERENCES

- 1 Patel AP, Smith RP. Vasectomy reversal: a clinical update. Asian J Androl 2016; 18: 365–71. [Doi: 10.4103/1008-682X.17509] [Epub ahead of print].
- 2 Belker AM, Thomas AJ Jr., Fuchs EF, Konnak JW, Sharlip ID. Results of 1,469 microsurgical vasectomy reversals by the Vasovasostomy Study Group. J Urol 1991; 145: 505–11.
- 3 Wood S, Montazeri N, Sajjad Y, Troup S, Kingsland CR, et al. Current practice in the management of vasectomy reversal and unobstructive azoospermia in Merseyside & North Wales: a questionnaire-based survey. BJU Int 2003; 91: 839–44.
- 4 Esteves SC, Miyaoka R, Agarwal A. Sperm retrieval techniques for assisted reproduction. Int Braz J Urol 2011; 37: 570–83.
- 5 Pavlovich CP, Schlegel PN. Fertility options after vasectomy: a cost-effectiveness analysis. *Fertil Steril* 1997; 67: 133–41.
- 6 Gerrard ER Jr., Sandlow JI, Oster RA, Burns JR, Box LC, et al. Effect of female partner age on pregnancy rates after vasectomy reversal. *Fertil Steril* 2007; 87: 1340–4.

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