I was disappointed to read about a device that was not successful in producing reliable vas occlusion in Amory et al.'s report in this issue of the journal [1]. For those who are unfamiliar with vasectomy terminology, it is important to understand that a vasectomy procedure has three major aspects: (1) anesthesia; (2) accessing or approaching the vas (that is, the method used to isolate a loop of the vas); and (3) occluding the vas.

With respect to anesthesia, some practitioners are proponents of a no-needle approach using a jet-injector-type device, whereas others suggest that using a small, 30-gauge needle is just as effective at minimizing pain [2–4]. However, it should be noted that many men who are afraid of having a needle stuck in their scrotum might come to a clinic that advertises the ‘no-needle’ technique, but might be more skeptical of a clinic that advertises a ‘small needle’ or ‘painless’ vasectomy technique. As noted by Prof RCM Kaza, President of the NSV Surgeons of India, vasectomy is both a surgical and a psychological procedure.

With respect to approaching the vas, the no-scalpel vasectomy (NSV) technique, developed by Dr S. Li in China is probably the best method for accessing or approaching the vas [5, 6]. The disadvantage of the NSV technique for the surgeon is that it requires more hands-on training and practice than some incisional techniques.

With respect to occluding the vas, this is a major current research question in the vasectomy field. Is it possible to develop a simple, standardized, reliable method of vas occlusion that will minimize recanalization? Amory’s report [1] documents one attempt to solve this problem. Existing evidence suggests that thermal cautery of the vas lumen—combined with fascial interposition—is perhaps the most reliable method for vas occlusion [7, 8]. However, almost every surgeon has his or her own technique of fascial interposition, and there is great variability among the vas occlusion techniques currently in use [9].

Some surgeons or clinics have their own unique and highly effective methods, such as the electrosurgical technique used by the Marie Stopes Clinic [10]. However, their effectiveness is not always reproducible when used with even slight modifications [11]. In addition, there is a concern with electrosurgical equipment that errors can occur: either vasectomy failures from too little energy [12] or injuries from too much energy [13].

On-going research to develop better methods of vas occlusion includes work by biomedical engineers on the use of high-intensity focused ultrasound [14] and infrared lasers [15, 16].

Consider this commentary as a call for competition! Men and their surgeons need a more reliable, easy-to-apply method of vas occlusion. Ideally, such a method (1) should be compatible with the NSV approach to the vas; (2) should not involve destruction of a long segment of the vas, so that it could be easily reversed; (3) should be as safe or safer than existing methods of vas occlusion; and (4) should not require expensive equipment.

**Potential conflict of interest**

The author discloses a potential conflict of interest in holding a US patent pending on a novel vas-cap device for vas occlusion.
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