The following was a contribution by **Michel Labrecque** (Quebec City, Canada) to the Vasectomy Network Google Group on February 27, 2022, as a response to a query by Doron Boone about testicular end burial vs. abdominal end burial for fascial interposition.

Doron,

Back in 1985-86 (a long time ago...!), I was trained to apply two clips on the vas and excised the segment in between (about 1 cm) – known as the ligation and excision (LE) "classical" vas occlusion technique. My professor had told me at that time that I had to expect to redo the vasectomy on about 1% of my vasectomized patients. And this is what I observed initially (<u>Labrecque 87</u>). However, it seems that I was getting more than 1% of failed vasectomies as years were going by...

In the early 90, Moss and Schmidt were claiming that they had been doing thousands of vasectomies without almost no failure (attached articles). I admit I was a little skeptical about their incredible results ... I then decided in the mid-90s to experiment with mucosal cautery (MC) and FI and make my own opinion.

Schmidt and Moss had both reported covering the prostatic end, and honestly I do not remember why, I performed my first series of cautery and FI (with clip) covering the testicular segment instead of the prostatic end. In addition, I was leaving the testicular end open (as recommended by Moss), excising a vas segment, and putting a clip on the cauterized prostatic end (see picture in Labrecque and Bédard 98). Frankly, from what I know now about vas occlusion techniques, putting a clip on the cauterized vas was simply stupid - a useless and even counterproductive gesture -, but after putting clips on the vas for about 10 years, it was hard to abandon such an habit ... The failure rate however dropped a bit in this first series of MC +FI (from 2.8% with LE to 1.2% with MC+FI –see attached Labrecque and Bédard 98) but I was still far from getting Smith and Moss results.

I then modified the technique and did exactly what Moss was doing. I covered the cauterized prostatic end with the fascia (still using a clip), not excising any vas segment and leaving the testicular end open. The failure rate with the classical LE technique was catastrophic (7-8%), but comparable to results from the best conduct studies on the same technique (see <u>Sokal and Labrecque 2009</u>). It was however 0.3% with MC+FI: A Miracle! This is the technique I am using since. In the last two years my failure rate (need to "redo" the vasectomy based on PVSA showing recanalization) was 0.1%.

...whether it matters which end is buried?

I would then say YES. I decreased my failure by about 10 switching from covering the testicular end to covering the prostatic end. However, I was more experienced with FI in my second published series ... When I look at FI illustrated in Labrecque and Bédard 98, I am sure this clip would slip! The edge of the clip should always be free from any tissue to avoid slipping.

Another factor that could explain the reduced efficacy of testicular compared to prostatic end covering, is the possible blow out/erosion of the FI caused by leaking sperm especially if the testicular end is left open.

Finally, another indirect evidence that prostatic is more effective than testicular FI, is that all studies of LE + testicular FI are showing very poor effectiveness results, with the best study (Sokal et al's RCT) showing a 6% failure rate (see Miranda et al reporting all the studies).

So Doron, keep covering the prostatic end!

Michel