Laparoscopic Single Port Hysterectomy

Chapter 5

Selection of Vaginal Manipulator

"Vaginal Manipulator Means More to me than just a nickname in High School"

-Anonymous

In a difficult single-port hysterectomy, choice of vaginal manipulator will absolutely make or break the procedure. Conversion to multiple-port or open hysterectomy will be much more likely when limitations on uterine manipulation exist. Nonetheless, not every community hospital can be convinced to purchase the most expensive manipulator on the market, and not every hysterectomy can be performed in your favorite tertiary center. As a result, sometimes you just have to make do.

Let's start off with some eliminations: a Sponge-Stick, RUMITM, Cohen, Hulka and a McCartney TubeTM without the manipulating lumen are not compatible with this technique.

Although I appreciate greatly down-sizing surgical costs, you are better off channeling your inner MacGyver to create a vaginal manipulator using a uterine sound and a snapped apart laparoscopic trocar than you would be using a sponge-stick to expose the fornices to create a colpotomy. It is just too low-tech.

The RUMITM, or at least the initial design, has a handle which creates an angle that is not amenable to hysterectomy in humans. Although later models may have solved this problem, I'm still not sure how that original angle was created. You just can't manipulate the uterus at all with a straight rod. I am left dumbfounded.

Also, a McCartney TubeTM devoid of its manipulating center is equally useless, although it could be utilized in the case of an extremely small uterus. For those of you not familiar with the McCartney TubeTM, it is essentially a long rubber-like cylinder inserted into the vagina with an open edge to make your colpotomy against. In other words, it's like an empty Cambell's soup can made of rubber. This provides a great view of the surface for your circumferential colpotomy but essentially no manipulation

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of the uterine body. In all but the lightest of wombs, this is incompatible with a single-port laparoscopic technique.

I will now move to the gold standard, the McCarus-Volker "ForniseeTM." This product is amazing and has a price tag equally as daunting. The ForniseeTM device contains an adjustable uterine manipulating rod, at a perfect angle, and the rod itself is solid steel. It can move any amount of tissue without bending. It also has an adjustable tip that turns horizontally to lock into place in the uterus. The burning surface is perfectly angled and is made of a hard, plastic-like substance that does not melt or change shape even when burned directly with 50 watt coagulating monopolar current. Finally, that ring that you want to make your colpotomy on, you know that final ring you trace around to complete the hysterectomy? Have you ever "missed it?" You know what I mean, the tissue was too thick, you were a little caudad or a little cephalad and just not on the ring? Well let me tell you this, this ring lights up.

Yes - I shit thee not!

This ring actually has a light making the exact level of the colpotomy easily visible throughout the entire procedure. You read that correctly, the entire procedure, because this ring is lit. (By the way it is not hot and will not burn any tissues.) So, operating with this device is very much like having the wind at your back.

Not every hospital is going to have this device, so some good substitutes would be the ColpotomizerTM, Uterine ElevatOR PROTM, V-CareTM, and the RUMI IITM (with the arch). Any of these will be able to manipulate the uterus to expose every aspect, which is what you're going to need if you've only got one port to work with, because a traction port just isn't available. Just remember that seeing the ring in the initial surveillance of the abdomen can be very important, because you can only judge how much

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work it will really take to complete the single-port hysterectomy if you can see when the work will be finished.