

and the convenience and safety of a disposable.” The handle works with the full range of RUMI tips, as well as all KOH Colpotomizer™ components and the Colpo-Pneumo Occluder™.

As a surgeon with preferences for the KOH Colpotomizer and the ergonomic design of the VCare, I found that the RUMI Arch seemed too good to be true. Unfortunately, as the saying goes, things that seem to be too good to be true usually are. I thought the angle on the RUMI Arch handle was way too acute. I found manipulating the uterus uncomfortable and defining the vaginal fornices difficult because of the deep bend in the handle design. Also, I was disappointed that CooperSurgical had done nothing to fix the chronic problem of better securing the KOH Colpotomizer to the handle.

Design/Functionality Score: 1.5

Innovation

As I like the RUMI system, this newer product seems more like a step backward than a step forward. I think the idea of a slimmed-down RUMI is conceptually good, but this version needs to go back to the drawing board.

Innovation Score: 1

Value

If you like the RUMI Arch and you are a VCare user, then its reusable design does offer an excellent value over the completely disposable VCare. But you have to like the RUMI Arch’s ergonomics better than VCare to make this value proposition work.

Value Score: 4.5

Summary

I was disappointed to dislike the RUMI Arch. I really wanted to like it and I was excited to try it, but, in the end,



RUMI Arch™ Uterine Manipulator Handle (CooperSurgical, Inc., Trumbull, CT). Photo courtesy of CooperSurgical.

I just did not think the product delivered. I know CooperSurgical can do better and I suspect they soon will.

Overall Score: 1.5

Product: 21 Fr. / 7-mm PRINCESS™ Resectoscope
Company: Richard Wolf Medical Instruments Corporation
Retail Price: \$6366.50

James A. Greenberg, MD

Brigham and Women's Hospital, Faulkner Hospital, Harvard Medical School, Boston, MA

[*Rev Obstet Gynecol.* 2010;3(3):145-146 doi: 10.3909/riog0127]

© 2010 MedReviews®, LLC

Design/Functionality: 4.5

Innovation: 5.0

Value: 3.5

Overall Score: 4.5

Background

Resectoscopy is a mainstay of the surgical treatment of submucous myomas. Although generally safe procedures, hysteroscopies using monopolar resectoscopes have been associated with complications related to the use of distention media such as 1.5% glycine, sorbitol, mannitol, and dextran. Specifically, excessive absorptions of these hypotonic distention media can lead to life-threatening hyponatremia, hypokalemia, hypocalcemia, and hypo-osmolality.¹ Switching from monopolar to bipolar resectoscopes eliminates the need for hypotonic distention media and allows surgeons to use good ol' saline. Unfortunately, until relatively recently this was not an option in resectoscopy. A few years back, Richard Wolf Medical Instruments Corporation (Vernon, IL) introduced the first bipolar resectoscope with its Bipolar Chip E-Vac system,² and now the same company brings us a newer, slimmer version with its 21 Fr. / 7-mm PRINCESS™ Resectoscope.

Design/Functionality

With its beginnings in Berlin, Germany, in 1906, the Richard Wolf corporation has a long and distinguished reputation in the endoscopy world and, as a rule, produces high-quality instruments. The PRINCESS resectoscope is no exception. First, at 21 Fr. / 7-mm, it is the smallest resectoscope

available—and smaller diameter means easier insertion and less dilation. Yet, when coupled with the 12° Panoview Plus endoscope, it does not yield any compromises with visualization as compared with its larger cousins. Second, its E-Line construction with its Qui-Connect locking mechanism allows for easy assembly and disassembly with a push-button release mechanism. Third, the S-Line feature allows the PRINCESS compatibility in bipolar mode as well as monopolar with only a change in the cable and solution (though why one would want to use it in a monopolar mode is unclear). Finally, the PRINCESS is unique in that the inner and outer sheaths can be changed from 21 Fr. to 24 Fr. while the working element remains the same. This allows the same system to be used for larger pathology if that is desired. Sadly, the rotatable feature is only available with the 24 Fr. sheaths—but that is something to look forward to in the future.

In use by the author, the PRINCESS performed with regal elegance. Sleek and quick to assemble, the scope goes in easily, provides a great picture, and cuts through pathology like a bipolar knife through butter.

Design/Functionality Score: 4.5

Innovation

Because nobody else has a similar product in this highly competitive market, I can only assume that the innovations required were substantial to create this thin-line, dual mode (bipolar and monopolar) resectoscope. Given the huge advantage of working without hypotonic distention media and the risks they bring, this innovation cannot be seen as anything less than a game-changer.

Innovation Score: 5.0

Value

Although the system works with most fluid management systems on the market, getting the PRINCESS does mean buying a whole new resectoscope system and chucking whatever you had before. Specifically, this entails buying the 12° Panoview Plus endoscope (\$3147.50), a 21 Fr. E-Line inner sheath (\$639.50), a 21 Fr. E-Line outer sheath (\$800), a 21Fr. working element (\$1412.50), a 21 Fr. obturator (\$120), and a bipolar cable (\$247) for a total retail price of \$6366.50. Of course, there is usually a trade-in



21 Fr. / 7-mm PRINCESS™ Resectoscope (Richard Wolf Medical Instruments Corporation, Vernon, IL). Photo courtesy of Richard Wolf.

discount or something similar, but moving to this system does require a significant capital cost. That said, \$6366.50 is cheap money to rid your hospital of the scourge of glycine.

Value Score: 3.5

Summary

If you perform operative hysteroscopy then you have had a problem with excessive absorption of hypotonic media. Fortunately, for most of us, that problem has been the early termination of a procedure due to exceeding the protocol limits for glycine or something similar rather than a serious patient injury or death. Nonetheless, if you could have all the benefits of a resectoscope without the hassle of hypotonic media, wouldn't that be great? If so, the PRINCESS is great.

Overall Score: 4.5

References

1. Estes CM, Maye JP. Severe intraoperative hyponatremia in a patient scheduled for elective hysteroscopy: a case report. *AANA J.* 2003;71:203-205.
2. Greenberg JA. Bipolar Chip E-Vac System. *Rev Obstet Gynecol.* 2008;1:199-200.

Dr. Greenberg reports no personal financial relationships with any of the companies whose products he reviews in this column.
