Most of us treating venous disease are always looking for techniques and technologies that may be better for patients and/or better for us. Patients obviously want the best treatment that we can offer, and many are cognizant about the various options for care, even before they visit us. The Internet has helped patients to better understand vein disease and the available options for modern-day care. At times, it may be a double-edged sword. However, in general, it is probably a good thing; as Sy Syms would say, “An educated consumer is our best customer.” This article discusses the various issues to consider when introducing a new technology into your armamentarium of vein care when speaking with patients. When incorporating any new technology, one needs to feel comfortable with feeling uncomfortable, especially when the patient may ask questions such as: How new is this? How many of these procedures have you done? Am I one of the first patients you’ve treated with this technology? Why is this better than something else I heard of? Is this covered by my insurance?

**CATEGORIES OF NEW TECHNOLOGY**

Most new technology can be divided into three types:
1. Improved
2. New
3. Really New

Improved Technology is illustrated by a simple change in laser wavelength or in venous stent design, for example. Improved Technology is also exemplified by radiofrequency ablation, which incorporated a change in technique from continuous pullback to segmental; yet, it is still radiofrequency ablation. Mechanical occlusion chemically assisted (ClariVein, Vascular Insights LLC) is an example of New Technology, as is polidocanol injectable microfoam (Varithena, BTG International Inc.) and the adhesive-based VenaSeal closure system (Medtronic). They use different mechanisms of action than traditional thermal ablation. Really New Technologies are those that have never been used before or are being used in a clinical trial. When introducing any technology into one’s practice, the discussion with the patient will be different depending on which of the three types you are going to employ. The Improved types do not really need much of an in-depth discussion because these are variations on a theme of an existing and proven technology. The main focus of this article is on the New and Really New Technologies.

Any New Technology needs to offer some of the changes listed below. These are some of the ones to discuss with patients when offering them a New or Really New Technology. Aspects of the technology may be:
1. They fill a needed void
2. The results are as good if not better than current technology
3. They are faster, safer, simpler, and/or easier for the patient and physician
4. There is less discomfort during or after the procedure and/or a faster, simpler recovery

There are other aspects as well, but the ones that truly impact patients are the ones they mostly want to know about.
THREE PHASES OF PATIENT INTERACTION

There needs to be a consistent message when a new technology is incorporated into one’s practice. The message is not only delivered by the vein specialist but by the entire team: nurse practitioners, nurses, office managers, secretaries, etc. The phases of interaction are encountered (1) before the procedure, (2) during the procedure, and (3) after the procedure. Each phase offers a different set of opportunities and challenges from both the patient’s and your viewpoints.

Before the Procedure

At this stage, the technology may be new to the patient but not all that new to you. You may have used it with a few patients already, or you may have participated in a clinical trial using the technology. There will also be times when the technology is new to you and to the patient. Someone needs to be first. In either case, you need to feel comfortable with feeling uncomfortable. The most important thing is to be honest and thoughtfully confident. Let the patient know what you have done to ensure the best possible outcome. Credibility is key. Explain what type of training you underwent, such as observing cases performed by someone with experience, training on models, didactic courses, etc.

Build on your previous experiences when you can. Perhaps you have introduced new technologies into your practice in the past. You might consider aspects of this technology that are similar to ones you already have a lot of experience with. Think about whether the approach to access is the same, if it is performed using ultrasound or fluoroscopic guidance like other procedures you are already doing, and if the postoperative activity and recovery are similar. If you have experience teaching other techniques to physicians or the institution you are affiliated with has a reputation for innovation, this might also be of benefit.

Be honest about the technology’s characteristics. It is most likely approved by the US Food and Drug Administration, which implies a level of safety to the patient, or perhaps it is being used in a clinical trial. You should be aware of the results that others have gotten with this device or technique. The final piece to discuss with the patient prior to the procedure is that you will want his or her input regarding the experience, both during and after the procedure. Include your patients as part of the “team” and part of the learning curve. They are helping you, and they are helping other patients as well. Thank them.

During the Procedure

In this next phase, you want to feel as comfortable as you can, and you want your patients to feel as comfortable as they can. This requires preparation by you and anyone else who will be assisting you. You need to rehearse the procedure with everyone involved: partners, nurses, technologists, company representatives, etc. Have confidence in yourself and your team. The first time that everyone sees the technique/technology should not be the day of the procedure. Know each step of the procedure thoroughly, including what each button, dial, and noise is. The question, “What is this for?” should not be asked on the day of the procedure. Consider minimizing the variables of the procedure. Maybe get more help than you will ultimately need, have someone proctor or an extra set of hands, then scale back as you gain experience. Finally, and most importantly, include your patients in the process. Thank them once again for participating, and encourage them to provide you with feedback.

After the Procedure

After the procedure, you should consider a personal phone call to the patient if he or she is the first or one of the first to undergo treatment with a New or Really New Technology. Schedule a follow-up with the patient soon after the procedure, address any concerns your patients might have, and encourage them to call with any questions. Once again, reinforce that they are part of the team and part of the learning curve. Their input is important to you and other patients. As you continue follow-up, share with them the results and experiences of other patients.

CONCLUSION

Most patients do not have much issue with new technology when it is presented in this straightforward manner. You are the vein specialist, and you want to offer them a treatment option that you think is right for them. Let them know that, but also let them know where you both are in the learning curve. They will appreciate it. Remember, as The Hold Steady song says:

“You can’t tell people what they want to hear, If also want to tell them the truth.”
–The Hold Steady, “Soft in the Center”

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