

This Free E-Book is brought to you by Natural-Aging.com.

**100% Effective Natural Hormone Treatment
Menopause, Andropause And Other Hormone Imbalances
Impair Healthy Healing In People Over The Age Of 30!**

Transitioning from EP Diagnostic to Therapeutics: What are the Essential Considerations?

By Barbara Sallo, RN, MBA and Marsha MacIntyre, RN, BSN

Transitioning from EP Diagnostic to Therapeutics: What are the Essential Considerations?

by Barbara Sallo, RN, MBA and Marsha MacIntyre, RN, BSN

When hospitals make the decision to expand the cath lab to perform electrophysiology (EP) procedures, it is important to look into the impact it will have on the total cardiology program. Traditionally, hospitals have looked to recognized medical specialist societies to provide insight and direction regarding clinical policy and process. This is no different for EP procedures, which have been routinely conducted in the cardiac catheterization lab setting. When looking for guidance and/or recommendations for EP catheter ablation treatment, the North American Society of Pacing and Electrophysiology (NASPE) and American College of Cardiology (ACC) offer policy statements. Catheter ablation is one procedure which has transformed the field of electrophysiology. Catheter ablation destroys atypical heart tissue which is responsible for abnormally fast heart rates. Previously, the treatment for many tachycardiac arrhythmias required extensive open-heart surgery. Catheter ablation, through the use of radiofrequency ablation, has, in many instances, made surgery and long-term drug therapy no longer necessary. Therefore, "the number of reported ablation procedures performed annually in the United States has increased from 450 in 1989 to ? 15,000 annually.¹ This increase in demand has made the addition of EP services at many hospitals very attractive.

When a hospital is considering expanding cardiology services to include EP and catheter ablation treatment, an assessment of existing clinical services is in order. One of the first questions to address is whether the hospital already has an established open-heart surgery program. While there are no defined regulations that require the "on site" availability of open-heart surgery services when performing catheter ablations, it appears to be an accepted medical practice.

As previously stated, two recognized organizations that provide electrophysiology clinical competency recommendations are the ACC and NASPE. However, the ACC defers to NASPE for specific guidelines. NASPE produces clinical competency recommendations for EP services. Recommended guidelines state "Comprehensive catheter ablation programs require a fully equipped invasive electrophysiological laboratory and ready access to surgical support and facilities. It was felt that full cardiac surgical support was desirable; nevertheless, at minimum, facilities performing ablation should

Transitioning from EP Diagnostic to Therapeutics: What are the Essential Considerations?

have thoracic surgical backup."² The guidelines are not specific regarding the need to have open–heart surgery available "on site," leaving this open for interpretation.

However, what the NASPE policy statement on catheter ablation, as published in PACE, does present, are equipment and clinical process recommendations. Cine or digital imaging, and hemodynamic monitoring and recording of, at the very least, arterial pressures and O₂ saturation are recommended. Standard cath lab radiation exposure precautions must be maintained, especially in extended ablative procedures.

Equipment required for ablations includes an external defibrillator with non–invasive pacing, a radiofrequency current generator with temperature and impedance monitoring capability and a power output of at least 50 Watts. Other desirable equipment includes mapping equipment, and recording equipment capable of monitoring a minimum of three surface leads and at least four intra–cardiac leads

concurrently. Hard copies of these recordings also need to be available for cardiologists' immediate review.

Airway maintenance equipment, such as oxygen, suction and general anesthesia should be available. If your lab is doing pediatric cases, general anesthesia is mandatory.

Staff in cardiac cath/EP labs can differ from hospital to hospital. Members of the EP team for ablation procedures generally will be similar to that of the cath lab. In addition to cath lab training, the EP staff requires experience and ongoing specialization with EP procedures. Ideally, if volume allows, there should be staff dedicated to the EP lab.

Staffing for ablations should consist of at least three team members in addition to the attending physician. It is "recommended that staff utilized for ablative procedures have experience with at least 30 catheter ablations before working independently in the EP lab, and that they continue to assist on 30 cases per year."³ The number of physicians involved in the case, their experience, and the difficulty of the case can change the staff composition to include more or less personnel.

The team should consist of a scrub person, a circulating nurse and a cardiovascular technician (CVT) monitoring person. Normal cath lab responsibilities for these positions remain the same with the exception of the CVT monitoring person. Ideally, the staff member monitoring the case will be CVT certified and have familiarity with ablative procedures. Additional responsibilities charged to the CVT monitoring person, besides observing the patient and recording and documenting clinical information, will be operating the radiofrequency generator used during the ablation. The monitoring staff person will turn the equipment on and off and feed information to the physician throughout the case. It is vital to have excellent communication between the CVT monitoring person and the physician. While operation of the equipment on is not difficult, it requires intense concentration. It is vitally important not to activate the ablator until instructed by the physician. The ablator permanently destroys viable cells. This can be especially significant in AV ablations, where ablating the inappropriate area can place the patient into permanent heart block requiring a pacemaker. Unlike cardiac catheterization procedures, the CVT staff member monitoring the case needs to be informing the physician every few seconds of the measured value and the length of time the machine has been operating. The information the

Transitioning from EP Diagnostic to Therapeutics: What are the Essential Considerations?

physician needs to be aware of includes: the power or temperature, impedance, and the length of time the generator is active. Any changes in these values need to be reported immediately. "If the catheter loses contact with the myocardium, blood around the catheter tip may become superheated and boil."⁴ For this reason, the CVT monitoring person needs to be prepared to turn the ablator off immediately by keeping his/her finger on or in close proximity to the power button. If discontinued early, the ablator can always be reactivated, but if left on too long, the damage becomes permanent.

Having an experienced staff on board is just one piece of the puzzle. Electrophysiology labs performing ablations should maintain a high volume for proficiency. The NASPE Policy Statement provides information on the success of ablation procedures as related to volume.

Today, most institutions do not require board certification in Clinical Competency in Electrophysiology (CCEP) as a credentialing requirement. However, CCEP recommends applicants should have met board requirements as described on the AHA journal Circulation website.⁵ Respondents to the CCEP Training Program Directors' Survey uniformly indicated that two years were required to achieve training in all aspects (diagnostic and therapeutic) of CCEP.¹ Additionally, there is general consensus among EP practitioners that one year of specialized training in EP is needed to gain the knowledge and technical skills necessary to become proficient in EP. In addition to general cardiology fellowship

training, the Clinical Competency Electrophysiology Training Program Directors' Survey¹ indicates that a minimum of 90 cases are required to acquire clinical competency in ablation. Furthermore, the NASPE Ad Hoc Committee¹ on catheter ablation recommends that a physician be the primary operator on ≥ 30 procedures, including 15 accessory pathway ablations.

Not surprisingly, the majority of EP physicians are located at high-volume academic centers. According to the NASPE website,⁶ the state of California has the most EP physicians at 161, while Wyoming has only one. More rural areas suffer a dearth of these specialists, and patients must often rely on referrals from their cardiologists to be evaluated at tertiary centers. The wait time to see these highly demanded specialized EP cardiologists can be two months or more. The Cardiovascular Roundtable⁷ notes that while the number of electrophysiologists has doubled between 1996 and 2001, the number of patients receiving EP therapy remains small due to an EP physician workforce being unable to meet the demand.

In conclusion, hospitals must consider a number of clinical issues when deliberating the feasibility of implementing a full-service EP program. Having open-heart surgery back-up on site is one of the most important considerations and must be carefully thought-out. Offering open-heart surgery can be a very expensive proposition, and often there are regulatory challenges and barriers to entry. Twenty-five states require hospitals to file Certificate of Need (CON) applications for acute care services. Each of these states has established a specific criterion for the clinical and/or financial threshold that would trigger the need to file the CON application, but all require an application for open-heart surgery at this time.

States also have established Department of Health Regulations that vary within each jurisdiction. Some states require hospitals to make notification of new services, and others will review services on inspection tours.

Transitioning from EP Diagnostic to Therapeutics: What are the Essential Considerations?

Gathering information from clinical resources, developing financial projections, and researching state-specific regulations regarding EP and open-heart surgery are all essential elements of a thorough due diligence. Preparation and presentation of all available information to the stakeholders -- including hospital administration and medical staff -- will set the stage for a well thought-out decision that will meet patients' needs with a successful, high-quality EP program.

This article was written by Marsha MacIntyre RN, BSN, consultant, and Barbara Sallo, President of Health Care Visions, Ltd., a cardiovascular consulting firm based in Pittsburgh, Pennsylvania. The firm brings extensive knowledge and expertise in this area of clinical care. Health Care Visions, Ltd. has assisted a multitude of hospitals in all phases of cardiovascular programs for market assessments, program assessments and feasibility studies to business planning and implementation.

Barbara Sallo, RN, MBA is the President of Health Care Visions, Ltd. a cardiovascular consulting firm based in Pittsburgh, Pennsylvania. The firm brings extensive knowledge and expertise in this area of clinical care. Health Care Visions, Ltd. has assisted a multitude of hospitals in all phases of cardiovascular programs from market assessments, program assessments and feasibility studies to business planning and implementation.

Transitioning – Relaxed to Natural

By Janice Johnson

Transitioning – Relaxed to Natural by Janice Johnson

TRANSITIONING:

Going from relaxed hair to natural hair is a process that involves patience, love and dedication. This is the time you decide you no longer want to relax your hair. At this point, you are "transitioning".

During this period, proper care must be taken to care for your hair. It may be frustrating sometimes dealing with the two textures - that's why some opt for "the big chop". This is the point where the relaxed hair is completely removed. Depending on how much natural growth you have, this may mean shaving your head or if you have an inch or two of new growth, you can cut the hair to the point of the new growth. This is known as a TWA (teeny weeny afro) – which looks great on most women!

If "the big chop" or TWA are not options you're willing to forgo, try to embrace your hair during the transition period by practicing the following tips:

Take the time and energy to care for your hair with the right styling options. In order to hide the two textures, you may opt for styles that require very little or no daily grooming like cornrows, braids, extensions, straw-sets or twist-outs. But, you must remember that during this transitioning period - **LOVE YOUR HAIR!**

One of the most important things to do is condition, condition, condition! Also, trim your hair gradually to get rid of the straight ends. This also aids in helping the hair avoid breakage. Another way to avoid

Transitioning from EP Diagnostic to Therapeutics: What are the Essential Considerations?

breakage is to use a wide tooth comb, conditioning the hair regularly, and by giving your hair a hot-oil deep conditioning treatment. This is essential to restore moisture and balance.

Many women have sworn by this method and have said they have experienced very little breakage or no breakage at all.

Remember when your hairdresser told you to make sure you don't wait too long for your next relaxer? (6–8 weeks was the recommended time frame). Well, the reason she/he said this was because when you relax the hair, the structure of the hair is now modified. And depending on how straight your relaxed hair is this meant that the hair structure was altered that much more.

When you transition, the point where the two textures meet is known as the "line of demarcation". This is the weakest point. The curly/coily hair meets the relaxed or straight hair. At this point the structure of the hair is completely different due to the two different textures. This is the point where the hair is susceptible to breakage.

While transitioning, if you are conditioning your hair, comb the hair carefully with the wide tooth comb while the conditioner is still in the hair. Leave the conditioner in the hair for 10 minutes and then rinse out. A great after wash and conditioner is Infusium Leave-In Conditioner. Add to the hair after washing and conditioning with the creamy conditioner. Infusium Leave-In Conditioner is a great product to use

after every wash because it rids the hair of tangles.

Try to consult with a professional stylist to help you through your transitioning period. A visit to the stylist for a professional deep conditioning will also be very beneficial and helpful during the transition period. It's best to go to a stylist that embraces natural hair. The last thing you need is a stylist who makes you feel like you've lost your mind because you've decided to go the natural route. You need to surround yourself with people who support your decision. It's amazing how many stylists frown upon natural hair.

Your stylist will also be able to recommend the best products and methods to use for your hair. Another key point to having good hair (whether transitioning or not), is a healthy diet. So, get healthy! Try to eat right so that your hair will grow quickly and grow thick and healthy. Green leafy vegetables like spinach and broccoli are great at growing long healthy locks.

Transitioning Tip: Try to avoid slicking your hair back because the tension may cause breakage. Your hair is more susceptible to breakage because of the two different textures.

Janice Johnson is the founder of the www.curlyhairsalon.com website. An online multi-ethnic black hair magazine that offers information, tips and advice to care for curly hair.



This Free E-Book has been brought to you by Natural-Aging.com.

[100% Effective Natural Hormone Treatment](#)
Menopause, Andropause And Other Hormone Imbalances
Impair Healthy Healing In People Over The Age Of 30!