There are two ways to live your life. One is as though nothing is a miracle. The other is as though everything is a miracle. Albert Einstein

Liver Transplants in 2006
♦ We have completed 9 adult liver transplants to date this year.

Radio Frequency Ablation-- In Liver Cancer -How Does it Work?

We now have a new treatment available in the treatment of liver cancer. In addition to chemoembolization and proton radiation we now have radiofrequency ablation. Radiofrequency is a type of electrical energy used to create heat in a specific location, at a specific temperature, for a specific period of time, and ultimately results in the death of unwanted tissue.

During a radiofrequency procedure, an ablation probe is placed directly into the area of the tumor. An array of several small, curved electrodes are deployed from the end of the probe into the tissue. The generator is turned on and target temperatures are input. The radiofrequency energy flows through the electrodes and once sufficient temperatures have been reached, the heat kills the tissue of the tumor area within a few minutes. Ultrasound is typically used to monitor the treatment process.

Heat is a very effective means of killing tissue. The process is rapid, typically requiring less than 10-15 minutes exposure time for a 3 cm area of tumor to be treated. The size of the ablated area is determined largely by the size of the probe, the temperature of the tissue, and the duration of time the energy is applied. There is a sharp boundary between dead tissue and unaffected surrounding tissue. Thus unwanted tissue can be ablated without much sacrifice of surrounding normal tissue.

Radiofrequency treatment options

One option is a percutaneous approach, in which the electrode is inserted through the skin to the desired location. The physician usually uses ultrasound to guide the needle to the right location. This is the least invasive way that RF is performed. General anesthesia is usually not necessary, but typically the patient is sedated. Often the patient is able to go home the same day. If general anesthesia is not used, some discomfort or pain may be felt while the area is being ablated.

Another option is a laparoscopic approach. With this approach, the surgeon makes a
few small incisions in the abdomen, through which the necessary instruments are passed in order to treat the target tissue. This is also a minimally invasive approach, although general anesthesia is necessary. Patients typically go home the next day. One advantage of this approach is that intraoperative ultrasound can be used, which may result in more accurate location and visualization of the target tissue.

A third option is the open approach. This is what most people probably think of when they think of an operation. An incision is made in the area to be treated, and the surgeon can directly visualize the procedure. General anesthesia is necessary, and the recovery period is a bit longer.

PLEASE be sure to get your labs done 3-4 days before your clinic visit. We will reschedule your clinic visit if you do not have your labs. Your labs are our only way to determine your liver function. Without labs we cannot know how to assist you properly.

Please call us if you change your:
- Name
- Phone Number
- Address
- Insurance
- Primary Care Provider
- Health status or have been hospitalized.

We need to keep your information updated, so we are able to contact you.

Cooking tips

Meats: Even lean meat has fat in it. Here are some ways to reduce the saturated fat in meat:
- Broil rather than pan-fry meats such as hamburger, lamb chops, pork chops and steak.
- Use a rack to drain off fat when broiling, roasting or baking. Instead of basting with drippings, keep meat moist with wine, fruit juices or an acceptable oil-based marinade.
- Cook a day ahead of time. Stews, boiled meat, soup stock or other dishes in which fat cooks into the liquid can be refrigerated. Then the hardened fat can be removed from the top.
- Make gravies after the fat has hardened and can be removed from the liquid.
- When a recipe calls for browning the meat first, try browning it under the broiler instead of in a pan.

Vegetables: Add herbs and spices to make vegetables even tastier. For example, these combinations add new and subtle flavors:
- Rosemary with peas, cauliflower and squash
- Oregano with zucchini
- Dill with green beans
- Marjoram with Brussels sprouts, carrots and spinach
- Basil with tomatoes

Start with a small quantity (1/8 to 1/2 teaspoon to a package of frozen vegetables), then let your own and your family's taste be your guide. Chopped parsley and chives, sprinkled on just before serving, also enhance the flavor of many vegetables.
Try cooking vegetables in a tiny bit of vegetable oil, adding a little water during cooking if needed, or use a vegetable oil spray. Only 1 to 2 teaspoons of oil is enough for a package of frozen vegetables that serves four. Place in a skillet with tight cover, season, and cook over a very low heat until vegetables are done.

**Using vegetable oils:** Liquid vegetable oils or margarines that contain no more than 2 grams of saturated fat per tablespoon can be used in many ways in cooking that require the use of fat. Use these low-fat oils to:
- Brown lean meats and pan- or oven-fry fish and poultry.
- Saute onions and other vegetables for soup.
- Make cream sauces and soups using low-fat milk.
- Add whipped or scalloped potatoes using low-fat milk.
- Make hot breads, piecrust and cakes.
- Pop corn and make cocktail snacks.
- Make casseroles using dried peas or beans.
- Brown rice and for Spanish or curried rice.

**Liver Support Groups**

We continue to have very active support groups. Thank you to all our patients and families for your hard work.

- **The Liver Support Group** meets every Tuesday (except holidays) from 12:30 p.m. until 2:00 p.m. This is a group that includes patients waiting for transplant as well as patients who have already undergone a liver transplant.
- **Caregiver Support Group** This is a group for those who are providing care and support for those with liver disease. This group meets on 1st and 3rd Tuesday of the month from 12:30pm - 2:00 pm.
- **Hispanic Support Group** meets on the 1st and 3rd Thursday of the month from 1:00pm - 2:30 pm.
- **Coachella Valley, Hepatitis C, Liver Disease & Transplant Support Group** meets the second Monday of every Month (except holidays) at 11:00 am at the Portola Community Center in Palm Desert  Contact Dr. Richard Darling
- **Alcoholics Anonymous** Mondays at 6 pm

**Your Liver Team:**

| Dr. Michel Mendler & Dr. Zeid Kayali | Transplant Assistants: Miriam Guzman, Marielena Castaneda & Elissa Zeeb |
| Dr. Bruce Runyon & Dr. George Yanni | Medical Assistants: Stephanie Cautivar |
| Patti Radovich, CNS- Newsletter Editor | Lucy Bernal |
| Brijie Elhazin, CFNP | Social Worker: Ben Mavru, MSW |
| **Transplant Coordinators** | Mimi Miller MSW |
| Judith Joseph, RN | **Financial Coordinator:** |
| Jennifer Stewart, RN | Loraine Russelos |
| Jackie Sorenson, RN | **Dietician:** |
| Ron Duvall, RN | Karen Defazio |