Recently diagnosed with a non-melanoma skin cancer such as basal cell carcinoma (BCC) or squamous cell carcinoma (SCC)? Don’t panic! These cancers are usually slow growing, allowing for early detection and treatment. Both surgical and nonsurgical treatment options are available for non-melanoma skin cancers. While the gold standard for treatment is usually a surgical technique, the type of treatment chosen depends on various factors including the type, location and size of the skin cancer, the patient’s overall health and whether or not it has occurred in the same place before.

SURGICAL TREATMENTS

Mohs surgery
Mohs surgery is the treatment of choice for non-melanoma skin cancers, like BCC and SCC, that occur in cosmetically sensitive areas or areas where there is limited skin laxity, such as around the eyes, ears, lips, nose, neck, feet, hands and genitalia. It is also used for tumors that have recurred, are large or have unclear edges. A dermatologist specially trained in this procedure uses a scalpel to remove the visible tumor layer by layer with very thin margins. A map of the surgical site is created to maintain the orientation of the tumor with respect to the patient’s anatomy. The layer is then sectioned, frozen and stained with special dyes in a laboratory on the premises while the patient waits. The surgeon examines the specimen under a microscope to determine whether the cancer cells are still present along the edges and/or in the depth. If cancer is found in any of these areas, the process is repeated wherein only the involved areas are removed. After the tumor is completely removed, the resulting wound is repaired in the most cosmetically acceptable way. Mohs surgery has the highest cure rate (95-99 percent) and achieves the goal of complete skin cancer removal while sparing the greatest amount of healthy tissue as possible to have the best possible cosmetic outcome with the lowest chance of recurrence.

Excisional surgery
In this procedure, the dermatologic surgeon removes the cancer with a margin of normal skin and the wound created is closed with stitches. The specimen is then sent out to the laboratory to be evaluated by a board-certified dermatopathologist. If it is determined that there is still skin cancer present in the specimen, the entire procedure may have to be repeated. Cure rates can be as high as 95 percent depending on the size, location and type of skin cancer, but may be inappropriate treatment for high-risk tumors.

Curettage and Electrodesiccation
This is a reasonable treatment of choice for small skin cancers that are low risk, non-aggressive and located in less cosmetically sensitive locations. The surgeon scrapes the tumor with a curette and then uses an electrocautery needle to remove any remaining cancer cells and control bleeding. This procedure is repeated several times to ensure...
adequate treatment of the cancer. Cure rates can approach those for surgical excision; however, the resulting round, white scar may not always be cosmetically acceptable.

**NON-SURGICAL TREATMENTS**

In some cases, the patient cannot undergo surgery, so it is not always a feasible treatment option. In some patients, complete removal of the skin cancer with surgery can leave an unacceptable cosmetic or functional outcome. On the other hand, when the cancer is caught in its very early stages, surgical treatment may not even be necessary. For these cases, non-surgical treatments can often be utilized.

**Topical medications**

Topical medications, such as 5-fluorouracil (5-FU) and imiquimod, are FDA-approved for the treatment of superficial BCCs. 5-FU is chemotherapeutic and works by directly exerting a toxic effect against cancer cells, while imiquimod stimulates the body's own immune system to attack the tumor. Cure rates are generally 70-75 percent, and minimal scarring is an advantage of treating small, early skin cancers with these medications as compared to surgical treatments. Patients may have redness, peeling, scabbing or an increased sensitivity to the sun while undergoing treatment.

**Photodynamic therapy**

Photodynamic therapy (PDT) is an in-office treatment in which a photosensitizing chemical is placed on the affected area for a given period of time (the incubation period) and then activated by a light source — usually blue and/or red light, Intense Pulse Light (IPL) or Pulsed Dye Laser (PDL). This targets the skin cancer cells and destroys them. It is only FDA-approved for precancerous actinic keratoses, not for skin cancer. It has been used to treat very superficial BCCs and SCCs with success, although cure rates and recurrence rates vary considerably. The efficacy can be improved by scraping the cancers first to allow better absorption of the chemical. Common side effects include redness, swelling and increased sensitivity to the sun for a few days following treatment.

**Cryotherapy**

Liquid nitrogen can be used to treat very superficial skin cancers in patients who are not surgical candidates. The tumor may need to be treated several times to achieve a complete cure, although cure rates tend to be lower than other treatment options, especially the surgical methods. After treatment, the lesion often becomes red, crusted and scabbed and can take a week or longer to fully heal. Pigmentation may be altered after treatment, resulting in a white scar.

**Radiation**

Radiation may be used in skin cancers that cannot be completely removed with surgery because they are large in size or the patient is not a surgical candidate. Radiation involves directing x-ray beams on the tumor in order to destroy it. A series of treatments over several weeks is often required.

**Oral medications**

Occasionally, BCC may become advanced and spread so deeply into the skin that surgery cannot adequately remove the tumor without causing significant functional or cosmetic damage. In rare cases, the BCC actually metastasizes and spreads to other parts of the body. Vismodegib and sonidegib are medications that target a known signaling pathway that promotes the cancer to grow. It is taken orally and may cause some temporary side effects such as loss of taste, hair loss and gastrointestinal upset.

Consult your board-certified dermatologist to discuss which treatment option is best for you.