Basal Cell Carcinoma

What is basal cell carcinoma?
Basal cell carcinoma is a form of skin cancer that usually results from exposure to sunlight or ultraviolet radiation. It is the most common type of skin cancer, and the most common type of cancer in humans overall.

The skin is made up of multiple layers, and the top protective layer, the epidermis, has several sub-layers working to maintain the skin. One of these sub-layers is called the basal layer and is made up of basal cells. When basal cells become damaged, they create more damaged cells, which appear as malignant growths, or carcinomas, on the skin. Basal cell carcinomas typically grow slowly and rarely spread, or metastasize, to other parts of the body.

Who gets basal cell carcinoma and why?
Each year, almost 3 million Americans are diagnosed with this condition. People who are exposed to the sun for long periods and have light-colored eyes and hair are more prone to developing basal cell carcinoma. Excessive sun exposure can cause certain chemical changes that damage the DNA of the skin cells and affects the body's instructions for how the cells replicate. As a result, the skin reproduces damaged basal cells instead of normal ones. These growths generally appear on all sun-exposed areas, such as the arms, legs, neck, back and head. Although this condition is more common in people over 40, it can also occur in younger people, even children, particularly if they have experienced severe sunburns at an early age.

How is basal cell carcinoma diagnosed at the lab?
A basal cell carcinoma usually can be removed using surgical techniques done in a healthcare provider's office. If a growth appears potentially cancerous, the healthcare provider will send a tissue sample to a pathology lab for further diagnosis. The tissue sample is then examined under a microscope by a surgical pathologist, preferably one with a subspecialty in dermatological pathology, who can confirm whether the abnormally growing cells are cancerous.

How is basal cell carcinoma treated?
These skin cancers grow very slowly and most often can be cured when treated early. A healthcare provider generally will apply a topical numbing anesthetic and remove the growth using a small scalpel. Some may also be treated by cryotherapy (freezing). Sometimes basal cell cancers can return, but they almost never spread to other parts of the body. However, if left untreated, they can become very disfiguring, especially when on the face. Other forms of treatment include radiation therapy and Mohs surgery.

Prevention is very important to reducing the risk of skin cancer. Wearing protective clothing outdoors, particularly a hat that shades the face and neck, and wearing sunscreen that blocks both UVA and UVB ultraviolet light, can protect the skin from sun damage. In addition, minimizing sun exposure between 10:00 a.m. and 4:00 p.m. when the sun is strongest, even on cloudy days, can help prevent basal cell carcinomas from developing.
Basal Cell Carcinoma

Learn more!
These trusted sources provide more information about basal cell carcinoma and associated risks:

www.skincancer.org
An international organization devoted to education, prevention, early detection, and prompt treatment of the world's most common cancer.

www.cancer.gov/types/skin
General information about different types of skin cancer and treatment options from the National Cancer Institute.