Squamous cell carcinoma is a common type of skin cancer with over 400,000 cases in the US yearly. Luckily, it is not usually a threat to life as secondary spread is uncommon. Squamous cell carcinoma (SCC) typically affects people of fair complexion. Lesions develop in areas which have been exposed to the sun over a long period. SCCs vary in size and growth. They can be symptomatic. Rarely, SCCs develop in old burn scars, injuries, and ulcers. SCCs often develop from solar (actinic) keratoses. These may appear as harmless "sun spots" such as small, red scaly patches occurring in sun damaged skin. If a keratosis has become thicker or larger, it may have converted. Some SCCs appear as sores which fail to heal. A common site is the bottom lip - if a sore has not gone in 4 weeks. It is often crusty and may bleed. A pre-cancerous lesion known as Bowen's disease can precede invasive SCC. This is a flat, red scaly patch up to several centimeters wide, often found in large numbers on the lower legs. The development of a lump or bleeding in Bowen's disease may indicate the beginning of invasive SCC.

An alarming lesion which is a low grade SCC is known as a keratoacanthoma. Often this is a dome-shaped nodule 2 or 3 cm in diameter over a few weeks! Luckily, KAs are rarely dangerous but untreated they can leave ugly scars and can evolve into a more aggressive variant of SCC. Surgical removal is advised. Most SCCs slowly enlarge, making early treatment more beneficial.

Most SCCs remain localized but they can occasionally spread to other sites of the body (metastases or secondary growths). These usually develop in the lymph glands, and are most likely if the original SCC is on the lip or ear. Secondary growths are more difficult to treat than the original skin lesion, as surgery may not always remove them completely.

Treatment The treatment for a SCC depends upon its type, its size and location, the number to be treated, and the preference or expertise of the doctor.

***Excision - The lesion is cut out and the skin is stitched up. ***Freezing - Cryotherapy with liquid nitrogen. ***Shave, curettage, & cautery (and other similar techniques) Many skin cancers can be successfully treated by shaving off or scraping out then cauterizing. The wound usually heals rapidly without the need for stitches. ***More complex surgery - Patients with larger lesions or one in a difficult site may be treated with three different types of excision including frozen section, delayed closure, and Moh's excision. Because these lesions following removal often leave a larger defect; a flap, graft, or second intention healing to repair the defect after excision may be needed. ***Radiotherapy (X-ray treatment) - can be used for some skin cancers, usually on the face.

Whatever the chosen treatment, SCC can usually be cured. Occasionally, SCCs come back at the same site, but they can then usually be treated again effectively.

If you have had one SCC treated, you have an increased chance of developing further SCCs. Early treatment means easier treatment, and less scarring. Wear sunscreens at all times with SPF of at least 50. Have regular skin exams both at our office and at home (monthly). Report any persisting or growing lumps or sores.

** Epidermal Growth Factor (EGFR) inhibitors are being studied.

**__Nicotinomide__ may have prevention effect at 500mg bid

**__Soriatane__ has a chemoprophylactic effect at 25mg po qd

**__Capecitabine__ (500mg bid q other week), side effects fatigue, diarrhea, neutropenia, fever stomatitis. Dihydropyrimidine dehydrogenase deficiency and renal function need to be followed

aspirin, NSAIDS, and sirolimus are being studied.

**__Aldara, Zyclara, Efudex__ may be used in select cases.

www.skincancer.org, www.aad.org, www.nlm.nih.gov/medlineplus/skincancer.html, cancernet.nci.nih.gov, www.cancer.gov, www.cancer.org, http://oncolink.upenn.edu/types/types.cfm?c=18, www.cancernet.nci.nih.gov, www.skin-cancer.com, www.skin-cancer.com www.cdc.gov/cancer/skin

T1 < 2cm

T2 > 2cm T2b > 2 risk factors

T3 > 4cm or bone erosion or invasions of nerve 0.1mm

T4 major bone invasion (risk factors: poor differentiation, perineural invasion, invasion beyond fat)

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