Skin Cancer Prevention & Management in Immunosuppressed Patients

Why is skin cancer surveillance so important in immunosuppressed patients?
Over one million new skin cancers are diagnosed in the U.S. each year; this number is exponentially increasing. Transplant patients, and others on immunosuppressive drug regimens, are more at-risk for a greater number and more aggressive skin cancers over their lifetimes.

Skin cancer is the most common post-transplant malignancy. Studies have shown as much as a 65-fold increase in the incidence of squamous cell skin cancer (SCC), a 10-fold increase in basal cell carcinoma (BCC), and a 1.6-3.4-fold increase in melanoma relative to the rest of the population. Metastatic skin cancer accounted for 27% of all deaths after the fourth year post-transplant in one Australian study. Many transplant patients survive their ordeal only to die of skin cancer a few years later.

Which patients are at greatest risk?
Older patients, those with a history of UV exposure, a history of HPV infection, a previous history of skin cancer, and a greater intensity and/or duration of immunosuppression are most at-risk to develop skin cancers.

Do different immunosuppressive drug regimens have variable effects on the development of skin cancer?
Much research is going on in this area. For example, low dose cyclosporine, or rapamycin may contribute to lower skin cancer incidence in comparison to older drug regimens. The intensity of immunosuppression (more agents used) increases the incidence of skin cancer, so many cardiac transplant patients are more at-risk than some renal transplant patients, for example. Patients on systemic steroids have a 2.31-fold increase in SCC, and a 2.68-fold increase in Non-Hodgkins Lymphoma.

How knowledgeable are most immunosuppressed patients regarding the risk of skin cancer?
Studies suggest that well under 50% of patients on immunosuppressive drugs have ever been educated regarding their higher risk of skin cancer, and most have never been seen by a Dermatologist.

How can you help?
All immunosuppressed patients, including transplant patients, should be followed regularly by a Dermatologist, and taught to perform monthly skin and nodal exams as well. Transplant patients should see Dermatology pre-transplant for a baseline exam and every three months thereafter. High risk patients should be considered for additional prophylactic treatment such as topical 5-fluorouracil, oral retinoids or even radiation treatment. Reduction in immunosuppression can be considered by the Transplant team.
Estimated New Cancer Cases in the United States, 2006

- Pancreas: 33,730
- Leukemia: 35,070
- Uterine Corpus: 41,200
- Non-Hodgkin's Lymphoma: 58,870
- Urinary Bladder: 62,190
- Colon & Rectum: 148,610
- Lung: 174,470
- Breast: 214,640
- Prostate: 234,460
- Non-Melanoma Skin Cancer: >1,000,000