Sometimes, it is more important to treat the patient who has the disease, than the disease the patient has.

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Waterville and Augusta
Skin Cancer – Take Home Messages
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The invitation to give a session on skin cancer was welcome. This was going to be a slam-dunk and I'd have the opportunity to visit my mentor, Mike Lacombe. I've practiced dermatology for around thirty years and a good portion of that time was on Kauai, Hawaii where I was the sole dermatologist. I've seen, and treated, thousands of skin cancers. Basal cells, squamous cells, melanomas, keratoacanthomas, and even a handful of Merkel cell carcinomas. So, create a laundry list, show some gruesome photos and convince the PCPs to send their patients to dermatologists for treatment. **This is CANCER, take it seriously.** Dermatologists are the skin cancer specialists. What a long strange journey concocting this talk has been.

As I thought about it and observed my practice and that of other dermatologists I came to realize that skin cancer has become a cottage industry and the patient can be the unwitting raw material. It's like auto mechanics. Do you trust a new mechanic to decide what has to be done to your car? How can you have confidence that your mother's dermatologist will do what is necessary and to not over treat because she is an income source from Medicare? What can be followed and handled by non-specialists safely, effectively and more cost-effectively? This is pertinent for central Maine where there is a paucity of dermatologists.

On April 3, 2008, I saw a 55 year old woman with a small superficial BCC on the right shoulder. I told her about a cream we could use to eradicate it and she related that a few years ago she had had a similar lesion removed by a Mohs surgeon in the South from her other shoulder. Now, imiquimod may not have been available then, but Mohs surgery for a lesion on the shoulder is more a function of supply of Mohs surgeons than of patient need. In the U.S. over 1000 dermatologists practice microscopically controlled surgery as opposed to 10 in Canada. Yes, the cure rate with Mohs is higher than with

other methods (98% as opposed to 90 – 95%); but for a small superficial BCC on the shoulder it hardly matters since these lesions are indolent and never metastasize.

Every peddler praises his needles

so "caveat emptor."

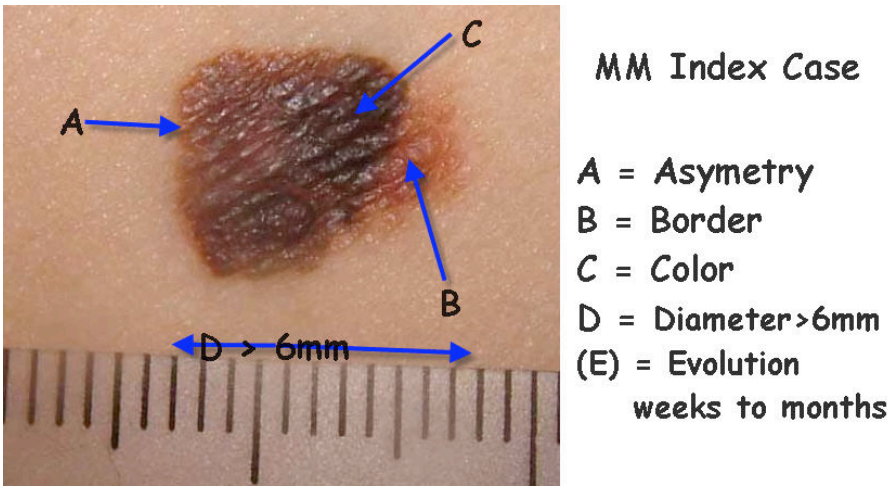
This case brings up the concept of **"Turtles, Birds and Bears"** which addresses the real, as opposed to the feared, risks of skin cancer. This simple memorable formula was elaborated in a fine article by Christie Aschwanden on sunscreens and skin cancer that appeared in the July 10, 2007 New York Times. Aschwinden argues that cancers follow three basic patterns: turtles, birds and bears.

1. Turtles move so slowly that you can still capture them while they're moving along;
2. Birds fly away so quickly that you can't catch them in time;
3. The bears can escape if you ignore them, but if you catch them in time, you can capture them.

Here in Central Maine, you have one or two dermatologists and they are very busy. It's hard to get an appointment. A patient will see a PCP (an awful acronym, but whatever!) or a "health care provider (read NP or PA) with her question. As a F.P., internist, general surgeon, P.A. or N.P. you can handle 90+% of the skin cancers you see. Here are some guidelines that I'd suggest based on three decades of experience.

Melanoma. There are ~ 60,000 melanomas a year in the U.S. About ½ are diagnosed by dermatologists. I see around three or four a year. A non-dermatologist might encounter three or four fresh melanomas in his career. Today, most melanomas are cured with simple excisional surgery following established guidelines. Ninety percent of melanomas are pigmented and the bad actors grow rapidly (over a period of weeks to months). They are usually greater than six mm in diameter, have a play of color, smudged and irregular borders. The key thing is behavior. Behavior trumps appearance. What is going on with the lesion? I would recommend that if you are concerned about melanoma you write me or have your patient see a dermatologist promptly since a proper diagnostic biopsy is helpful. By this, I mean an excisional biopsy if possible.

Archetypal Melanoma



The above is a picture of an actual melanoma seen in my practice. It was noted in the axillae of a 33-year old woman by her mother. It was a new lesion that the patient was not aware of (indicating, perhaps, recent growth) and its appearance warranted biopsy. This confirmed a thin melanoma less than 1 mm thick that was cured with simple in-office surgery and no need for sentinel lymph node dissection.

An important article appeared in the J Am Acad Dermatol a number of years ago on how melanomas are discovered (see Ref. # 10).

Who Makes the Dx of Melanoma?

In Men	In Women
42% made by patient	66% made by patient
23% by wife/girlfriend	2% by husband/boyfriend
35%by physician	32% by physician

"To talk of disease is an Arabian Night's Experience." I will relate three melanoma chronicles. and have many more.

Nonmelanoma Skin Cancers: Basal Cell, Squamous Cell (and Keratoacanthoma)
NMSC are relatively benign with certain caveats. The death rate from these lesions is quite low. It is, however, embarrassing if one misses one of these and a dermatologist or plastic surgeon leads your patient to believe that they had or have **CANCER** and that the derm or plastic man) found it just in time. The lesions you have to watch out for are those around the ears, nose, and inner canthi. Immunosuppressed patients can sometimes have aggressive lesions; especially patients with lymphoproliferative disorders.

Basal Cell Carcinomas are the archetypical turtles. They are slow growing and invade only locally. It is estimated that there are > one million in the U.S. per year. I have seen two patients lose ears because they were treated improperly (both by the same plastic surgeon). So it is your responsibility to make sure patients with BCC (and SCC) in the critical areas are referred appropriately.

Squamous Cell Carcinomas are less common than BCC. One sees ~ 4 – 5 BCC per SCC. Most SCCs are similarly benign with the same caveats as BCC. While the majority of SCCs are caused by ultraviolet radiation, a small subset is induced by chronic inflammation or evolves in old burn scars. These have the potential to be bears or birds. Microscopically, they are poorly differentiated. So it's important when getting a path report to note whether the differentiation of the cells is noted. Immunosuppressed patients may have more dangerous SCC. Occasionally these lesions can metastasize.

Keratoacanthomas are seen with some regularity. They are not skin cancers. Under the microscope they are often indistinguishable from well-differentiated SCC. KAs grow rapidly over a period of weeks, plateau and if left alone regress over four to six months. If you biopsy them, they get signed out as well-differentiated SCC. Pathology is a 19th century science. A pathologist looks at the specimen at one moment in time. They often

haven't received an adequate history and must report what they see. With KAs the history is all-important. KAs around the mouth, ears, nose and eyes can be problematic and if large can cause significant morbidity if not treated.

Actinic Keratoses (AKs) are cash cows for many dermatologists. These over-worked businessmen and women rush from room to room with spray bottle in hand and dispense the sacrament of liquid nitrogen from the censor of the spray bottle. What they should know, but often forget, is that AKs are not skin cancers, but mild dysplasias caused by ultraviolet light in (for the most part) patients with Type I – II skin. Family history is important, because DNA repair plays a role. Many "prominent" U.S. dermatologists want to call AK, "Squamous Cell Carcinoma Grade ½." This is an insidious, cynical and fear-mongering tactic. It also allows them to bill for removal with a malignant rather than a benign lesion code.

Let me tell you a story. In the 1980s, Robin Marks, an Australian dermatologist did a study of AKs in Oz. He selected a town with ~ 3000 adults and with his colleagues screened every person over the age of 40 annually for five years. Most had AKs. They had a hard time finding any that changed into SCC (although the conventional wisdom at the time was that the malignant transformation rate was 10%). Indeed, 25% of the lesions disappeared in given year (and the patients developed new lesions). They estimated the malignant transformation rate to be < 1/500. No U.S. or Australian journal would touch Marks' study because dermatologists in these areas run around with spray bottles generating income. The British Journal of Dermatology did publish the two-part article but it never caught fire and has been forgotten. No one invited Marks to speak about his work (except me at a conference in Hawaii) and he stopped speaking about it because he liked to lecture to dermatologists at international conferences. The textbooks still say that the malignant transformation rate can reach 10% and everyone is happy. Except, perhaps, some patients who smell a rat. The important thing to recognize about AKs is that they are markers for patients with deficient DNA repair mechanisms and indicate that the patient is at risk for SCC, BCC and probably melanoma. So these people need to be screened yearly or twice semi-annually. Marks recently revisited this area in an editorial in the British Journal of Dermatology. The essay, "Who benefits from calling

a solar keratosis a squamous cell carcinoma?" is well worth reading and will be posted of a web site.

No one can get to be competent with Skin Cancer after one talk. But, there are strategies that can help.

When thou arte callde at anye time,
A patient to see:
And dost perceave the cure to grate,
And ponderous for thee:

See that thou laye disdeyne aside,
And pryde of thyne own skyll:
And think no shame counsell to take,
But rather wyth good wyll.

Get one or two of experte men,
To helpe thee in that neede;
To make them partakers wyth thee
In that work to procede.... John Halle (1529 – 1568)

With the support of Drs. Onion and Schneid, I have started the **Maine Virtual Skin Clinic**. This can serve as a free, electronic consultative service for patients with skin disease and will be a good resource for patients for whom you need a quick opinion. A recent case illustrative can be viewed at: http://www.mevirtualskin.blogspot.com (go to entry of March 11, 2008. If you have cases to present, there's a standard format. You can become an author if you ask me, or I can upload your presentation (it takes 10 – 15 minutes). This is a great learning experience! It is also a service to patients who may have to wait a long time or travel great distances to see a dermatologist.

I will also put a **Skin Cancer Overview on Dermatology Central** a blog that can serve as a reference to those who may want more information and a few photos. The link is http://dermatologycentral.typepad.com/resource/

REFERENCES AND RESOURCES

1. **eMedicine.com http://www/emedicine.com**
This is free and accessible to all. There are good chapters on all the common skin cancers.

2. **Dermatology Atlases:** There are many useful ones. Here are two of the best.

DermIS: http://www.globalskinatlas.com
This is free and comprehensive

Global Skin Atlas http://www.globalskinatlas.com One can get a free user code to use this. Good photos from Australia.

If you want more resources, please contact me.

3. **Spontaneous remission of solar keratoses:** the case for conservative management.
Marks R, Foley P, Goodman G, Hage BH, Selwood TS.
Br J Dermatol. 1986 Dec;115(6):649-55.
Abstract: One thousand and forty people aged 40 years and over, 616 (59.2%) of who had solar Keratoses, were followed for 12 months. Two hundred and twenty-four people (36.4%) had a spontaneous remission of at least one of their solar keratoses. A total of 485 lesions (25.9%) underwent spontaneous remission out of the 1873 lesions that were present at the first examination of these 224 people. There was no significant difference between the number of lesions present at the initial examination in those who had a spontaneous remission compared with those who did not. There was a 21.8% increase in the total number of solar keratoses in the1040 people studied in the 12-month period, due to new lesions forming at the same time as remissions were occurring. The incidence rate of squamous cell carcinoma occurring in the people with solar keratoses was 0.24% for each solar keratosis present at the original examination. **With a substantial proportion of solar keratoses remitting spontaneously, plus the low rate of malignant trans-formation and the low potential for metastasis to occur from squamous cell carcinoma arising in a solar keratosis, the rationale of treating all solar keratoses appears questionable.**

I have put discussion about this article at:
http://dermatologycentral.typepad.com/resource/skin_cancer/index.html

6. **Who benefits from calling a solar keratosis a squamous cell carcinoma?**
Robin Marks, Br. J. Dermatol 2006:155;23-26
Super article – see http://www.dermatologycentral.typepad.com Category Skin cancer for PDF of this article.

6. **Maine Virtual Skin Clinic** http://www.mevirtualskin.blogspot.com
Please let me know if you want to join this list, and feel free to present cases for discussion

7. **Turtles, Birds and Bears** is described in "Doctors Balk at Cancer Ad, Citing Lack of Evidence" By CHRISTIE ASCHWANDEN, New York Times, July 10, 2007. See: http://dermatologycentral.typepad.com/resource/2007/07/turtles-birds-a.html

8. The **Ugly Duckling Sign** was first described in a letter in the Archives of Dermatology 1998;134:103-104 by J.J. Grob and Bonerandi from Marseilles, France **UD** helps to distinguish atypical (dysplastic) nevi and early melanomas from benign nevi.

9. **Skin Cancer Overview** I have just started to create this page. It is envisioned as a resource for patients, their families, physicians and allied health care workers. It's a work in progress. Go to: **http://dermatologycentral.typepad.com/resource/**
or go to http://www.dermatologycentral.typepad.com and click on "Skin Cancer" category and it is the 2008.4.6 entry.

10. **Who discovers melanoma?** Koh HK, et.al, J Am Acad Dermatol. 1992 26:914
Purpose: to assess patterns of melanoma discovery and determine the patients' role in finding their own lesions.

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Websites of interest:
Virtual Grand Rounds in Dermatology: www.vgrd.org
VGRD Blog: www.vgrd.blogspot.com
Maine Virtual Skin Clinic: http://www.mevirtualskin.blogspot.com