

Skin Cancer



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Why Discuss Skin Cancers?

They are very common.

They can cause mortality (especially melanoma)

- Risk of mortality can be reduced by early detection

They can cause significant morbidity

- Morbidity can be reduced by early detection

Primary care doctors are in an excellent position to find many skin cancers

Skin Cancers are Very Common

Basal Cell and Squamous Cell Cancers:

- The two most common cancers in humans.
- 5.4 million new cases in US in 2012 (vs 3.5 million new cases in 2006)
 - Compared to 1.6 million cases of all other types of cancer in US in 2012*
- This is the most recent study.
- Reporting of BCC and SCC isn't required, so this is likely an underestimate.

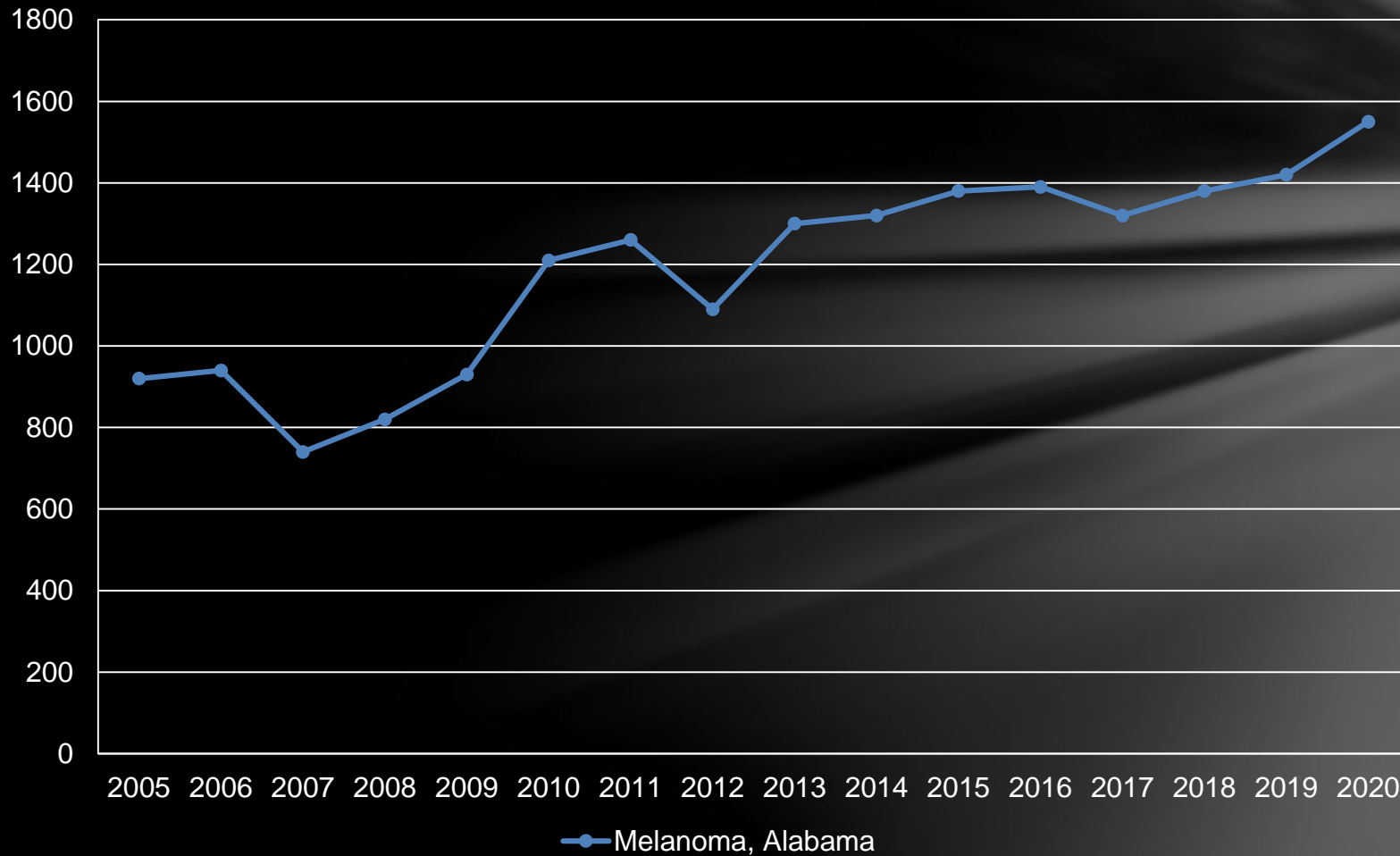
Melanoma:

- 5th most common new onset cancer in men in 2019 (7% of all new cancers)*
- 5th most common new onset cancer in women in 2019 (5% of all new cancers)*
- Probability of developing Melanoma in US (2013 – 2015):
 - Men: 1 in 215 by age 49, 1 in 27 lifetime risk
 - Women: 1 in 150 by age 49, 1 in 40 lifetime risk

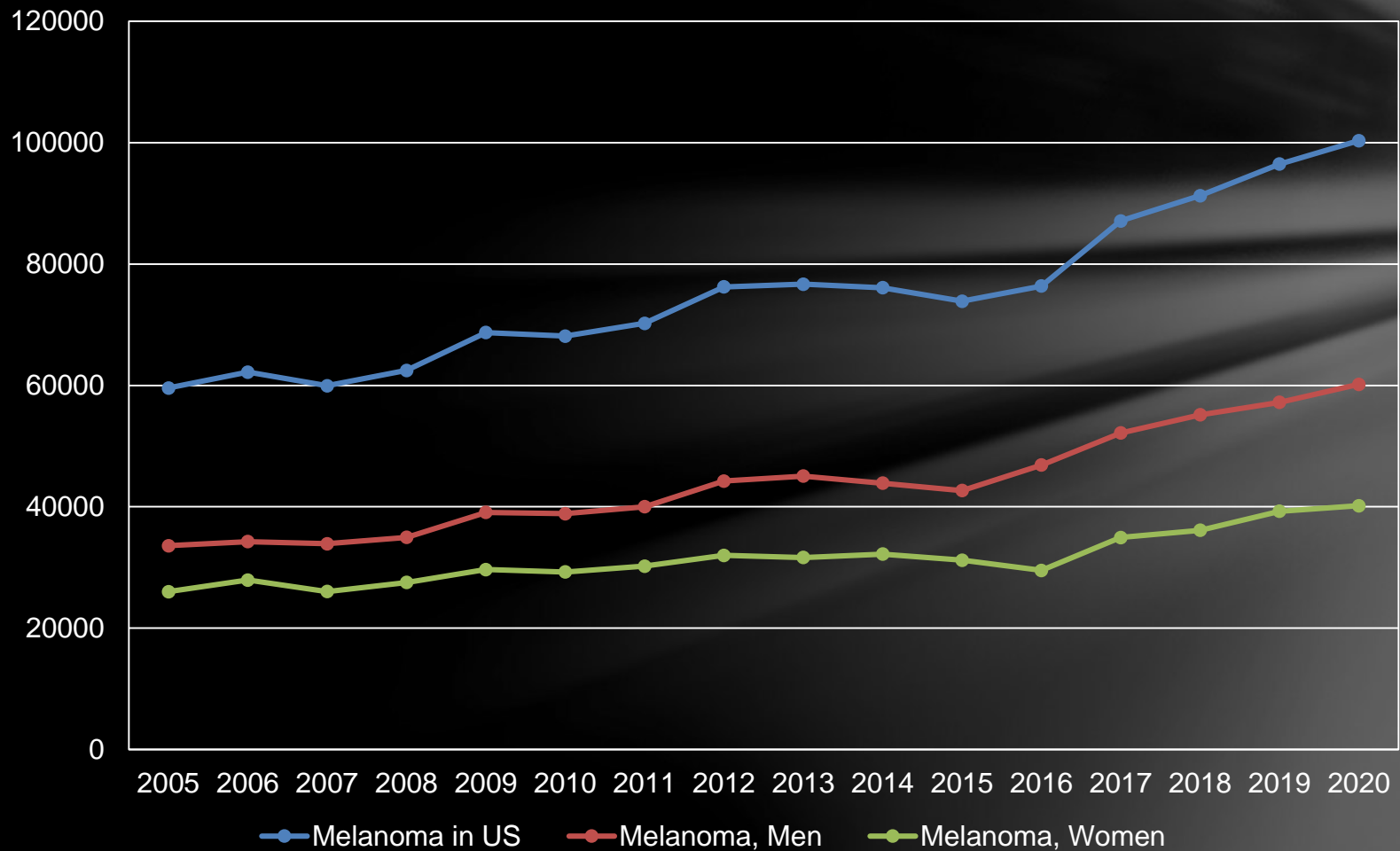
- Doesn't include Basal Cell, Squamous Cell, or *in situ* cancers.

(American Cancer Society, Cancer Facts and Figures 2019; 4-5, 14, 24)

Incidence of Melanoma in Alabama



Incidence of Melanoma in US



Skin Cancers can cause Mortality

Nonmelanoma Skin Cancer Cancer:

- 3,400 deaths in US in 2015

Melanoma:

- 7,230 deaths in the US in 2019
- Not in top 10 causes of cancer deaths

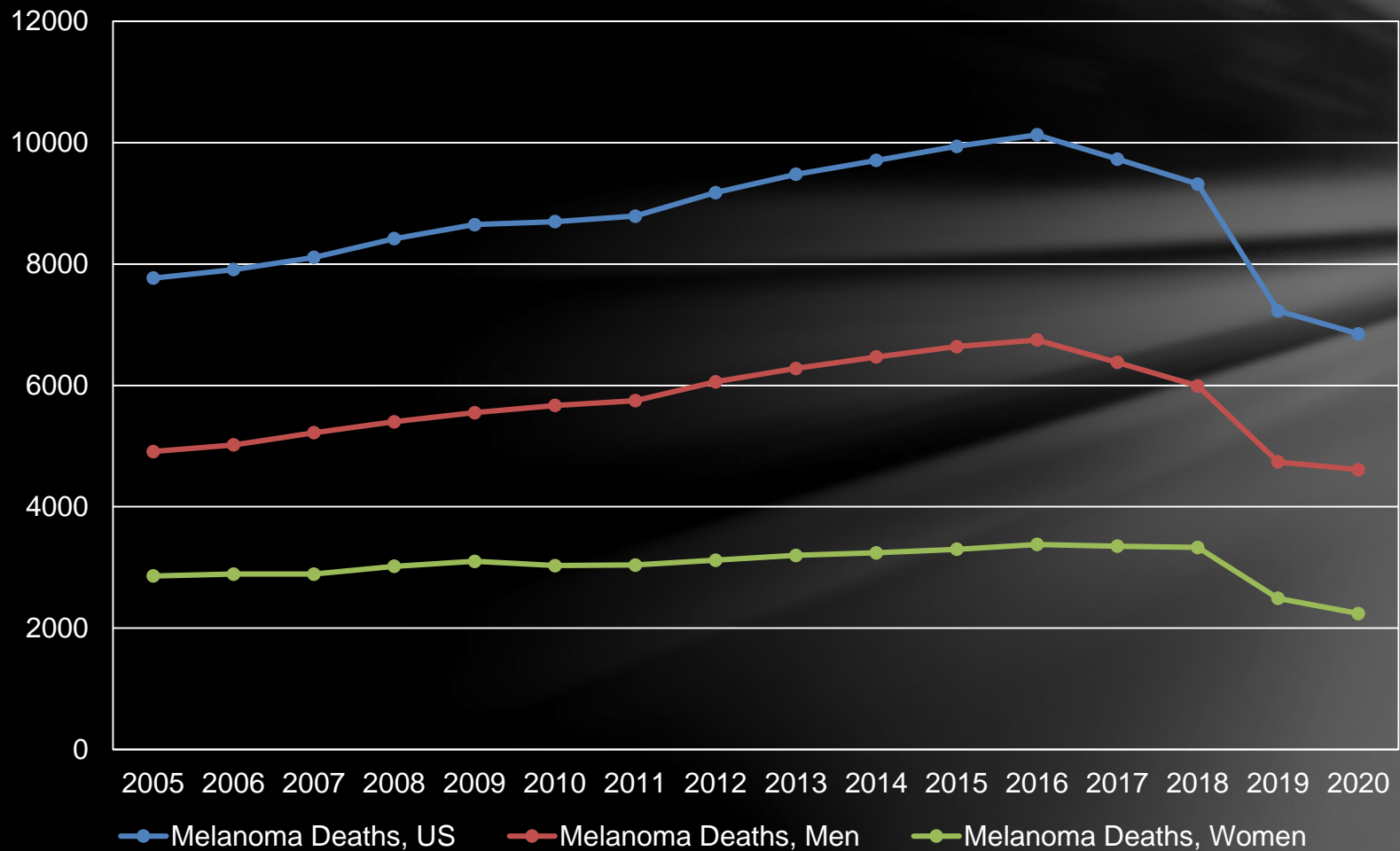
5 Year Survival Rate:

1975-77: 82%

1987-89: 88%

2008-14: 94%

Melanoma Deaths in US



Skin Cancers can cause Significant Morbidity

Deformity due to local tissue destruction

Pain and itching

- More common with increasing depth of invasion, esp BCC and SCC
- Only 1/3 skin cancers have any pain or itching

Bleeding

Hygiene problems

Primary Care Doctors are in an Excellent Position to find Skin Cancers

Patients frequently don't even notice a skin cancer.

Patients who do notice a skin cancer frequently think that it is a:

- Pimple
- Cyst
- Traumatized site
 - "I keep cutting this spot with my razor."
 - "I bumped this spot, and it's just slow to heal."
- Benign lesion (mole, wart)
- Foreign body

Since the patient isn't worried, he/she doesn't mention it to the doctor.

A skin exam may reveal a previously unknown suspicious lesion

- Since Primary Care Doctors see patients regularly, they are in a position to find many skin cancers.

Risk Factors for Skin Cancer

UV Light Damage

- History of significant sun exposure or sun burns (esp childhood)
- Physical markers of sun damage
 - Dry, thin, wrinkled skin
 - Leathery skin
 - Pigmentary disorders
 - Freckles, lentigines
- Light skin, hair and eyes
- Tanning beds are “carcinogenic to humans”¹

¹World Health Organization International Agency for Research on Cancer 7/28/2009

Risk Factors for Skin Cancer (cont)

Personal history of Skin Cancer

Many moles

Immunosuppression

Ionizing Radiation

Chemical Exposure

Human Papilloma Virus

Chronic Inflammation

Cigarette Smoking

Basal Cell Carcinoma

Superficial Spreading

- Thin, red or pink plaques

Nodular

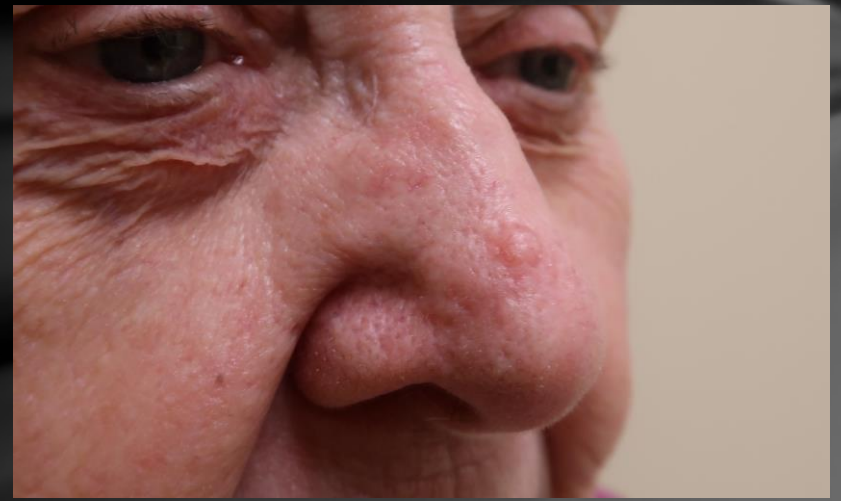
- Well defined, pearly, translucent nodule
- Central dimple or ulceration
- Can be flesh colored or pigmented
- May have a spider vein in it

Sclerosing (Morpheaform)

- Flat or indented, hypopigmented, looks like a scar
- Borders poorly defined



Basal Cell Cancer



Basal Cell Cancer



Basal Cell Cancer



Basal Cell Cancer



Basal Cell Cancer

Squamous Cell Carcinoma

SCC in situ

- Scaly, red plaque
- May be white, hyperkeratotic

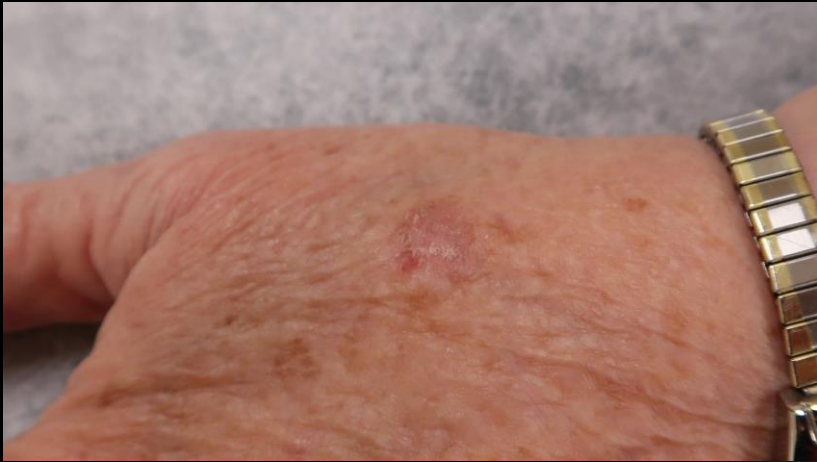
Well Differentiated Invasive SCC

- Painless, raised, flesh colored or red nodule
- May have scab or ulcer
 - Often the scab is attributed to trauma
 - Non healing scabs and ulcers should be biopsied
- May have keratotic crust
- May look like an advanced actinic keratosis, a wart or cutaneous horn

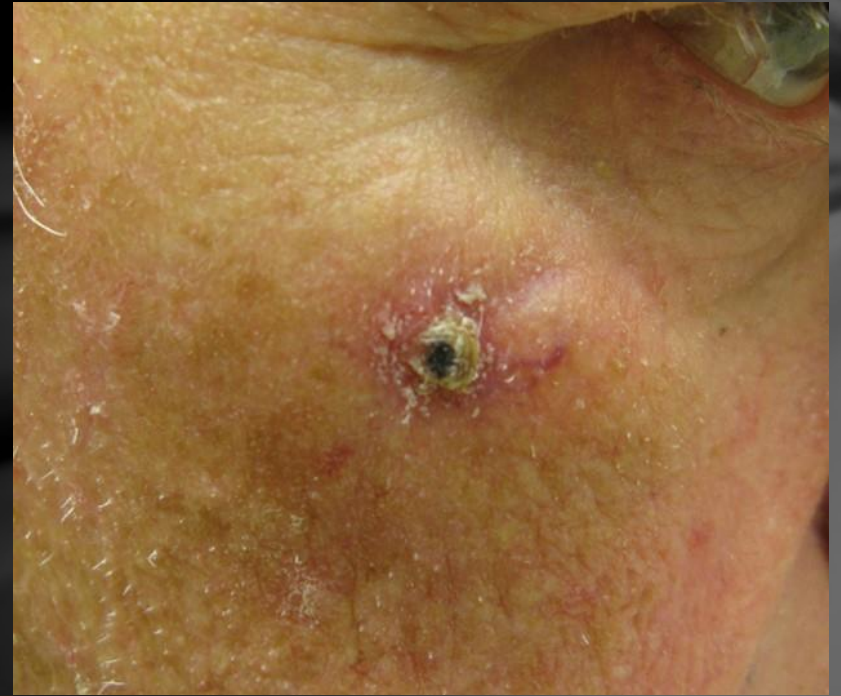
Keratoacanthomatous Type SCC

- Rapidly growing nodule with central keratinaceous plug

Take note if path report mentions perineural invasion!!



Squamous Cell Cancer *in situ*



Squamous Cell Cancer



Squamous Cell Cancer



Squamous Cell Cancer



Squamous Cell Cancer



Squamous Cell Cancer

Melanoma: Risk Factors in a Pigmented Lesion

A: Asymmetry

B: Border irregularity

C: Color

- Shiny black, blue, red, violet
- Variegated
- 1% are not pigmented

D: Diameter > 6mm

- Size of a number 2 pencil eraser

Evolving

- Changing over weeks



Melanoma *in situ*



Melanoma (0.82 mm)



Melanoma (0.40 mm)



Melanoma (1.00 mm)



Melanoma (0.28 mm)



Melanoma



Melanoma



Melanoma (5.65 mm)



Melanoma



Melanoma

Survival Rate for Melanoma

5 Year Disease-Free Survival		
	2000	2011
All Melanomas Combined	88%	91%
Local Disease	95%	98%
Regional Disease	58%	62%
Distant Metastasis	13%	16%

Most important prognostic factor is thickness!

(American Cancer Society, Cancer Facts and Figures 2011; 21)

(American Cancer Society, Cancer Facts and Figures 2000; 15)

Actinic Keratosis

Not cancer, but increased risk for malignant transformation

- Also called Solar Keratosis
- Most common premalignant lesion
- 1 - 10% of Actinic Keratoses progress to Squamous Cell Cancer
- People that have an actinic keratosis frequently have many of them

Rough, raised, red patches in sun exposed areas

May be white, hyperkeratotic



Actinic Keratosis



Actinic Keratosis

Seborrheic Keratosis

Waxy, raised, “stuck on” appearance

Gray, brown; sometimes tan, yellowish orange

Often fits the description of the ABCDEs of a lesion that is suspicious for melanoma

Benign, no increased risk of malignancy





Seborrheic Keratosis

Lentigo

Pigmented – light, medium, or dark

Usually well defined border

Can be solitary or multiple



Merkel Cell Carcinoma



Options to Work Up/Treat a Skin Lesion

Do nothing

Topical Agents

- 5-FU (Efudex, Fluoroplex)
- Imiquimod (Aldara, Zyclara)

Cryotherapy: Works well on very thin lesions

- Don't use on lesions that are suspicious for melanoma or "pre-melanoma"

Photodynamic Therapy

- +/- curettage or scraping before applying sensitizer
- Photosensitizer (aminolevulinic acid or methyl aminolevulinate)
- Treat with 417 – 740 nm (blue to red) 1 – 4 hrs, once or twice

Tangential Excision

Incisional Biopsy

Full Thickness Excision

Take Home Points

Skin cancers are very common.

Skin cancers have potential for morbidity and mortality.

Morbidity and mortality can be minimized by early detection.

Do thorough skin exams as part of routine exams.

If a lesion isn't clearly benign, biopsy or refer for biopsy.

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