

Skin Cancer Treatment and Prevention

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SKIN CANCER





SKIN CANCER

Basal cell carcinoma

Squamous cell carcinoma



Nonmelanoma skin cancer/
keratinocyte carcinoma

Melanoma

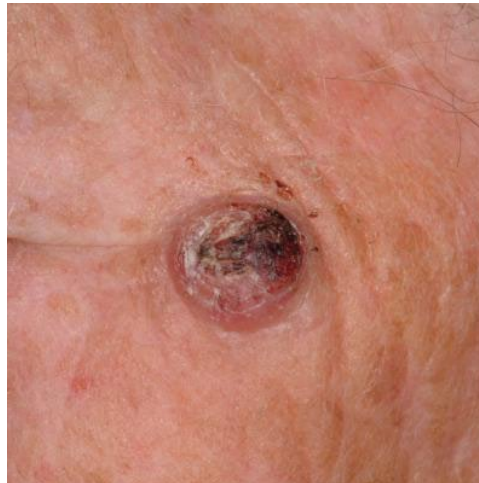


Can metastasize if not caught early

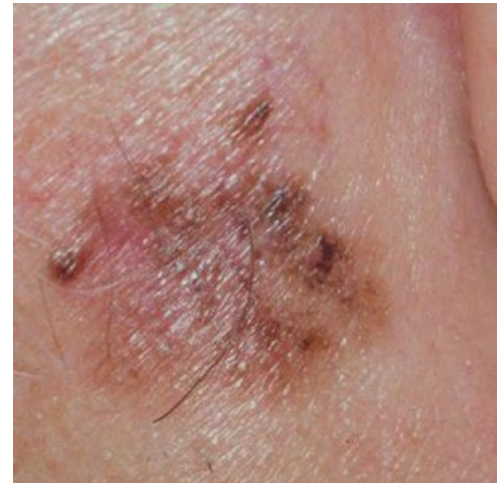
Basal Cell Carcinoma



Squamous Cell Carcinoma



Melanoma



SKIN CANCER ON THE RISE

Nonmelanoma Skin Cancer/Keratinocyte carcinoma (BCC, SCC)

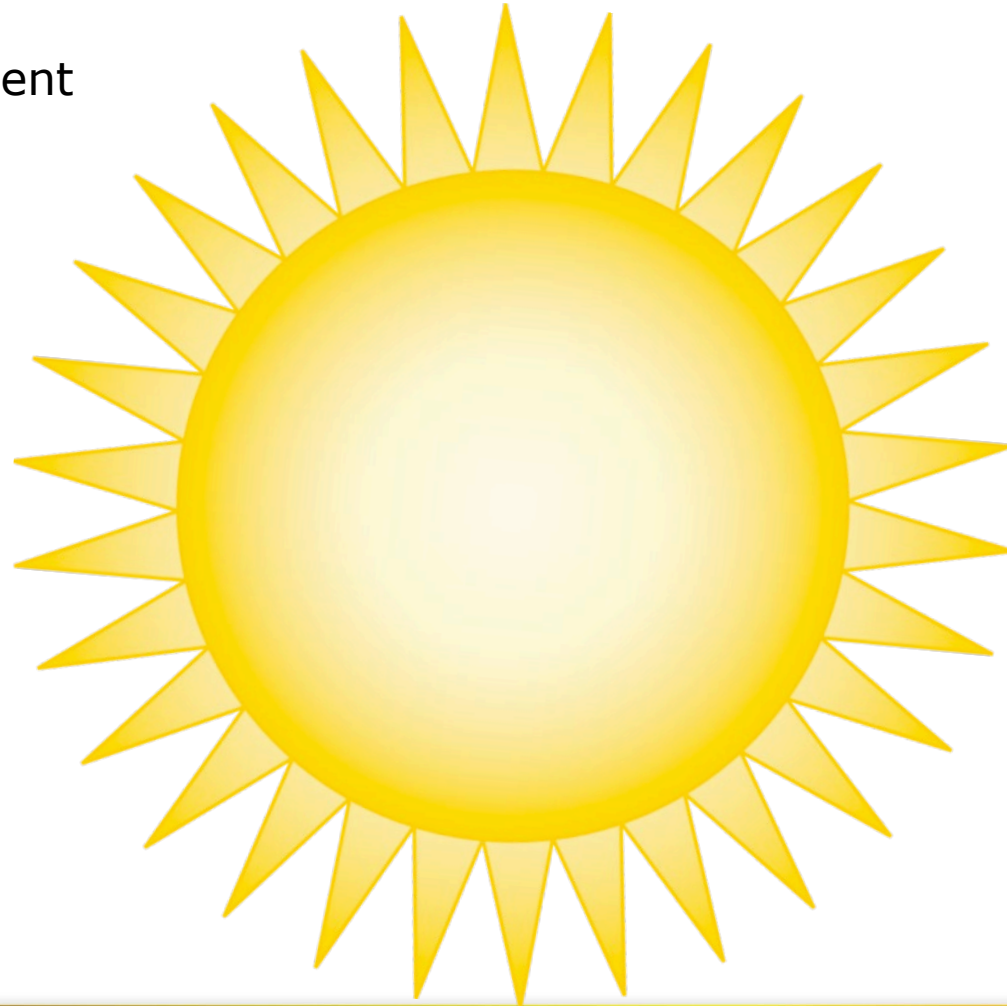
- Skin cancer > breast, prostate, lung and colon cancers combined
- Between 40-50% of Americans who live to age 65 will have either BCC or SCC at least once

SKIN CANCER

SUN exposure

- Cumulative or intense intermittent

Decreased immune system



SKIN CANCER TREATMENT

TREATMENT OF SKIN CANCER

Excision with closure

- 4-10 mm margin of tissue excised
- 95% cure rate

Electrodesiccation and curettage (ED&C)

- Scrape and burn
- 92-95% cure rate

Creams

- 5-fluorouracil, Imiquimod
- 70-90% cure rate

Mohs surgery

- 98-99% cure rate

Frederic E. Mohs (March 1, 1910 – July 2, 2002)



MOHS SURGERY

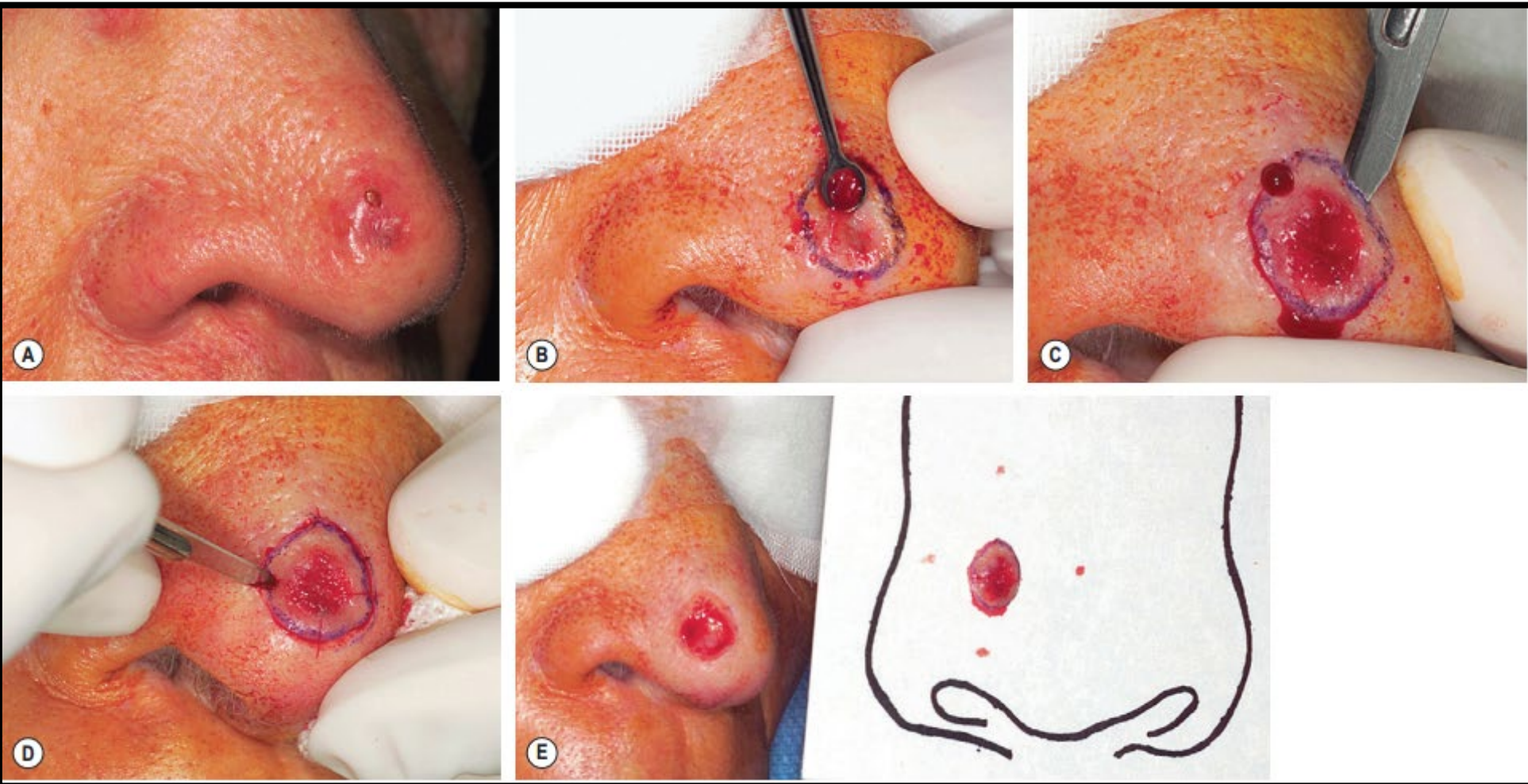
Tissue sparing

100% margin control

Highest cure rate



MOHS SURGERY



MOHS SURGERY

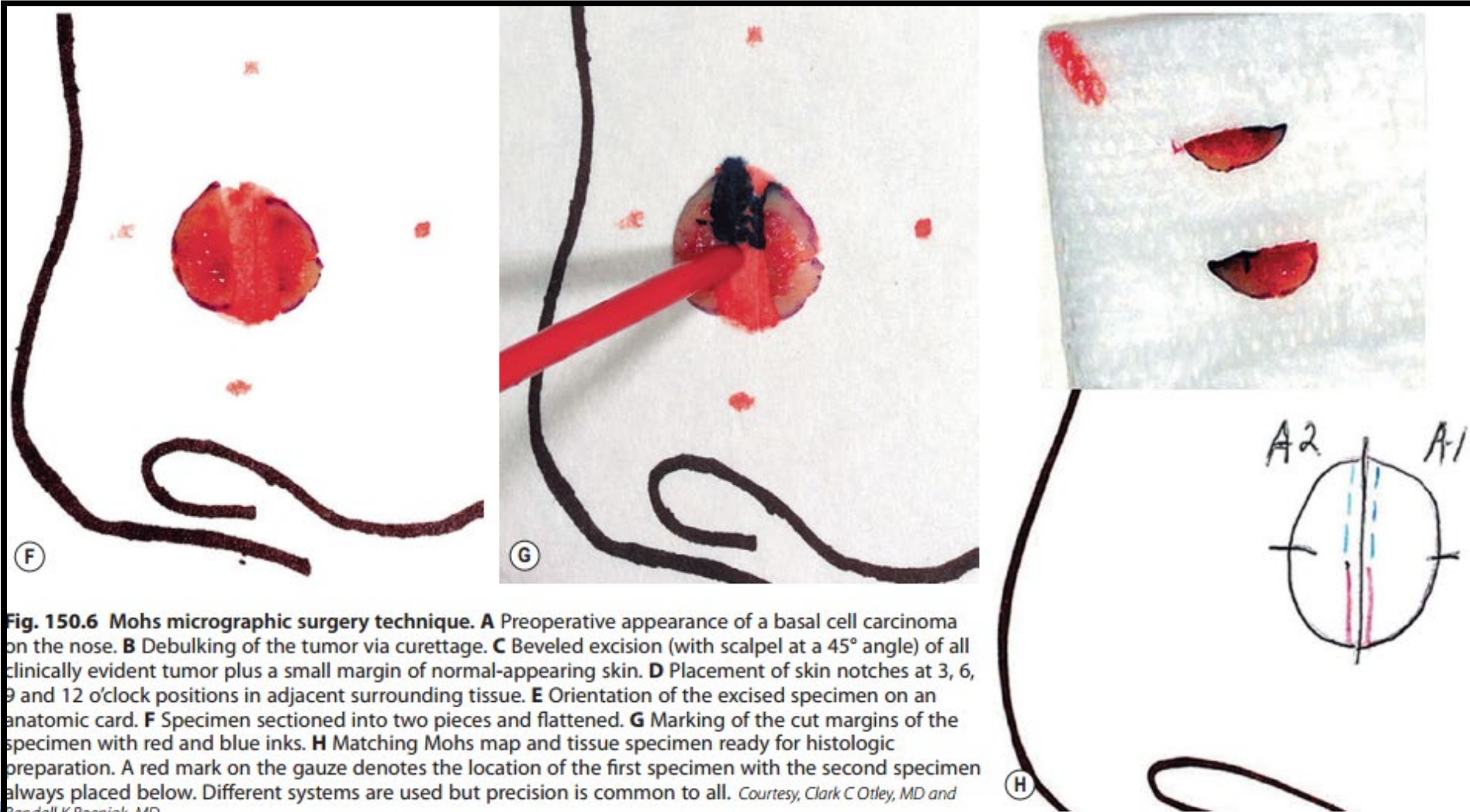
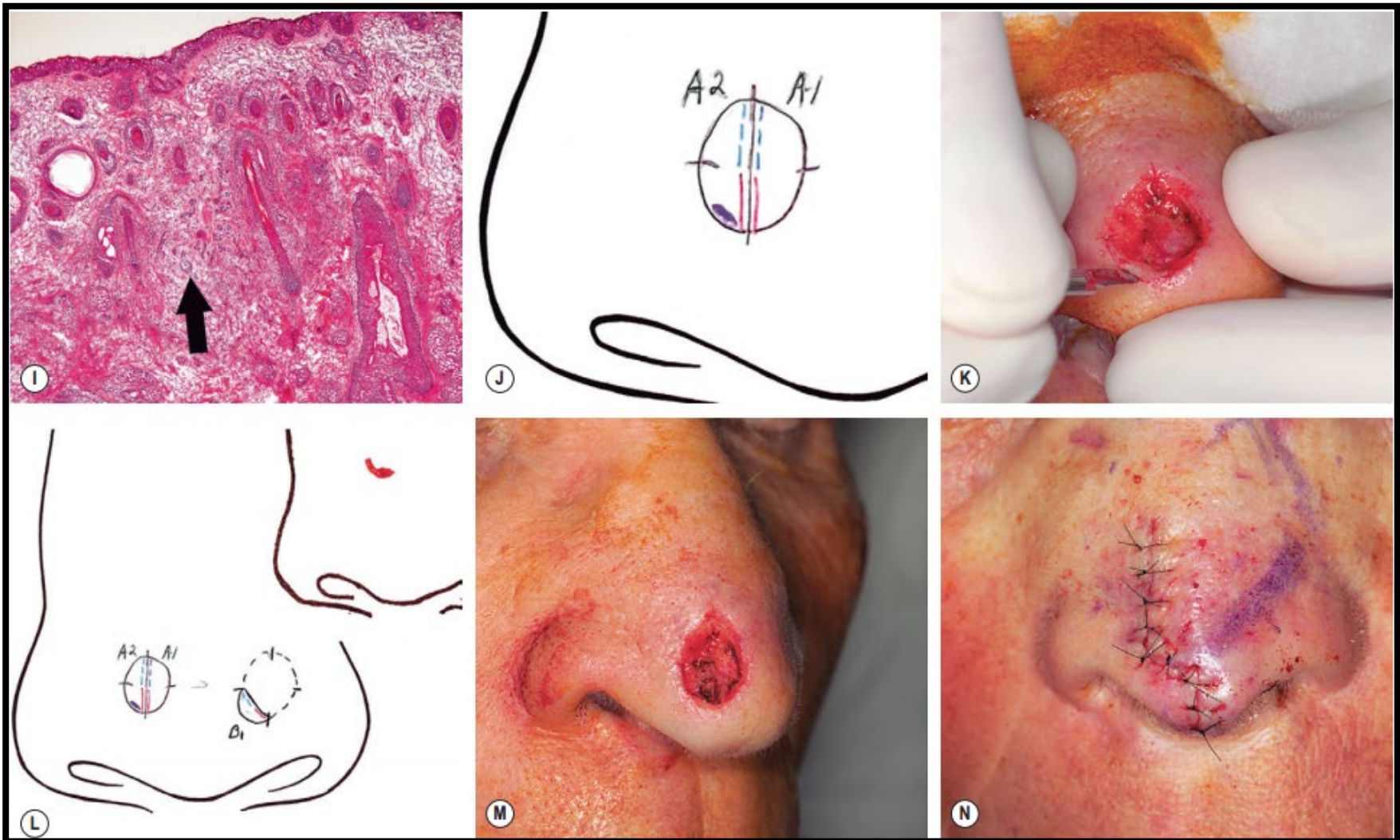


Fig. 150.6 Mohs micrographic surgery technique. **A** Preoperative appearance of a basal cell carcinoma on the nose. **B** Debulking of the tumor via curettage. **C** Beveled excision (with scalpel at a 45° angle) of all clinically evident tumor plus a small margin of normal-appearing skin. **D** Placement of skin notches at 3, 6, 9 and 12 o'clock positions in adjacent surrounding tissue. **E** Orientation of the excised specimen on an anatomic card. **F** Specimen sectioned into two pieces and flattened. **G** Marking of the cut margins of the specimen with red and blue inks. **H** Matching Mohs map and tissue specimen ready for histologic preparation. A red mark on the gauze denotes the location of the first specimen with the second specimen always placed below. Different systems are used but precision is common to all. *Courtesy, Clark C Otley, MD and Randall K Roenigk, MD.*

Continued

MOHS SURGERY



DOES MY SKIN CANCER NEED MOHS SURGERY?

Location

- Head, neck, hands, feet

Recurrent

Large or rapid growth

Aggressive

Decreased immune system

SKIN CANCER PREVENTION

Sun is a **carcinogen**

- DNA Damage
- Immunosuppression → Decreased repair of DNA damage
- Repair mechanisms reduced with age

TOO MUCH DNA DAMAGE → SKIN CANCER

SKIN CANCER PREVENTION

Sun Protection

- Clothing
- Hats
- Shade
- Avoiding peak exposure times

Sunscreen

- Sun Protection Factor (SPF) ≥ 30

SUNSCREEN

Physical Blockers

- Zinc oxide or titanium dioxide
- Inert metal particles that reflect UVA and UVB

Chemical Absorbers

- Absorb energy in UVA, UVB, or both
- Many sunscreens contain both

Body and Facial

- Must reapply
- Proven to decrease actinic keratoses and skin cancers



SUN PROTECTIVE FACTOR

Relationship of SPF to the Blockage of UVB Radiation

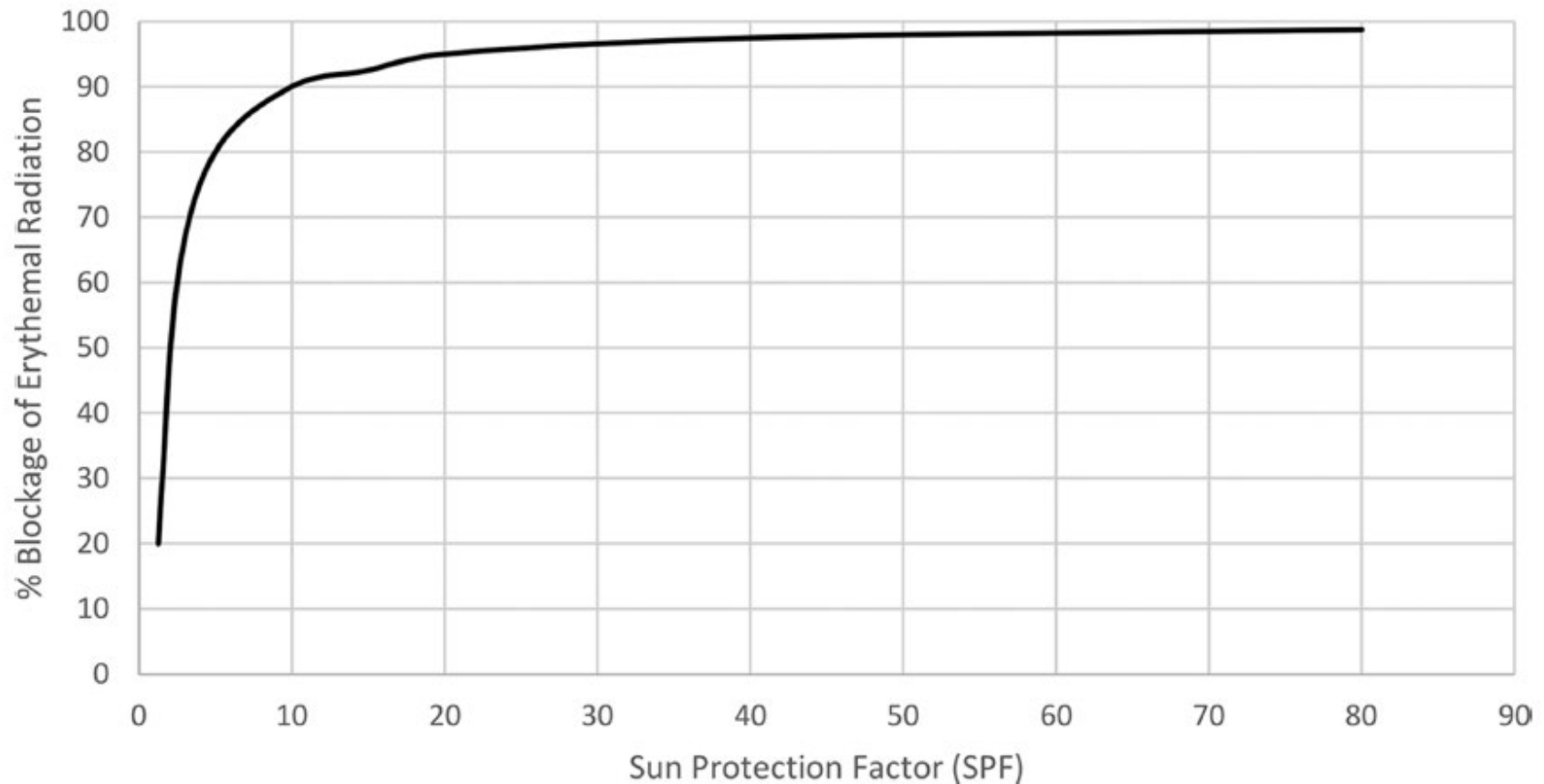


Figure 14-1. The relationship of SPF to the blockage of UVB radiation. This is a nonlinear relationship, and as SPF increases beyond 30, there is minimal added protection.

Benzene Contamination

2021 Recall

Contaminant of manufacturing

Benzene ≠ Oxybenzone or Avobenzone

Mostly aerosol sprays

SKIN CANCER MANAGEMENT

Dermatology Visits

- Catch them early
- Treatment of actinic keratoses
 - Liquid nitrogen
 - Field treatment



NICOTINAMIDE aka NIACINAMIDE

- Phase 3 Randomized Trial of Nicotinamide for Skin-Cancer Chemoprevention
 - 500mg twice daily
 - N Engl J Med 2015; 373:1618-1626 [October 22, 2015](#)
 - 23% Fewer nonmelanoma skin cancer
 - 13% Fewer actinic keratoses
 - No side effects at this dose



**Early
rebellion**

Thank you

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