If I get a skin cancer, what are the different ways to treat it?



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More treatment options, especially for small, superficial lesions

Almost always treat by cutting it out



A biopsy must be done to confirm the diagnosis under the microscope.

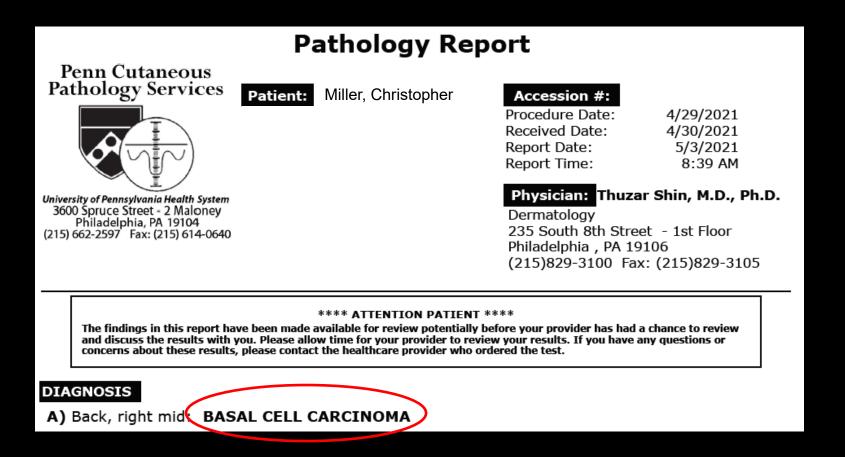


The purpose of the biopsy is usually diagnosis, not treatment





Your doctor will get a pathology report from the biopsy and recommend treatment.



Patient informed. Schedule excision.



Treatment options

Destructive

- Scraping
- Freezing
- Topical creams

Excision

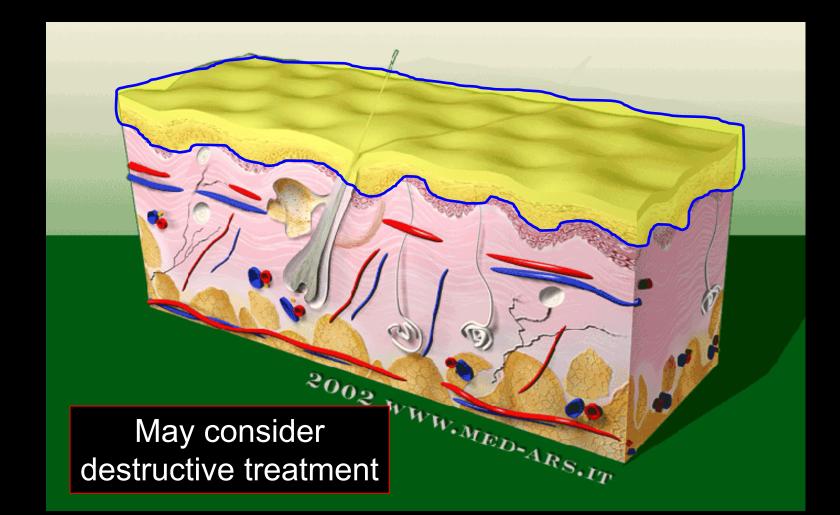
- Conventional excision
- Mohs surgery

No stitches

Cut and stitch



Actinic keratosis Superficial BCC and SCC





Actinic keratoses are frequently frozen with liquid nitrogen



Topical treatment is helpful when there are many superficial lesions







2 months after treatment



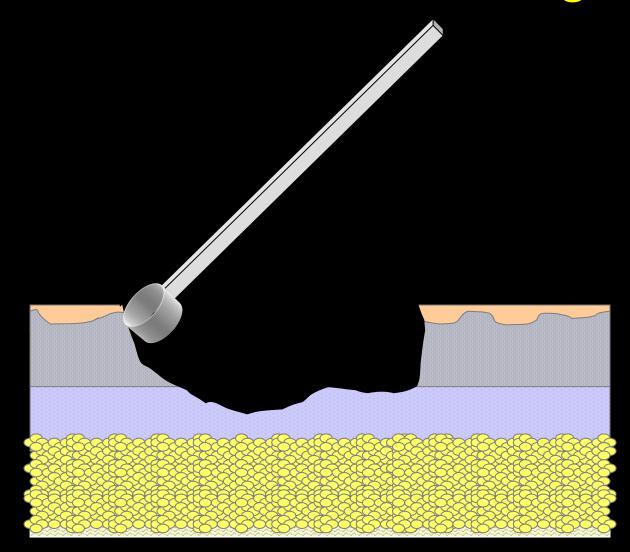
Some small, superficial cancers can be scraped off



Small basal cell cancers Small squamous cell cancers

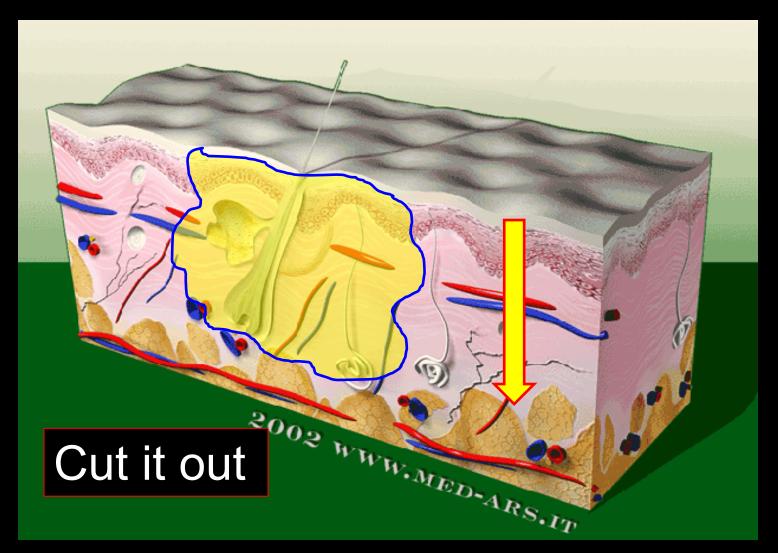


Scraping allows no microscopic examination of the edges





Melanoma Invasive skin cancer





Excision options

Conventional excision

- Cut out cancer
- Stitch
- Confirm pathology

Mohs surgery

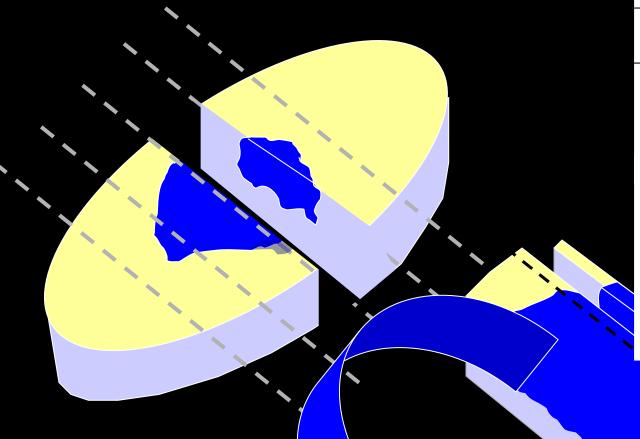
- Cut out cancer
- Confirm pathology
- Stitch





Then confirm pathology margins





SP 1065443

University of Pennsylvania Department of Dermatopathology

PATHOLOGY REPORT

PATIENT: BASKIN, CAROL

DIAGNOSIS:

SKIN, LEFT MEDIAL CLAVICLE: Squamous cell carcinoma, invasive. The tumor does not extend to the deep or lateral margins in the sections examined.



Abide JM et al. Plastic and Reconstructive Surgery 1984;73(3):492-7

Excision Options

Conventional excision

- Cut out cancer
- Stitch
- Confirm pathology

Mohs surgery

- Cut out cancer
- Confirm pathology

Stitch



Mohs surgery leaves nothing to chance

- 100% of margin evaluated
- Confirms negative margins <u>before</u> stitching
- Highest cure rate (97-99%)
- Preserves maximal amount of healthy tissue







When is it important to confirm the cancer is out *before* stitching?

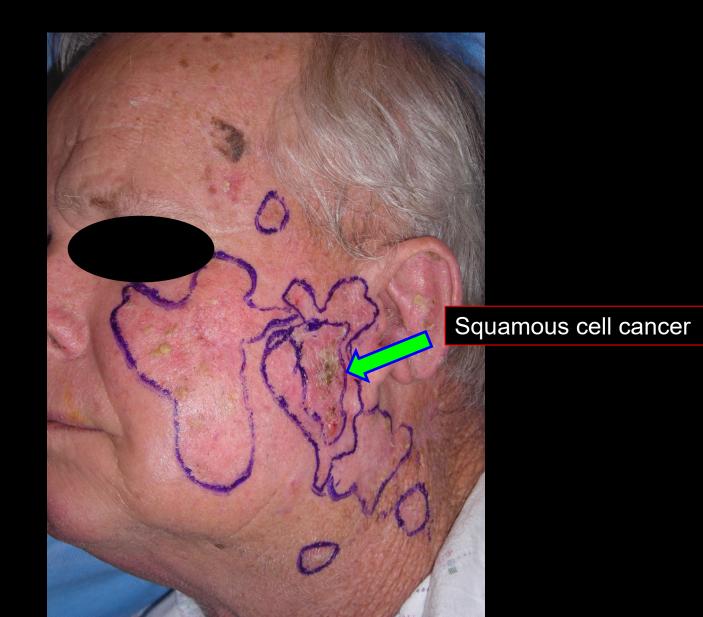


The edges of the cancer are hard to see





Multiple skin cancers are present nearby





Larger skin cancers

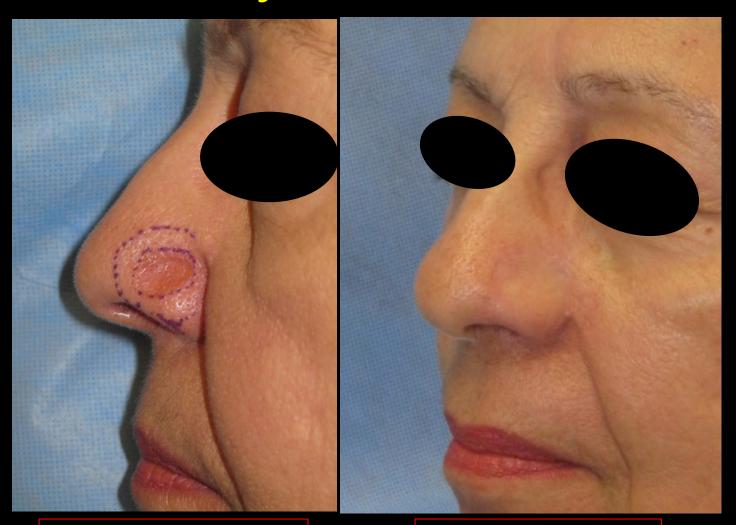


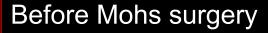


Preoperative

4 months after Mohs surgery

The cancer is in a functionally or cosmetically sensitive location

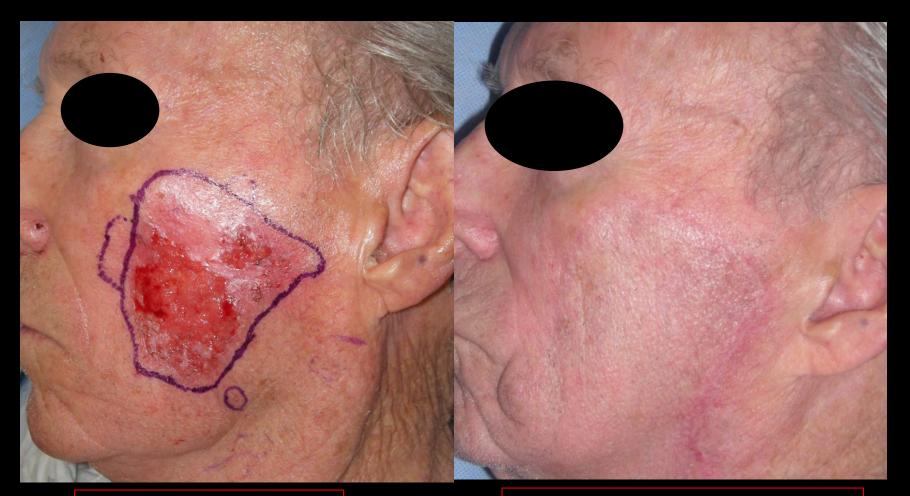




After Mohs surgery



The reconstruction will be extensive



Before Mohs surgery

3 months after Mohs surgery



The skin cancer has been previously treated



Excision scar. Skin cancer not completely removed.



Low recurrence rates for in situ and invasive melanomas using Mohs micrographic surgery with melanoma antigen recognized by T cells 1 (MART-1) immunostaining: Tissue processing methodology to optimize pathologic staging and margin assessment

Jeremy Robert Etzkorn, MD,^a Joseph F. Sobanko, MD,^a Rosalie Elenitsas, MD,^a Jason G. Newman, MD,^a Hayley Goldbach, BS,^b Thuzar M. Shin, MD,^a and Christopher J. Miller, MD^a *Philadelphia, Pennsylvania*

At Penn, we are leaders in Mohs surgery for melanomas in challenging locations (head, neck, hands, feet)



J Am Acad Dermatol. 2015 May;72(5):840-50

Our research is focused on identifying which melanomas would benefit most

Clinical factors associated with subclinical spread of in situ melanoma

Thuzar M. Shin, MD, PhD, Jeremy R. Etzkorn, MD, Joseph F. Sobanko, MD, David J. Margolis, MD, PhD, Joel M. Gelfand, MD, MSCE, Emily Y. Chu, MD, PhD, Rosalie Elenitsas, MD, Waqas R. Shaikh, MD, MPH, and Christopher J. Miller, MD *Philadelphia, Pennsylvania*

Clinical and pathologic factors associated with subclinical spread of invasive melanoma

Thuzar M. Shin, MD, PhD, Waqas R. Shaikh, MD, MPH, Jeremy R. Etzkorn, MD, Joseph F. Sobanko, MD, David J. Margolis, MD, PhD, Joel M. Gelfand, MD, MSCE, Emily Y. Chu, MD, PhD, Rosalie Elenitsas, MD, and Christopher J. Miller, MD *Philadelphia, Pennsylvania*

> J Am Acad Dermatol. 2017 Apr;76(4):714-721 J Am Acad Dermatol. 2017 Apr;76(4):707-713



Take home message: Treatment options

Destructive

- Scraping
- Freezing
- Topical creams

Excision

- Conventional excision
- Mohs surgery

 Actinic keratoses
Superficial or small basal cell cancers and squamous cell cancers Melanomas

Invasive skin cancer

