KNIGHT CANCER Institute

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Enhancing Skin Cancer Early Detection and Treatment in Primary Care

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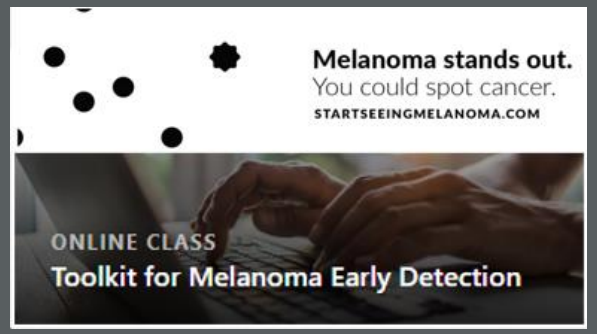


BRIDGE-C2 CENTER

Building Research In Implementation & Dissemination To Close Gaps & Achieve Equity In Cancer Control

Disclosures

- **Discussed :**
  - Sklip LLC – Former Dermatology Faculty Members Own Company
- Dr. Berry serves as a consultant on advisory boards for Bristol Myers Squibb and as an investigator for Nflection Therapeutics

Photo Credit: OHSU Dermatology

Objectives

1. Understand the patients at high risk for melanoma and populations not likely to seek care
2. Identify melanomas
3. Use technology to reduce barriers to access to care
4. Choose a biopsy type– to shave or not to shave
5. Use EMR support tools to support workflow
6. Coordinate melanoma treatment and survivorship

Melanoma Early Detection Toolkit (MTED)
CME Credit!

Melanoma Early Detection Toolkit

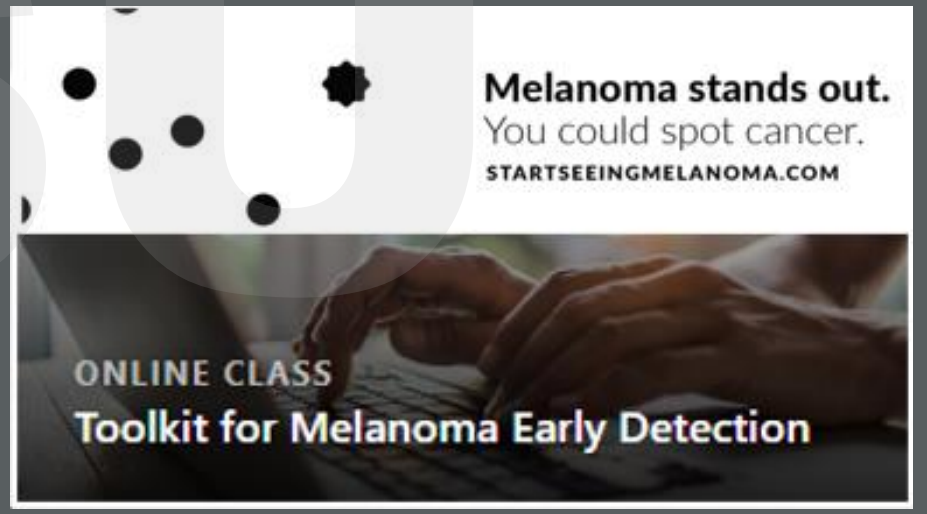
A toolkit with resources and education for those interested in screening or referring patients who are at higher risk for melanoma, and disseminating educational tools to empower patients to evaluate their own skin. The toolkit consists of:

- **CME training** for primary care providers on melanoma early detection (online and in-person options)
- **Patient materials** to help spread early detection awareness and education
- **Melanoma Risk Evaluation tool** (in progress)

CME training

Tools and materials for your patients

Melanoma Risk Evaluation Tool



Case 1:
64 yo man with 2 yr history of right temple nodule

Photo Credit: Dr. Richard Moberly, MD

Statistical Projection For The Year 2025 In The United States

100,960 new cases of Melanoma (60,550 men + 44,410 women)

8,430 deaths from melanoma

5th most common invasive cancer in men and 6th in women

1,420 new cases of Melanoma in the state of Oregon

SOUNDING BOARD

The Rapid Rise in Cutaneous Melanoma Diagnoses

H. Gilbert Welch, M.D., M.P.H., Benjamin L. Mazer, M.D., M.B.A., and Adewole S. Adamson, M.D., M.P.P.

American Cancer Society. NEJM 2021 PMID: 33406334.

US Preventive Services Task Force | Recommendation Statement

April 18, 2023

Screening for Skin Cancer

US Preventive Services Task Force Recommendation Statement

US Preventive Services Task Force

Article Information

JAMA. 2023;329(15):1290-1295. doi:10.1001/jama.2023.4342

Objective #1

Who is at high risk for skin cancer?

Notable risk factors and risk stratification tools

Risk Level	Melanoma Risk factors	Melanoma Risk (RR except as noted) [1]
Moderate risk	Total common nevi >15 [1]	1.5
	Total common nevi 41-60 versus <15 [1]	2.2
	1 atypical nevus	1.5
	2 atypical nevi	1.5
	High density of freckles vs low	2.1
	Blue eye color vs dark [2]	1.5
	Hazel eye color vs dark [2]	1.5
	Green eye color vs dark [2]	1.6
	Light brown hair vs dark [2]	1.6
	Blond hair vs dark [2]	2.0
	Fitzpatrick I phototype	2.1
	Fitzpatrick II phototype	1.8
	History of sunburn [4]	2.0
	Indoor tanning use in any gender [20]	1.7[3]
High risk	Total common nevi 61-80 vs<15 [1]	3.3
	3 atypical nevi [4, 1]	3.0
	4 atypical nevi [4, 1]	4.4
	Red hair vs dark [2]	3.6
	Family history of melanoma in one or two first degree relatives [2, 21]	1.7-3
	History of AK and/or KC [2]	4.3
	CLL[22]	3.9[2]
	Indoor tanning use in women aged 30-39 years [20]	4.3
	Transplant recipient [23, 24]	2.2-4.6[2]
Ultra- high risk	Total common nevi 101-120 vs<15 [1]	6.9
	5 atypical nevi [1]	6.4
	Personal history of melanoma [25]	8.2-13.4
	CDKN2A mutation carrier [26]	14[5]-28[6]
	3 or more relatives on the same side of the family affected [21]	Up to 35-70
	Indoor tanning use in women aged <30 years [20]	6.0[3]
	MC1R R/R genotype[4] and ≥ 20 nevi >5mm vs wildtype *MC1R* and 0-4 nevi [27]	25.1[3]

Table 1. Risk levels for melanoma as determined by risk factors - Reference population for relative risk is general population without the risk factor except as noted. AK-actinic keratosis; KC-keratinocyte carcinoma; CLL-chronic lymphocytic leukemia. [1]RR= relative risk; [2]standardized incidence ratio (SIR); [3]odds ratio (OR); [4] patients with loss-of-function mutations commonly associated with the red hair phenotype in both alleles of the *MC1R* gene; [5]absolute risk by age 50; [6] absolute risk by age 80

Noteworthy risk factors:

- Family history of melanoma
- Pregnancy
- Immunosuppression (due to treatment for organ transplant or autoimmune conditions, CLL)
- Those who don't seek regular care
- Those who don't have family at home

AGENT ORANGE

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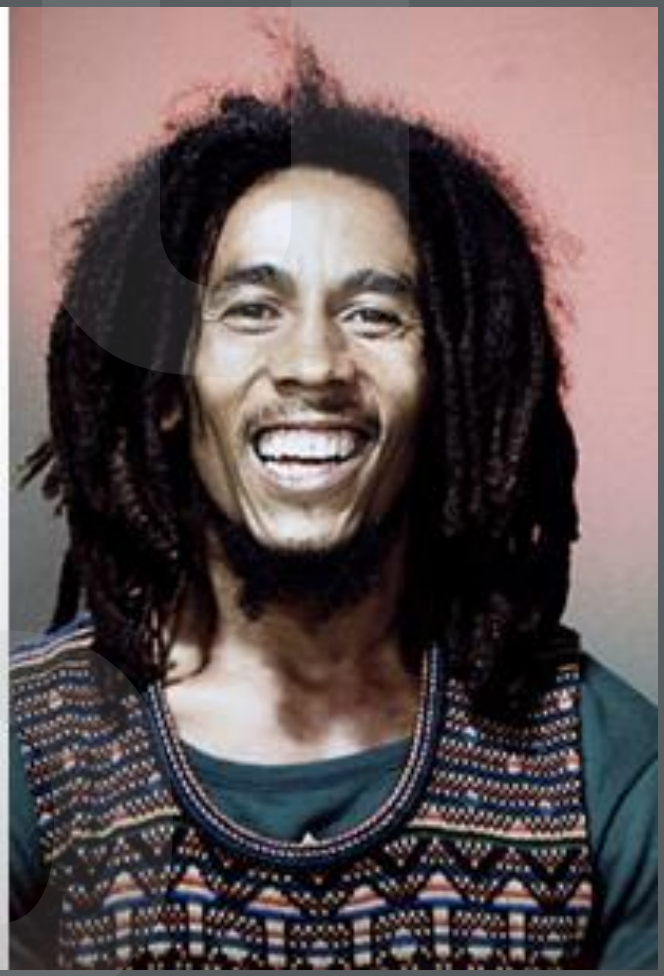
Skin of Color and Others at Risk



Melanoma and Skin of Color

Table 7. Trends in 5-year Relative Survival Rates* (%) by Race, US, 1975-2018

	All races			White			Black		
	1975-77	1995-97	2012-18	1975-77	1995-97	2012-18	1975-77	1995-97	2012-18
All sites	49	63	68	50	64	69	39	54	64
Brain & other nervous system	23	32	33	22	31	29	25	39	40
Breast (female)	75	87	91	76	89	92	62	75	83
Colon & rectum	50	61	65	50	62	65	45	54	60
Colon	51	61	63	51	62	64	45	54	58
Rectum	48	62	68	48	62	67	44	55	65
Esophagus	5	13	21	6	14	22	4	9	15
Hodgkin lymphoma	72	84	89	72	85	90	70	82	87
Kidney & renal pelvis	50	62	77	50	62	76	49	62	77
Larynx	66	66	61	67	68	62	58	52	53
Leukemia	34	48	66	35	50	67	33	42	62
Liver & intrahepatic bile duct	3	7	21	3	7	20	2	4	19
Lung & bronchus	12	15	23	12	15	23	11	13	21
Melanoma of the skin	82	91	94	82	91	94	57†	76†	70
Myeloma	25	32	58	24	32	57	29	32	60
Non-Hodgkin lymphoma	47	56	74	47	57	75	49	49	70
Oral cavity & pharynx	53	58	68	54	60	70	36	38	52
Ovary	36	43	50	35	43	49	42	36	41
Pancreas	3	4	12	3	4	11	2	4	11
Prostate	68	97	97	69	97	97	61	94	97
Stomach	15	22	33	14	20	33	16	22	34
Testis	83	96	95	83	96	96	73‡†	86†	92
Thyroid	92	95	98	92	96	99	90	95	97
Urinary bladder	72	80	77	73	81	78	50	63	65
Uterine cervix	69	73	67	70	74	67	65	66	56
Uterine corpus	87	84	81	88	86	84	60	62	64

*Rates are adjusted for normal life expectancy and are based on cases diagnosed in the SEER 9 areas for 1975 to 1977 and 1995 to 1997, and in SEER 17 areas for 2012-2018; all cases were followed through 2019. Rates for White and Black patients diagnosed during 2012-2018 are exclusive of Hispanic ethnicity. †The standard error is between 5 and 10 percentage points. ‡Survival rate is for cases diagnosed from 1978 to 1980.

Sources: 2012-2018 survival – SEER*Explorer, National Cancer Institute, 2022. Available from https://seer.cancer.gov/explorer/. Colon & rectal cancer – SEER*Stat software (version 8.4.0.1), National Cancer Institute, 2022. Historical survival was previously calculated using SEER*Stat version 8.3.9 (2021),

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MAIN MENU

Chapters 1-6 can be completed in around 60 minutes.

The training contains video clips which will need headphones or speakers.

Click here for additional course instructions.

- Pre-Test
- 01 Identify High Risk Patients
- 02 Perform Rapid Screenings
- 03 Visual Identification
- 04 Perform Biopsies
- 05 Solutions for Busy Clinics
- 06 Patient Education Resources
- Post-Test

Additional Learning:

- 07 OHSU Epic SmartPhrase Tools
- 08 Non-Melanoma Skin Cancers
- 09 Dermatopathology Reports
- 10 Staging, Treatments, Follow Up

Melanoma risk tool

RECOMMENDATIONS STRATIFIED BY MELANOMA RISK LEVEL (Add Risk Assessment Points together)				
	Low Risk (Total: 0 points)	**Some Risk (Total: 1-3 points)**	**Moderate Risk (Total: 4-8 points)**	**High Risk (Total: 9 or more points)**
EDUCATION	• Skin cancer warning signs • Self-exam instructions	• Skin cancer warning signs • Monthly self-exam instructions	• Skin cancer warning signs • Monthly self-exam instructions • Medical provider skin exam	• Skin cancer warning signs • Monthly self-exam instructions • Medical provider skin exam
MEDICAL PROVIDER EXAM	See a medical provider for any suspicious lesions	• See a medical provider for any suspicious lesions • Consider a yearly full body skin exam by a medical provider	• At least annual skin exam with a medical provider • Consider dermatology referral for skin exam every year or whenever a suspicious lesion is found • Add annual screening to health maintenance	• Refer to dermatology for full-body skin exam and continued management • Add annual or biannual screening to health maintenance

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Objective #2

Identifying melanoma

Discuss skin exams and melanoma recognition

Learning Pearl

Overcome Screening Obstacles:

- Have a patient undress
- Make a new appointment for screening
- Refer to dermatology
- Online Toolkit:
  - Rapid exams
  - Patient Education Tools (smartphone apps, website handouts the AVS dot phrase)

Siegel RL, Miller KD, Jemal A. Cancer statistics, 2016. CA Cancer J Clin. 2016;66:7-30.

American Academy of Dermatology: Statistics and Facts https://www.aad.org/media/stats

Virtual CME and Resource Toolkit How To Diagnose Melanoma

1. Rapid Screenings Demo
2. Patients with Skin of Color
3. Checklist and tips for incorporating into practice

Screening Demonstrations

01 This video is an introduction to screening rapidly for melanoma.

Length: 2 Minutes

02 Skin exam demonstration highlighting information on patients with skin of color.

Length: 7 Minutes

Benign Melanocytic Nevi
Photo Credit: Skin Cancer 909

How do I tell if a mole is normal?

How is it shaped?

- Round or oval is normal

How well-defined are the edges of the mole?

- Clean edges with no pigment branching out is normal

What color is it?

- One uniform color is normal

How big is it?

- Smaller than the end of a pencil eraser is normal

Has it changed?

- No change in growth or how it feels within a few days/months is normal

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The ABCDEs Of Melanoma

- The ABCDEs of Melanoma is another method to help you detect skin lesions suspicious for Melanoma
  - Not all of these criteria need to be met (most important is change ("E") **Evolution**
  - Some Melanomas only have one "strike" against them!

The Key to Diagnosis:

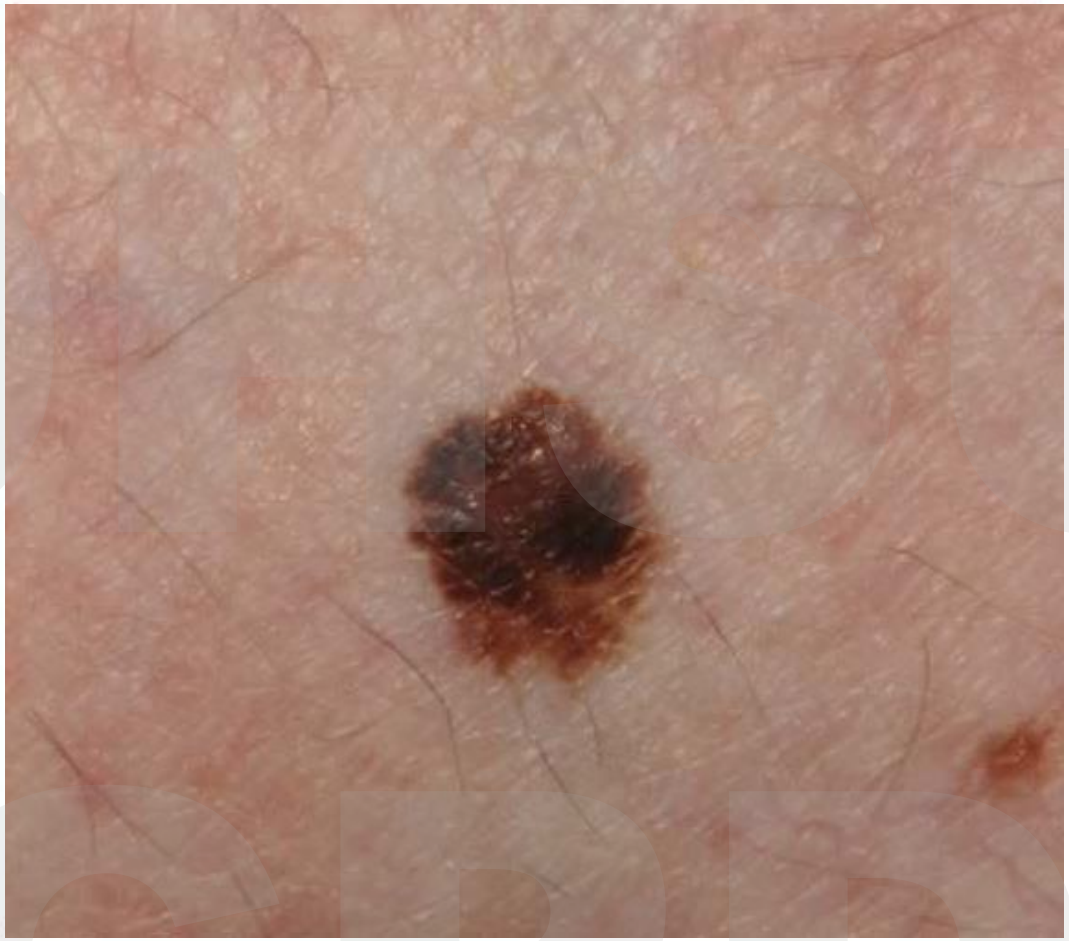
- Anything that looks suspicious to you or to the patient (use the online modules to build your picture bank).
- Symptoms matter!

Photo Credit: OHSU Dermatology

The Diagnostic Process

Building your “picture bank”

What is your diagnosis?



Not Melanoma 0 10 20 30 40 50 60 70 80 90 100 Melanoma

Probability (%) or likelihood that it is melanoma

Reference: Visual Perception Training, Northwestern

Reference: Visual Perception Training, Northwestern

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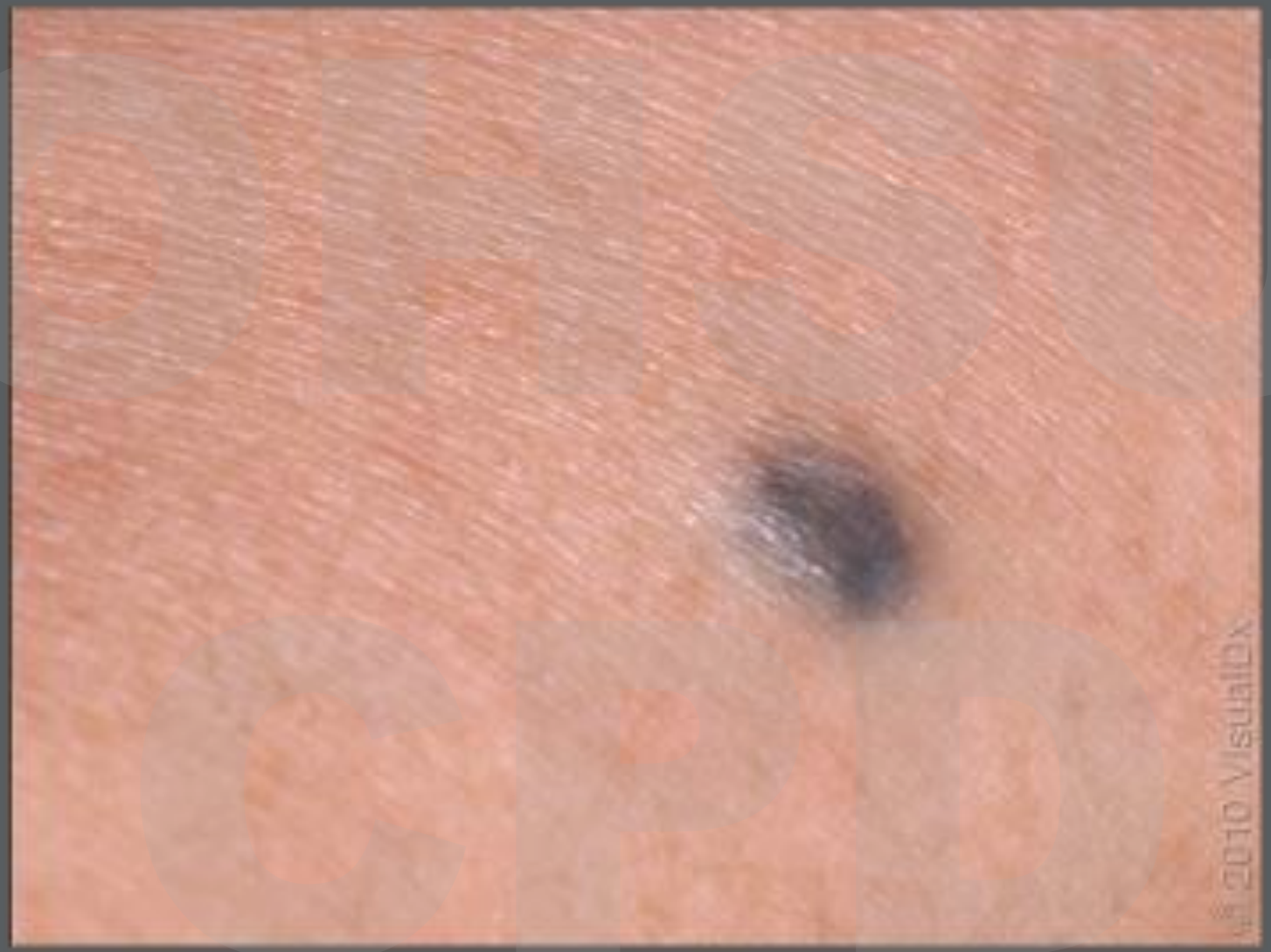
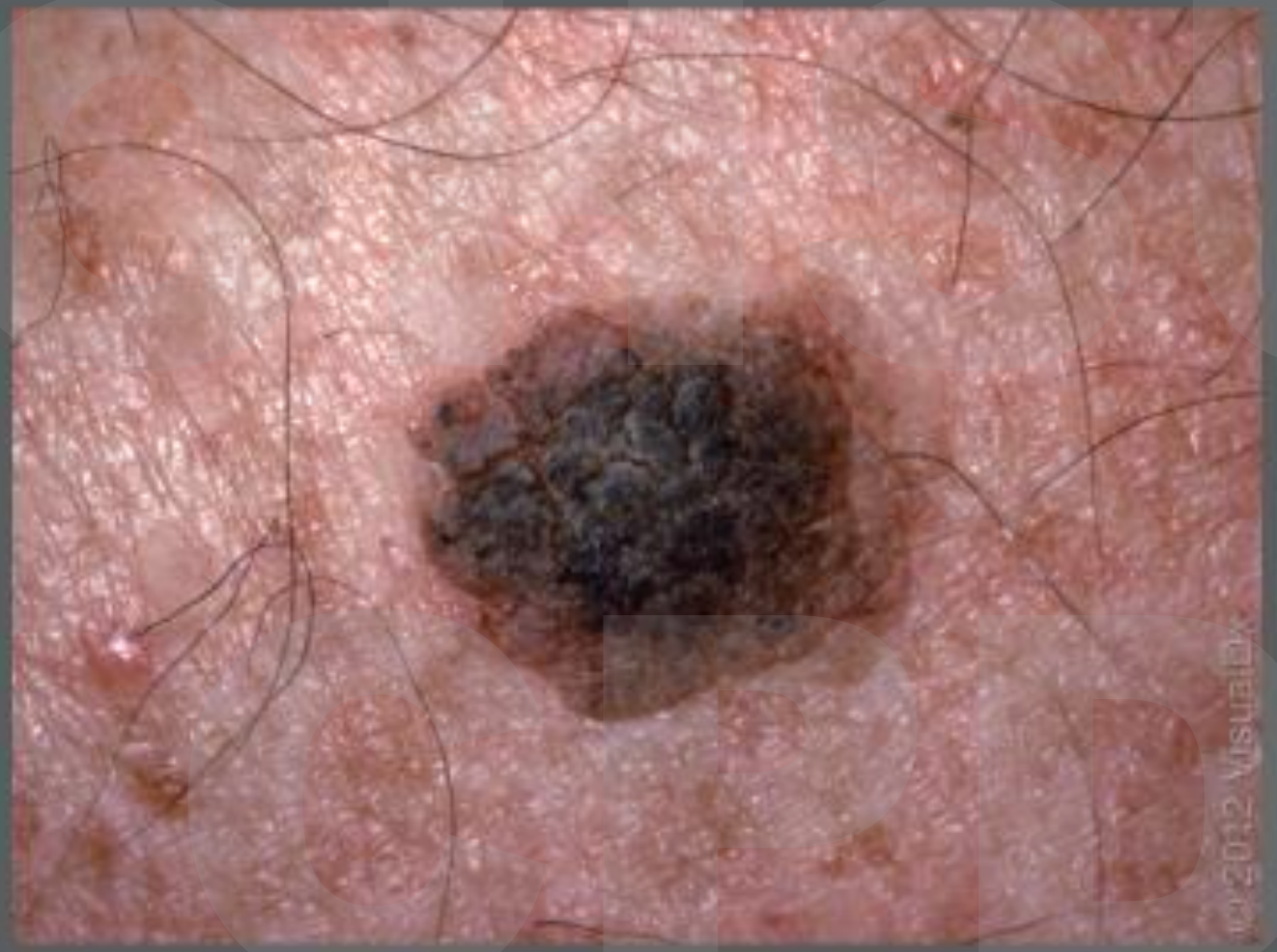
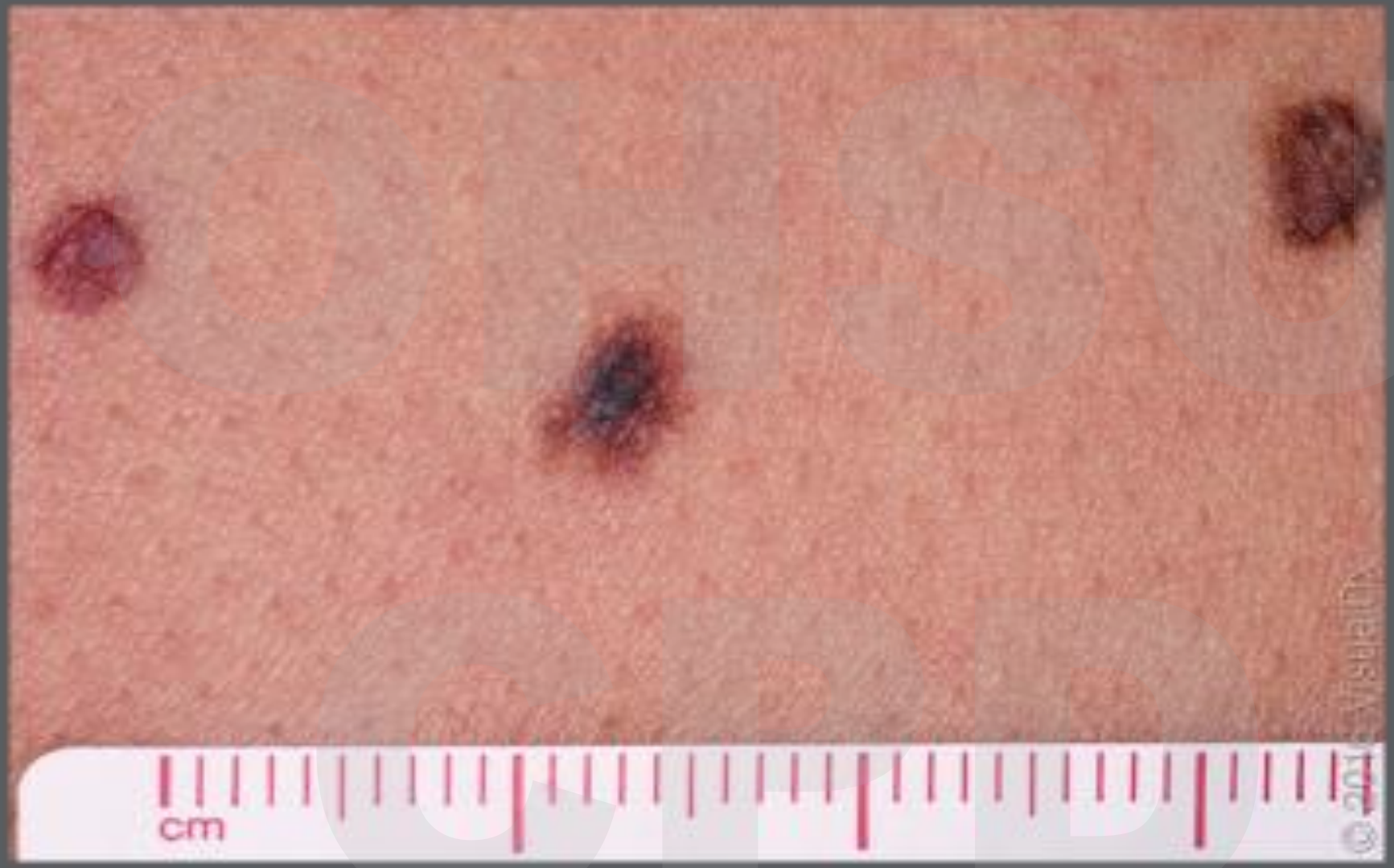

© 2010 VisualDx


©2012 VisualDx


cm
1
2

Reference: Visual Perception Training, Northwestern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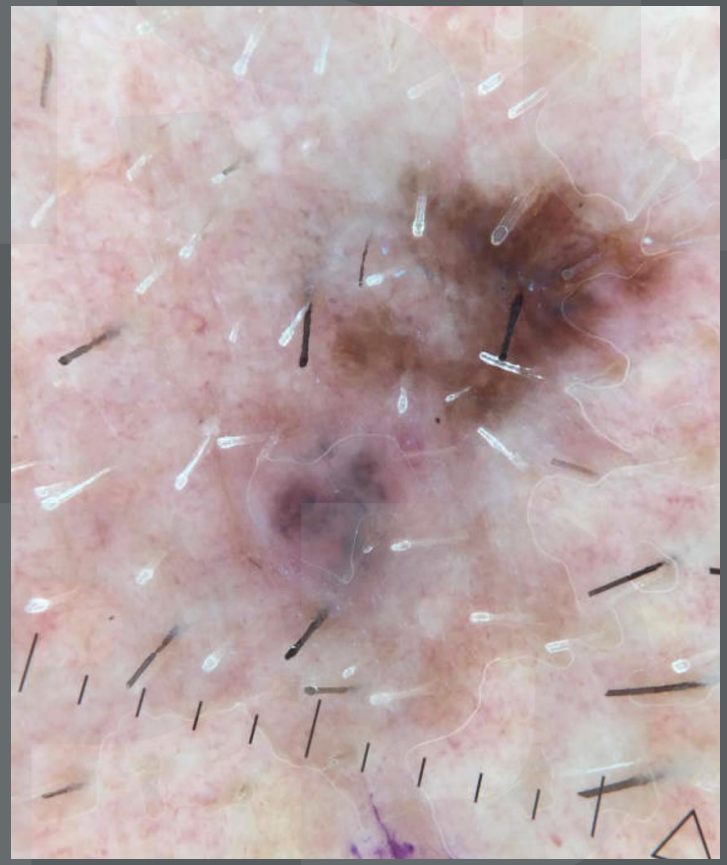
Melanomas can be small….



…and very aggressive

The Ugly Duckling Sign

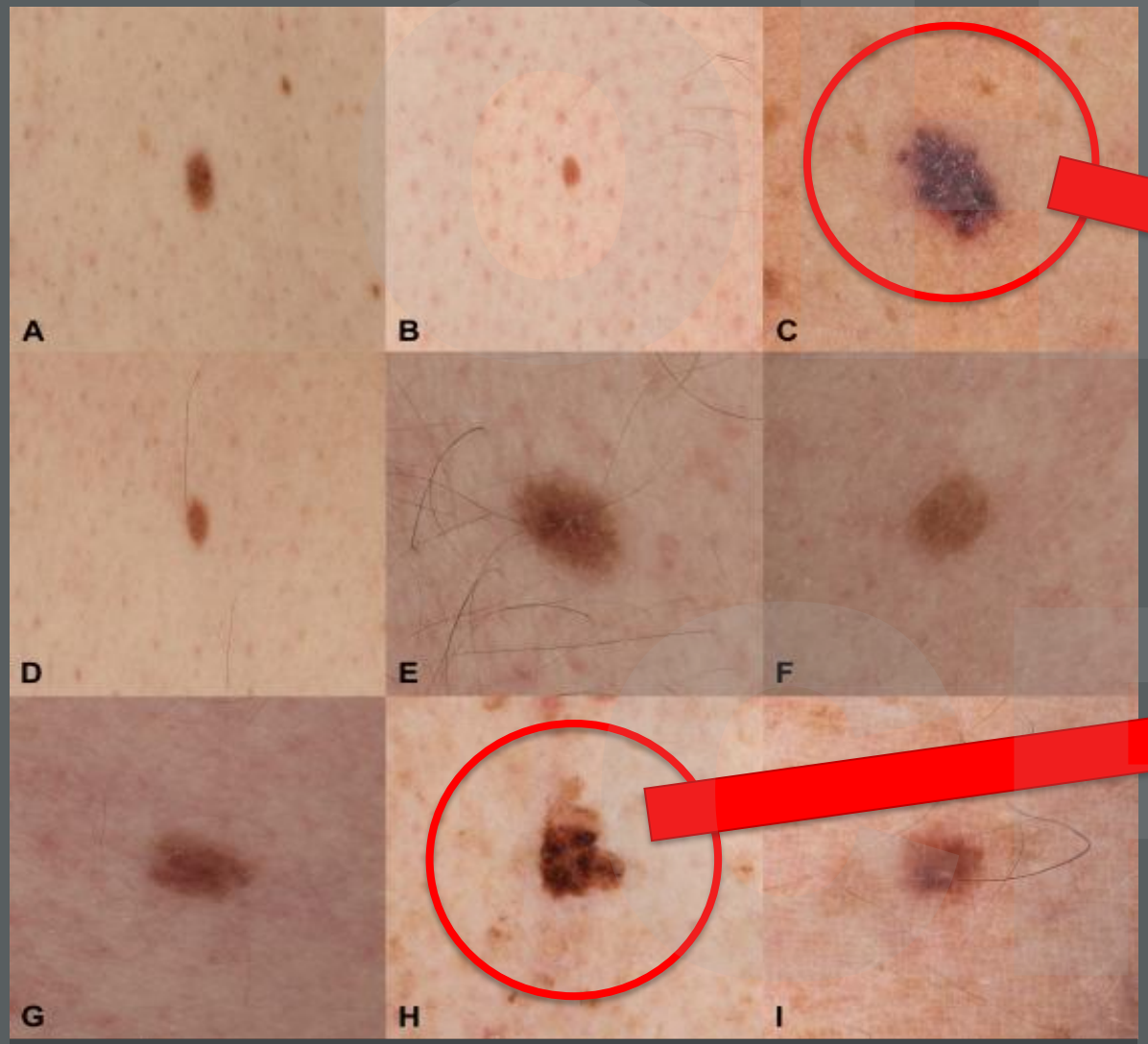
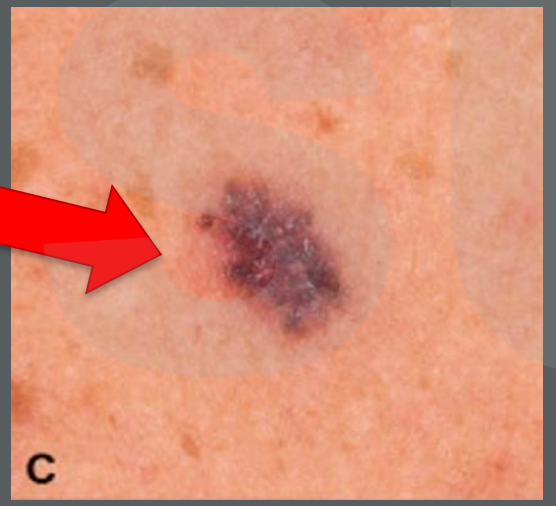
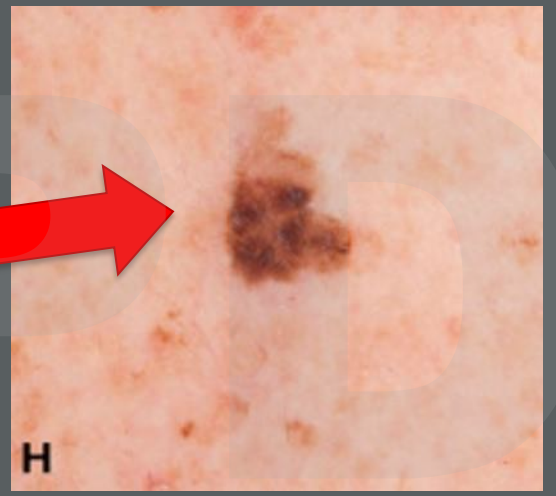


Photo Credit: Ilyas, et al. JAAD 2017;77(6):1088-1095





The Ugly Duckling Sign is a useful method to help you detect skin lesions suspicious for Melanoma.

For patients with many moles, look out for moles that stand out compared to the others.

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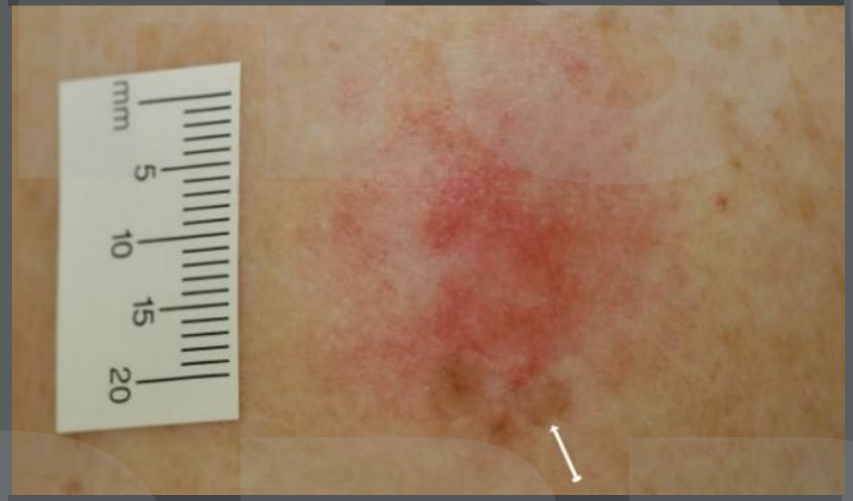
Difficult Melanomas

Clinically looks like a Spitz Nevus

Spitzoid Melanoma

Photo Credit: Kim HY, et al. Ann Dermatol. 2015;27(2):206-209

Melanocytes are present, but clinically looks like little or no brown color



Amelanotic Melanoma

Photo Credit: Skin Cancer 909

Clinically looks like a Scar

Desmoplastic Melanoma

Photo Credit: MoleMap NZ, DermNet NZ

When in doubt, biopsy, refer to dermatology, use eConsults or send patients to our dermoscopy-at-home eVisit page.

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How To Diagnose Melanoma

Remember:

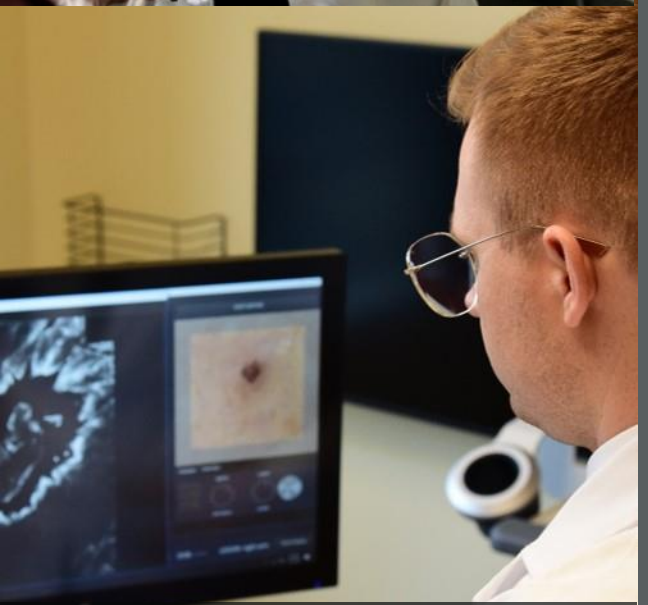
Every dermatologist builds expertise over time, and always biopsy or refer when there is any doubt.

Visual Identification Quizzes

Each quiz contains a brief written overview and 15 images. You should spend just a few moments on each multiple choice question, and you will receive immediate feedback to let you know if the choice was correct. This is not graded, but meant as a learning exercise.

1 **Quiz 01** Melanoma vs. Benign Lentigo (Lentigines)	2 **Quiz 2** Seborrheic Keratosis vs. Melanoma	3 **Quiz 3** Blue Nevus vs. Melanoma
4 **Quiz 4** Mole (Nevus) vs. Melanoma	5 **Quiz 5** Acral Melanocytic Nevi vs. Acral Lentiginous Melanoma (ALM)	6 **Quiz 6** Nail Unit Melanoma (NUM) vs. Melanoychia (bengin)

PREV NEXT



Dermoscopy (top), Reflectance Confocal Microscopy (bottom)
Photo Credit: OHSU Dermatology

When you suspect skin cancer

Options for what to do next

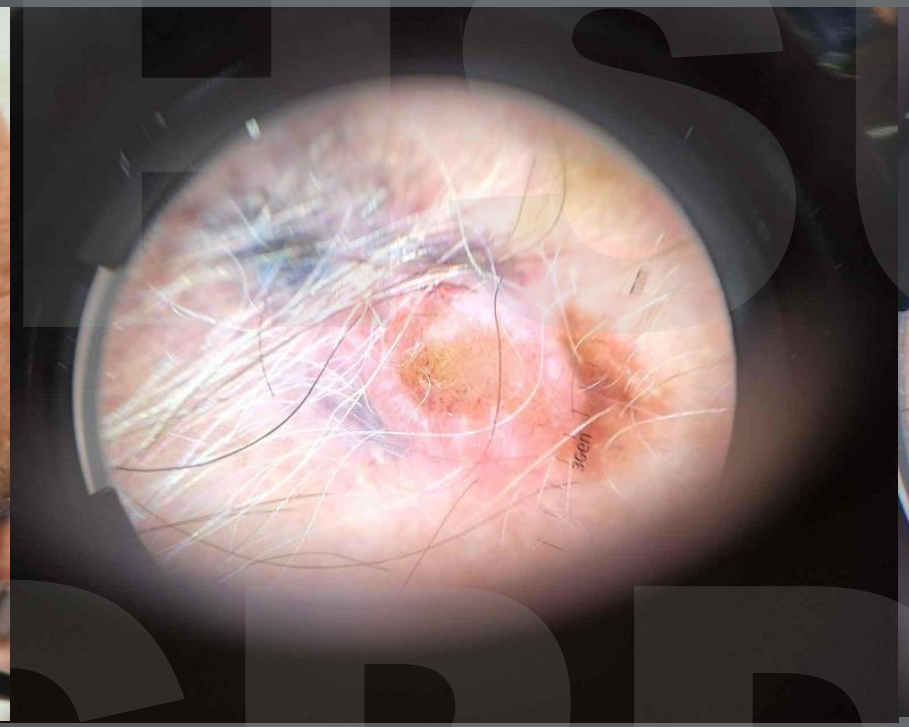
1. Biopsy
2. Take a photo for monitoring
3. E-consult
4. Referral to Dermatology

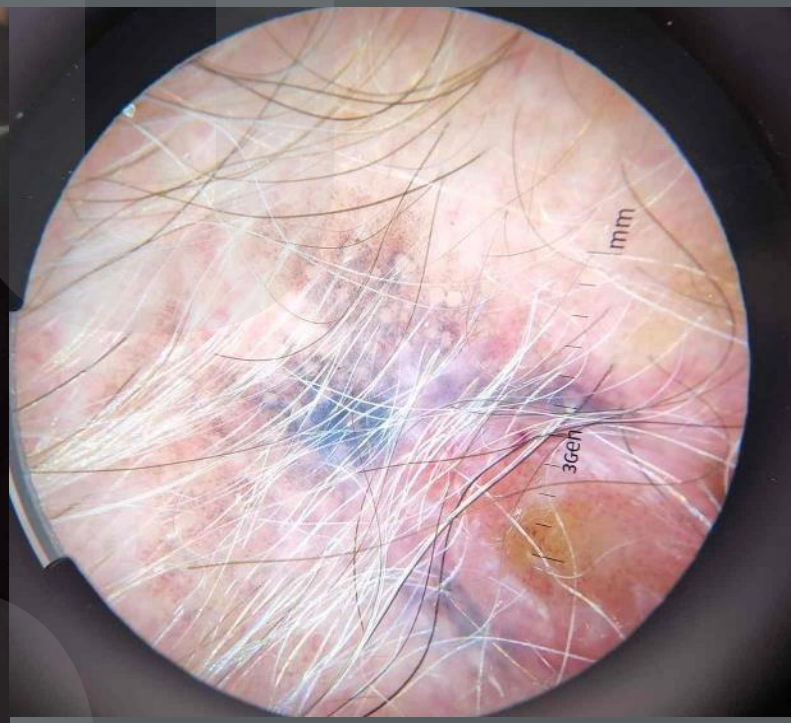
Objective #3

Use Technology to Reduce Barriers to Care Access

Dermoscopy Photos, E-Consults

Case 1:
64 yo man with 2 yr history of right temple nodule





E-consult read within 24 hours, offered appointment the next day. Seen 7 days later due to need for insurance authorization.

Photo Credit: Dr. Richard Moberly, MD

How do I take a good photo of a skin growth?

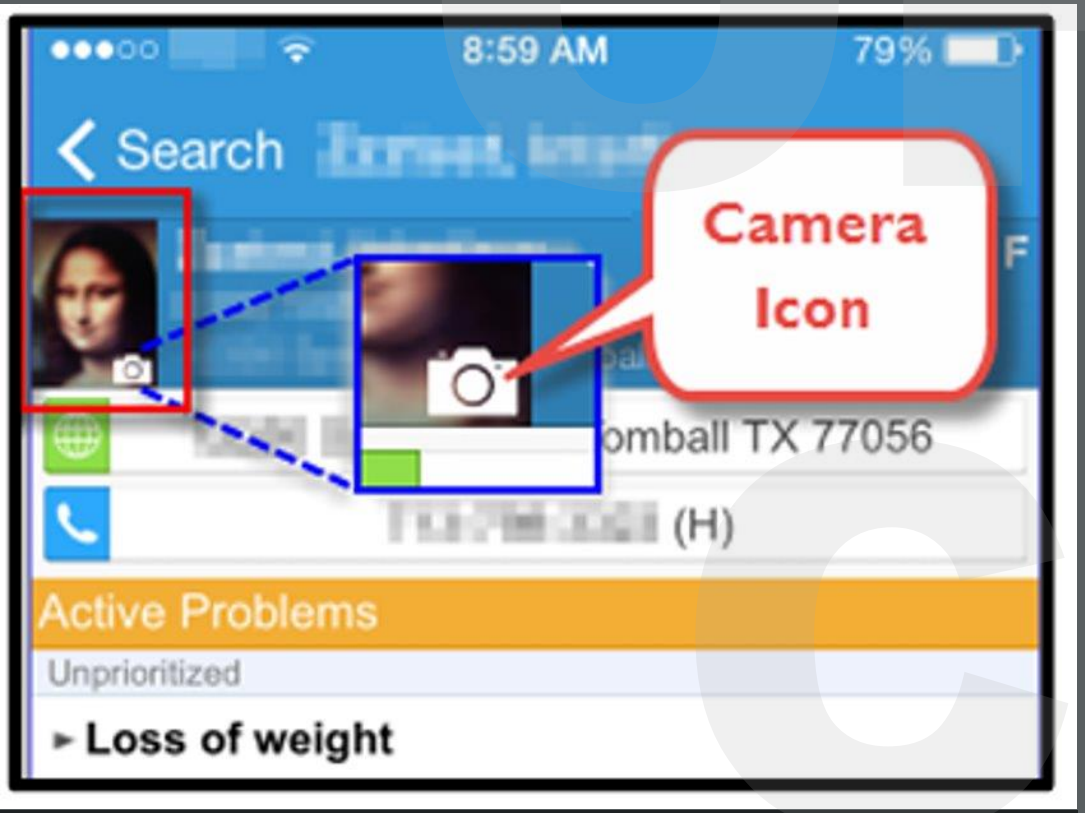


Photo Credit: UVA

Use Haiku or Canto (or clinic camera)

- Take 3 photos
  - 1. far out with identifiable body part (arm)
  - 2. close-up with measurement (pen/quarter/ruler)
  - 3. dermatoscope
- Add media, label, save

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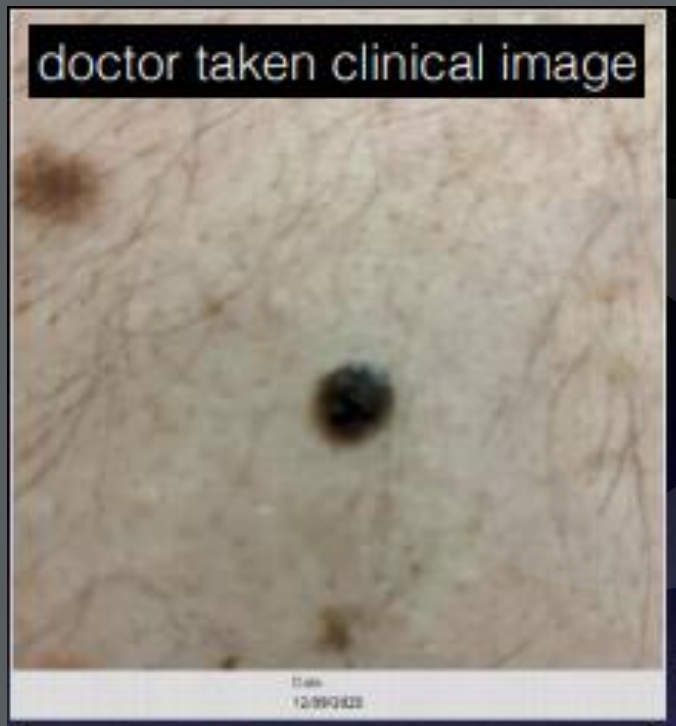
Dermoscopy smart phone device

- Attach to iPad or smart phone
- Add contact medium (alcohol, hand sanitizer, mineral oil or ultrasound gel) and place on lesion to photograph
- Turn on light
- Enlarge to 1.5x
- Capture photo



eConsults

Dermoscopy Questions:
stoos@ohsu.edu

eConsult Tip Sheets are on O2:

Objective #4

To Shave Biopsy or Not…

Discuss the importance of different biopsy techniques

From what you have learned, this mole looks suspicious for melanoma

Your patient is concerned they have melanoma and wants to have the skin lesion removed

How do you biopsy a concerning skin lesion?

Biopsy Types

Photo Credit: OHSU Dermatopathology

Shave Biopsy**

Deep Shave Biopsy/ Shave-Excision/ Saucerization/ Scoop Shave

Epidermis (0.05 – 1.5 mm)*

Dermis (1.5 – 4 mm)

Subcutaneous Fat

Fascia

Punch Biopsy

Elliptical Excision

*Shave biopsies are adequate when it is deep enough to cause some bleeding

**Thickness of each skin layer depends on the anatomical location and the individual

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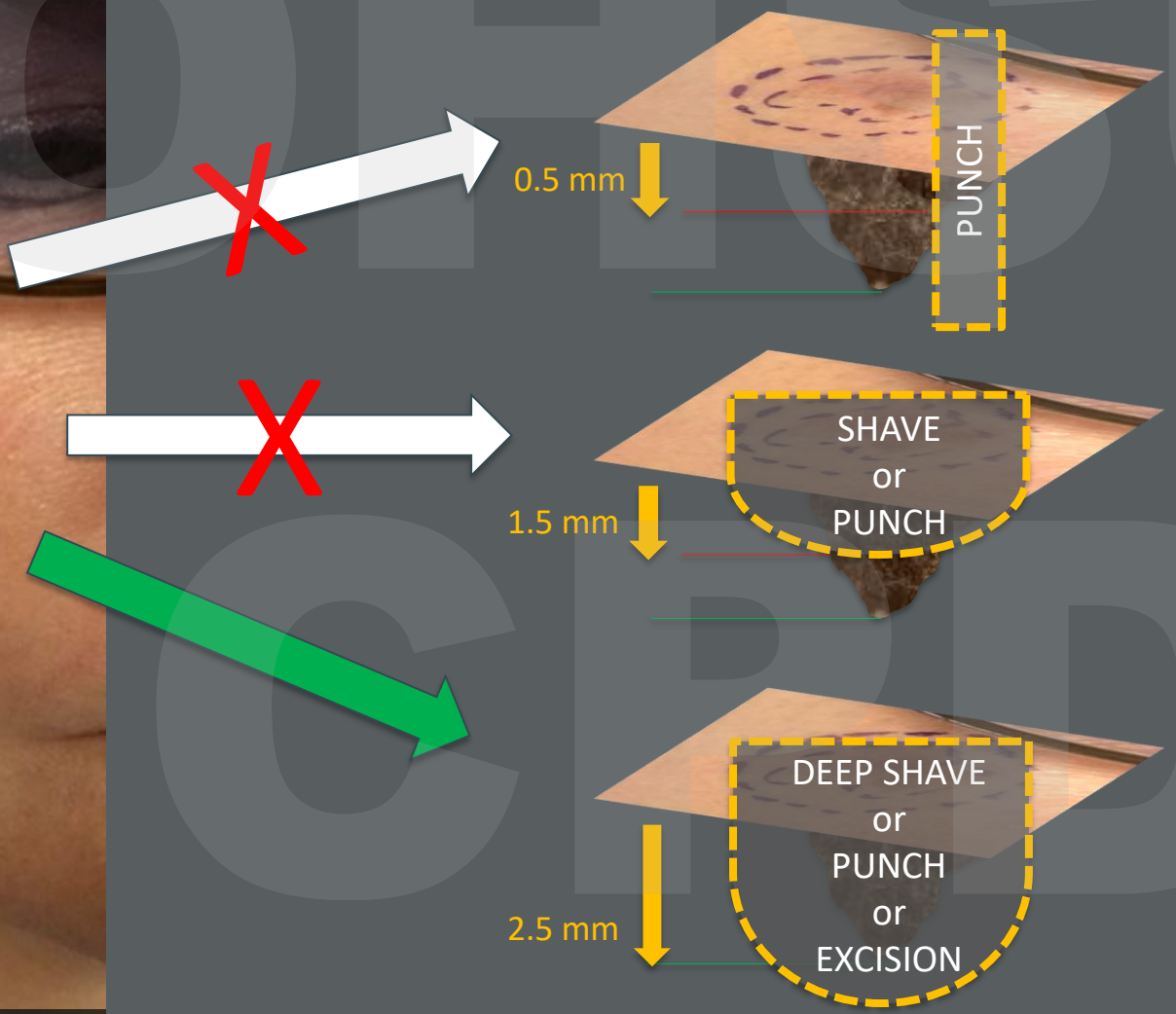
It Is Ideal For Suspected Melanoma Cases To Be Biopsied Deep Enough For Accurate Staging

Photo Credit: Dr. Anna Bar



Method: 4 mm punch biopsy deep enough, but smaller in diameter than the lesion itself

✗INACCURATE STAGING:
Melanoma 0.5 mm deep

Method: Shave or punch biopsy that is not deep enough

✗INACCURATE STAGING:
Melanoma 1.5 mm deep

Method: Deep shave or punch biopsy or excision of entire lesion

✓ACCURATE STAGING:
Melanoma 2.5 mm deep

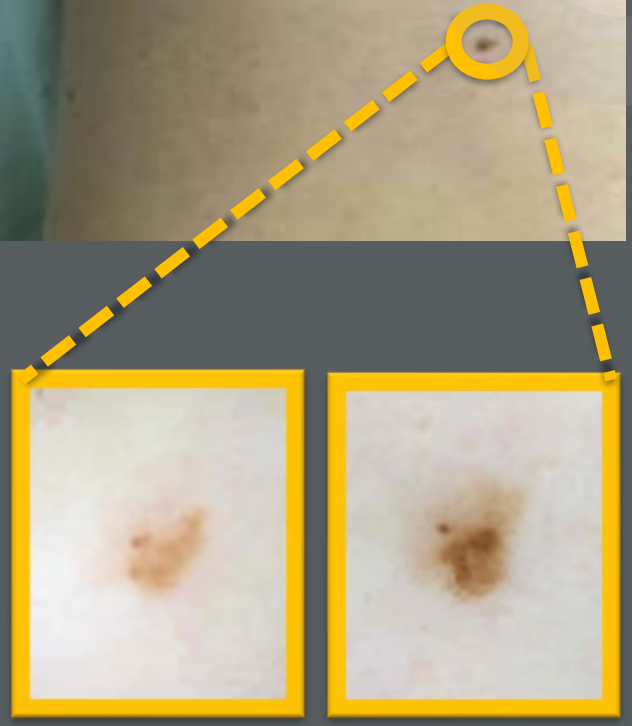


Photo Credit: Kim Sanders, MPAS, PA-C

Choosing A Method That Maximizes The Likelihood Of Accurate Diagnosis

For suspected Melanoma cases, it is preferable to choose a biopsy method that will allow you to remove in one intact piece …

the entire lesion

+

About 1-2 mm margin of normal skin around the lesion at an appropriate depth

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How To Diagnose Melanoma

A biopsy that is inadequate can result in a Misdiagnosis or Inaccurate Staging!

.skincancerpunch

.skincancershave

02 Perform Rapid Screenings
03 Visual Identification
04 Perform Biopsies
05 Solutions for Busy Clinics

Biopsy Demonstrations

01 Punch Biopsy

1 minute – with narration

02 "Scoop" biopsy

2 minutes – with narration

PREV NEXT

Case 1

Dermatology Visit

A: MELANOMA, RIGHT TEMPLE, MEASURING 3.7 MM IN THICKNESS, ULCERATED.

MELANOMA OF THE SKIN SYNOPTIC REPORT:

Site:
- Right temple

Maximum Tumor Thickness:
- 3.7 mm

Ulceration:
- present

Mitotic Rate:
- 5/mm2

Peripheral margins:
- closely approached by melanoma in situ

Deep margin:
- involved by invasive melanoma

Microsatellitosis:
- not identified

Lymph-Vascular Involvement:
- not identified

Perineural Involvement:
- not identified

Tumor-Infiltrating Lymphocytes:
- present, non-brisk

Tumor Regression:
- present

Pathologic Staging (AJCC 8th edition):
- pT3b pNx pMx

Photo Credit: Dr. Elizabeth Berry, MD

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Case 1

Dermatology Visit

B: MELANOMA, RIGHT UPPER ARM, MEASURING 0.6 MM IN THICKNESS.

MELANOMA OF THE SKIN SYNOPTIC REPORT:

Site:
- Right upper arm

Maximum Tumor Thickness:
- 0.6 mm

Ulceration:
- not identified

Mitotic Rate:
- 1/mm2

Peripheral margins:
- involved by melanoma in situ

Deep margin:
- uninvolved

Microsatellitosis:
- not identified

Lymph-Vascular Involvement:
- not identified

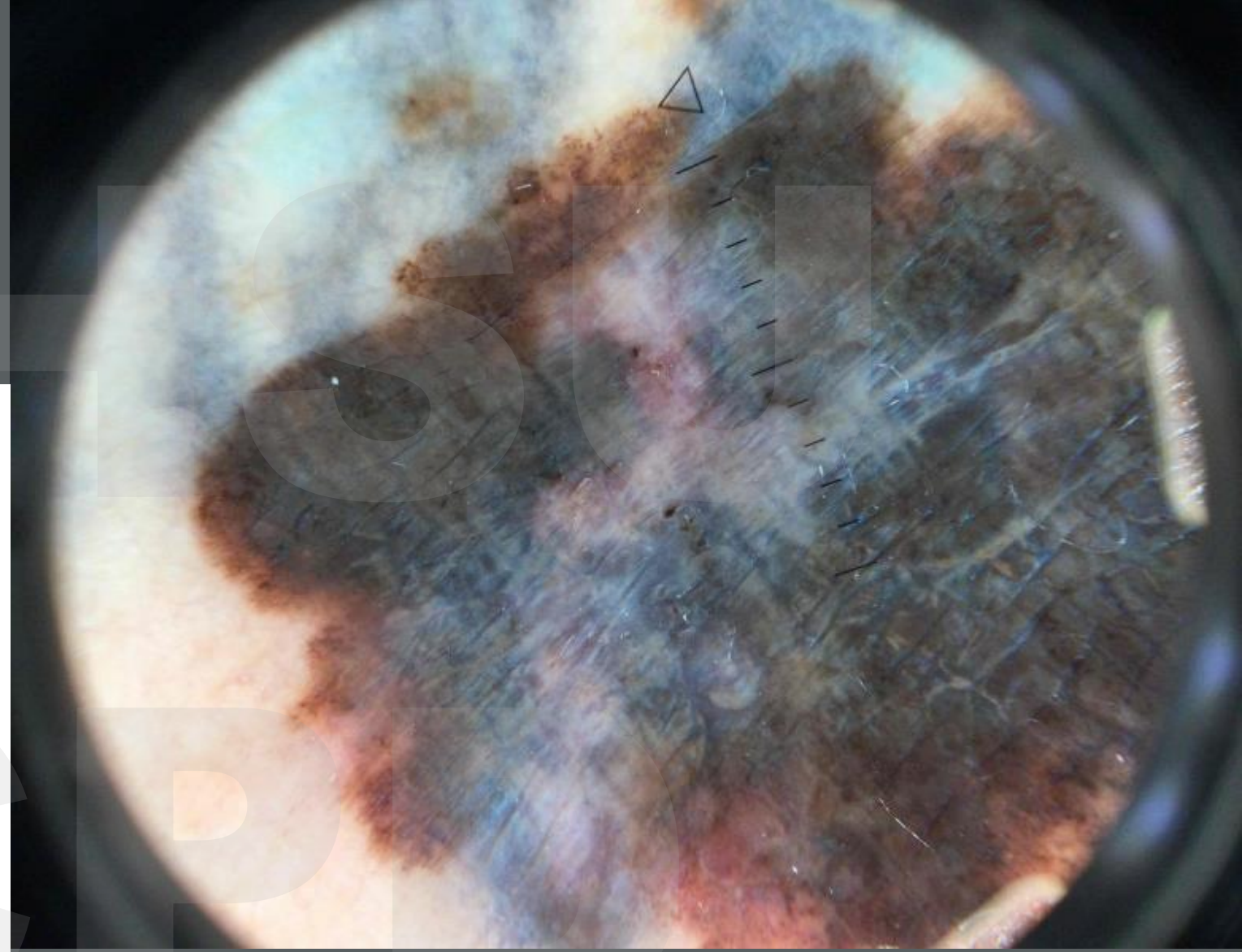
Perineural Involvement:
- not identified

Tumor-Infiltrating Lymphocytes:
- present, non-brisk

Tumor Regression:
- present

Pathologic Staging (AJCC 8th edition):
- pT1a pNx pMx

Photo Credit: Dr. Elizabeth Berry, MD



Second Primary Melanoma!

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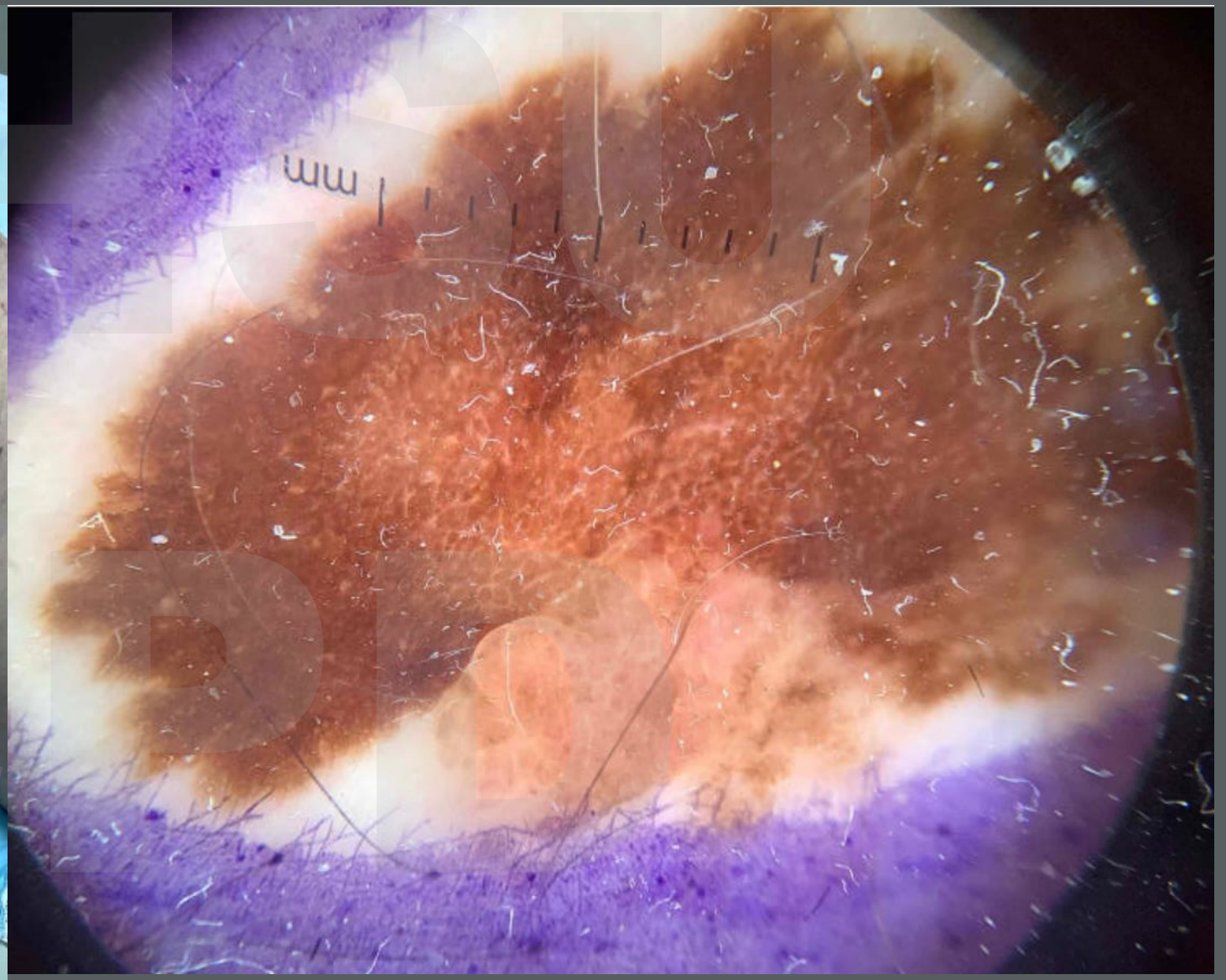
Case 2: 59 yo man with itchy “mole” on back

Photo Credit: Lara Clayton, PA-C



MELANOMA, RIGHT MID LATERAL BACK, MEASURING 0.4 MM IN THICKNESS, ARISING IN A CONGENITAL PATTERN NEVUS.

NOTE: The melanoma is predominantly confined to the epidermis (in situ) and is arising in a congenital-pattern nevus. Melanoma in situ extends to within approximately one millimeter of a peripheral tissue margin, and the congenital-pattern nevus extends to within a millimeter of the deep margin. Additional treatment which ensures complete removal may be prudent.

MELANOMA OF THE SKIN SYNOPTIC REPORT:
Anatomic Site: skin, right mid lateral back
Breslow Thickness: 0.4 mm
Ulceration: not identified
Mitotic Rate: not identified
Lymph-Vascular Involvement: not identified
Perineural Involvement: not identified
Tumor-Infiltrating Lymphocytes: present, non-brisk
Tumor Regression: not identified
Microsatellitosis: not identified
Peripheral Margin: uninvolved
Deep Margin: uninvolved
Pathologic Staging (AJCC 8th edition): pT1a

Photo Credit: Lara Clayton, PA-C

Learning Pearl

Shave / deep shave/ scoop biopsies may be acceptable methods

Caution: Orientation of excision closure can disrupt lymphatic drainage and make lymph node biopsy more difficult

Siegel RL, Miller KD, Jemal A. Cancer statistics, 2016. CA Cancer J Clin. 2016;66:7-30.

American Academy of Dermatology: Statistics and Facts https://www.aad.org/media/stats

Objective #5

EMR Support Tools

Save time with EMR Tools available in EPIC and MTED

MAIN MENU

Chapters 1-6 can be completed in around 60 minutes.

The training contains video clips which will need headphones or speakers.

Click here for additional course instructions.

- Pre-Test
- 01 Identify High Risk Patients
- 02 Perform Rapid Screenings
- 03 Visual Identification
- 04 Perform Biopsies
- 05 Solutions for Busy Clinics
- 06 Patient Education Resources
- Post-Test

Additional Learning:

- 07 OHSU Epic SmartPhrase Tools
- 08 Non-Melanoma Skin Cancers
- 09 Dermatopathology Reports
- 10 Staging, Treatments, Follow Up

To calculate the Melanoma Risk Score, you will
use the table to make your recommendations:

	RECOMMENDATIONS STRATIFIED BY MELANOMA RIS		
	Low Risk (Total: 0 points)	**Some Risk (Total: 1-3 points)**	**Moderate Risk (Total: 4-8 points)**
EDUCATION	• Skin cancer warning signs • Self-exam instructions	• Skin cancer warning signs • Monthly self-exam instructions	• Skin cancer warning signs • Monthly self-exam instructio • Medical provider skin exam
MEDICAL PROVIDER EXAM	See a medical provider for any suspicious lesions	• See a medical provider for any suspicious lesions • Consider a yearly full body skin exam by a medical provider	• At least annual skin exam wit medical provider • Consider dermatology referra exam every year or wheneve suspicious lesion is found • Add annual screening to heal maintenance

Here are some useful links and documents:

- Statistics: Melanoma of The Skin
- Quick Reference Guide
- USPSTF Screening Recommendation Paper
- EMR Risk Calculator Reference Material
- Adult After Visit Summary
- Peds After Visit Summary
- Start Seeing Melanoma Public Education Website
- MoleMapper Website
- Support Staff Education Module
- AAD Dermatologist Locator
- OHSU Dermatology Referrals
- Educational Materials Order Form

.melrisk

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Online Toolkit Resource Tab:

1. Handouts
2. Epic Smartphrases
3. Online risk calculator for patients

Skin Cancer Screening Reference Guide

Screening Recommendations

Populations at risk for developing melanoma

Adults aged 35–75 years should be screened at least annually with a total body skin examination when presenting with one or more of the following risk factors:

- Personal history of skin cancer, pre-cancerous lesions, or predisposing genetic mutation;
- Family history suggestive of a predisposition toward melanoma; or
- Physical features suggestive of susceptibility for skin cancer.

See over for a table that provides more details on risk factors.

Intake Form

Doorway risk assessment

- Fair complexion
- Blonde, red, or light brown hair
- Blue, green, or hazel eyes
- Light skin colors (Fitzpatrick I–III, Fitzpatrick 1988)
- Numerous freckles
- Many visible moles

Diagnosis Codes

Atypical nevus *(need to specify site)* — D22.X
Family history of melanoma — Z80.8
Family history of skin cancer — Z80.8
Freckles — L81.2
History of atypical nevus — Z87.898
History of sun-damaged skin — Z87.2
Multiple pigmented nevi of the trunk and extremities — D22.7
Personal history of melanoma — Z85.820
Personal history of skin cancer — Z85.828
Personal risk factors not otherwise specified Z91.89
Screening for skin cancer — Z12.83
Skin tanning due to UV light — L56.8
Sun-damaged skin — L57.8
Tanning bed use — Z91.89

Sample EPIC SmartPhrase (dot phrase) for Risk Factor Assessment

- Fitzpatrick skin type I–III: {YES/NO:63}
- Blond or red hair: {YES/NO:63}

AVS and Patient Education Materials Available in Toolkit

Primary Care Training v2.0

Credits

Resources | Menu

MAIN MENU

60 Minute Training

Chapters contain slides, videos and quiz questions.

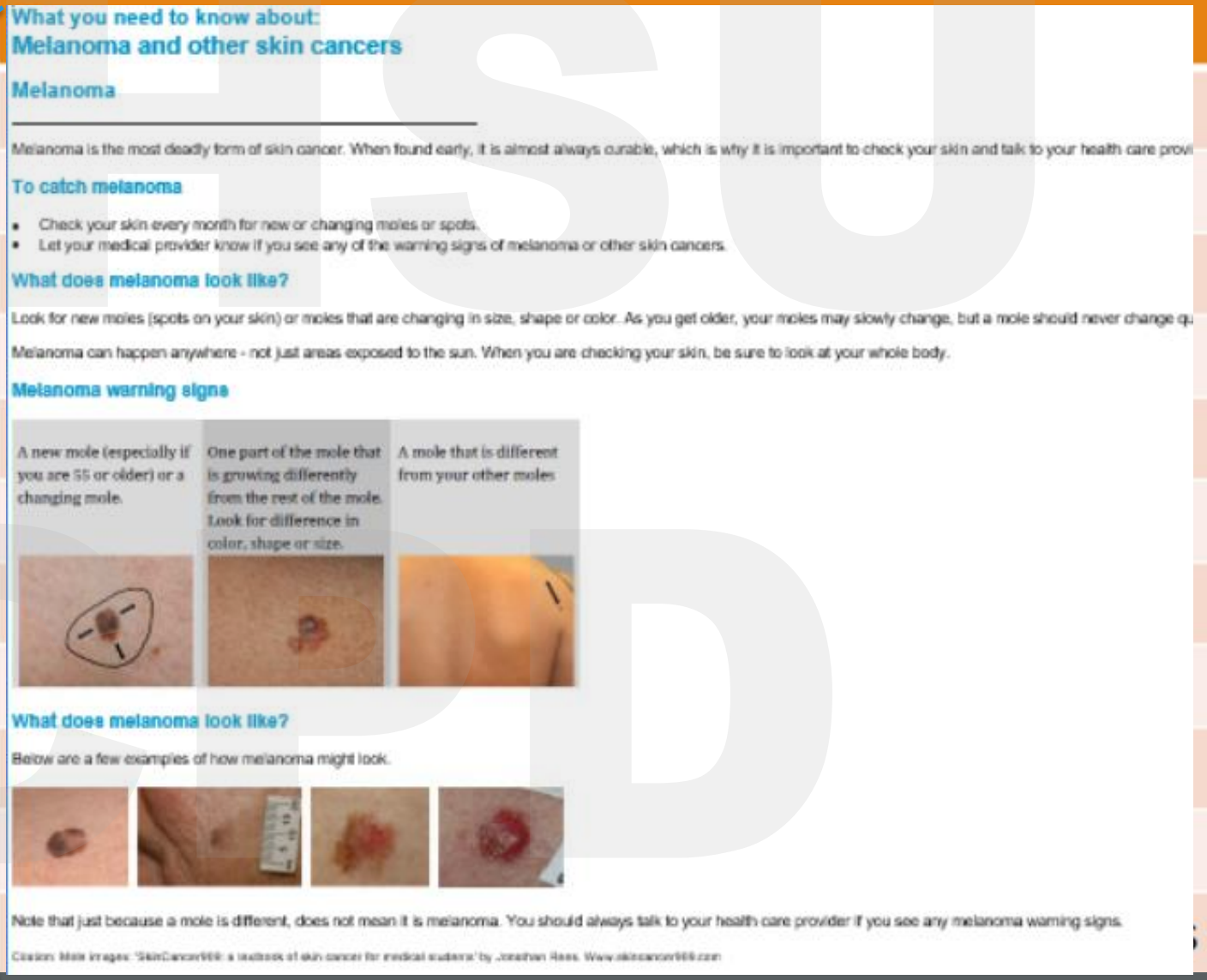
- Pre-Test
- 01 Identify High Risk Patie
- 02 Perform Rapid Screenin
- 03 Visual Identification
- 04 Perform Biopsies
- 05 Solutions for Busy Clinic
- 06 Patient Education Resou
- Post-Test

Additional Learning:

- 07 OHSU Epic SmartPhrase Tools
- 08 Non-Melanoma Skin Cancers
- 09 Dermatopathol
- 10 Staging, Treatme

Epic smartphrases for patient education

Name
.MELRISK
.SKINCANCERAVS
.MELHPI
.MELPE
.MELROS
.SKINCANCERPE
.SKINCANCERPUNCHBX
.SKINCANCERPUNCHBXS
.SKINCANCERSHAVEBX
.SKINCANCERSHAVEBXS
.MOLEMAPPER



What you need to know about:
Melanoma and other skin cancers

Melanoma

Melanoma is the most deadly form of skin cancer. When found early, it is almost always curable, which is why it is important to check your skin and talk to your health care provi

To catch melanoma

- Check your skin every month for new or changing moles or spots.
- Let your medical provider know if you see any of the warning signs of melanoma or other skin cancers.

What does melanoma look like?

Look for new moles (spots on your skin) or moles that are changing in size, shape or color. As you get older, your moles may slowly change, but a mole should never change qu

Melanoma can happen anywhere - not just areas exposed to the sun. When you are checking your skin, be sure to look at your whole body.

Melanoma warning signs

A new mole (especially if you are 55 or older) or a changing mole.

One part of the mole that is growing differently from the rest of the mole. Look for difference in color, shape or size.

A mole that is different from your other moles

What does melanoma look like?

Below are a few examples of how melanoma might look.

Note that just because a mole is different, does not mean it is melanoma. You should always talk to your health care provider if you see any melanoma warning signs.

Citation: Mole images: 'SkinCancer909: a textbook of skin cancer for medical students' by Jonathan Rees. Www.skincancer909.com

Objective #6

Melanoma Treatment and Survivorship

Next steps for treatment and follow-up

Melanoma *in situ*

T1a Melanoma
(<0.8 mm) Breslow Depth

Will require additional wide excision with appropriate margins (0.5-1.0 cm for MIS, 1.0 cm for invasive melanoma)
Consider referral to dermatologic surgery

Melanoma
More than 0.8 mm Breslow Depth

In addition to wide excision,
Sentinel Lymph Node Biopsy (SLNB) may be necessary
Referral to surgical oncology

Gershenwald, Jeffrey E et al. “Melanoma staging: Evidence-based changes in the American Joint Committee on Cancer eighth edition cancer staging manual.” *CA: a cancer journal for clinicians* vol. 67,6 (2017): 472-492. doi:10.3322/caac.21409

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I have a patient with a history of Melanoma, what is appropriate follow-up?

Photo Credit: OHSU Dermatology

Follow-up For Patients With A History Of Melanoma

- Monitor your patient for additional melanoma metastasis or recurrence
- Full body skin exam and full lymph node exam at least once a year
- Full review of systems to evaluate for signs of metastatic disease
  - Imaging tests as needed for specific symptoms
  - Possible regional Lymph Node Ultrasound
- Educate your patient about skin and lymph node self exams
- Genetic counseling/testing if three or more melanomas, or personal or family history of melanoma and certain cancers

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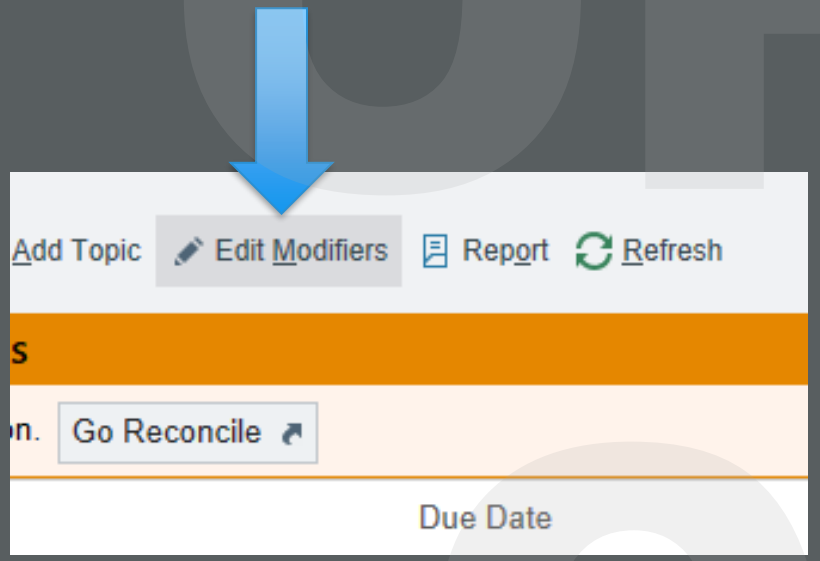
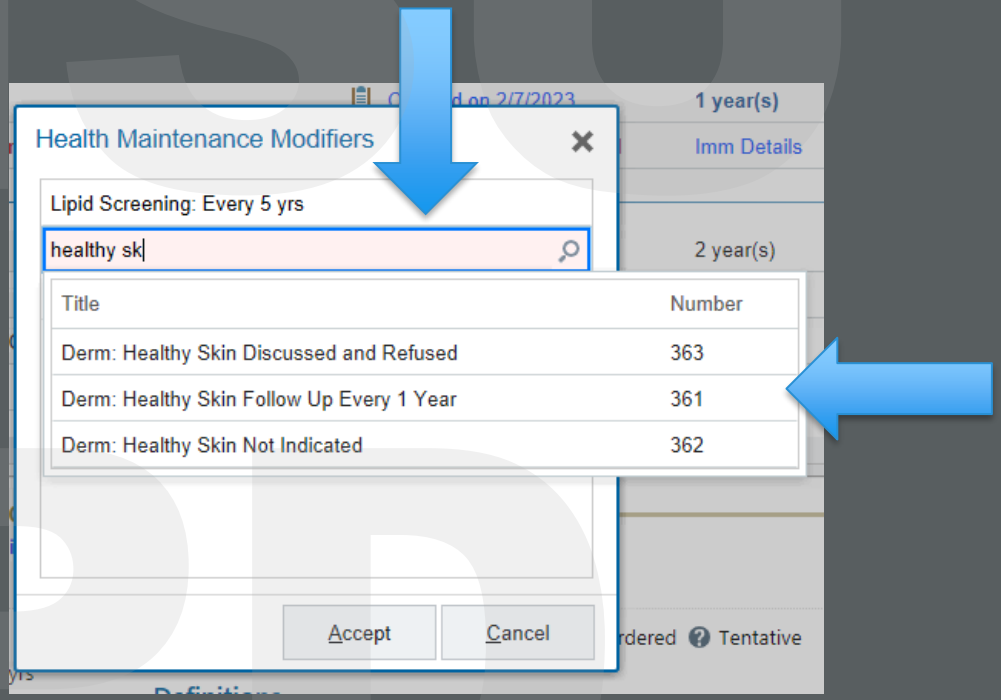
Health Maintenance Reminder





References

This training was developed with input, assets and content from the following contributors:

- OHSU Melanoma Symposium, Dr. Anna Bar, MD; May 19, 2018. Presentation, OHSU Dept. of Dermatology.
- Immunohistochemical Staining in the Mohs Lab, Jonathon Hetts, HT; 2018 Presentation, OHSU Dept. of Dermatology.
- Melanoma Detection PCP, Dr. Sancy Leachman, MD, PhD; Jan. 28, 2020 Presentation, OHSU Dept. of Dermatology.
- OHSU Melanoma Symposium, Dr. Justin Leitenberger, MD; May 19, 2018. Presentation, OHSU Dept. of Dermatology.
- Melanoma Echo: Diagnosis of Melanoma, Dr. Emily Smith, MD; Jun. 8, 2018 Presentation. Mizzou. Missouri Telehealth Network. Missouri Foundation for Health.
- Melanoma Echo: Practical Melanoma Dermatopathology, Dr. Emily Smith, MD; Oct. 12, 2018 Presentation. Mizzou. Missouri Telehealth Network. Missouri Foundation for Health.
- Melanoma Echo: Staging and Management, Dr. Emily Smith, MD; Aug. 4, 2018 Presentation. Mizzou. Missouri Telehealth Network. Missouri Foundation for Health.
- Melanocytes: Nevi & Melanoma, Dr. Kevin White, MD; Presentation, OHSU Dept. of Dermatology.

- War on Melanoma; www.waronmelanoma.org
- American Academy of Dermatology; www.aad.org
- American Joint Committee on Cancer (AJCC); www.cancerstaging.org (https://cancerstaging.org/CSE/Physician/Documents/Melanoma%202.2.18.pdf)
- National Cancer Institute (www.training.seer.cancer.gov)
- National Comprehensive Cancer Network (NCCN (www.NCCN.org) (2018) (https://www.nccn.org/patients/guidelines/content/PDF/melanoma-patient.pdf)
- U.S. Preventative Services Task Force (USPSTF) (https://uspreventativeservicestaskforce.org)

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- Elizabeth Stoos, MEd, OHSU Dermatology
- Dr. Alex Verdieck, MD, OHSU Family Medicine
- Dr. Alexander Witkowski, MD, PhD, Dermatologist, OHSU Dermatology
- DermNet NZ, www.dermnetnz.org (https://creativecommons.org/licenses/by-nc-nd/3.0/nz/legalcode) – Desmoplastic Melanoma
- Kim HY, et al. 2015, 'A case of Spitzoid melanoma,' *Annals of Dermatology*, vol. 27, no. 2, pp. 206-209. - (http://creativecommons.org/licenses/by-nc/3.0/) – Spitzoid Melanoma
- Kim Sanders, MPAS, PA-C
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- OHSU Dermatopathology Photos – Jessica Tran, HTL, OHSU Dermatopathology
- Skin Cancer 909 www.skincancer909.com 'Skin Cancer 909: a textbook of skin cancer for medical students' by Jonathan Rees – Amelanotic Melanoma, Benign melanocytic nevi

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- Jeremy Erroba, BRIDGE-C2 Project Coordinator
- Kathryn Bonuck, BRIDGE-C2 Data Analyst

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Building Research In Implementation & Dissemination To Close Gaps & Achieve Equity In Cancer Control

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What do I do with the results of a biopsy?

Discuss what happens after a skin biopsy is sent to the lab and a Dermatopathologist makes a diagnosis

Considerations
Margin positivity
Next steps
Unfamiliar terminology

MELANOCYTIC NEVUS, COMPOUND TYPE.

NOTE: The nevus extends closely to the deep biopsy margin, appearing excised in these sections.

MELANOMA?

MELANOCYTIC NEVUS, JUNCTIONAL TYPE, WITH ATYPICAL FEATURES SUSPICIOUS FOR EARLY MELANOMA IN SITU.

NOTE: Incomplete circumscription, increased single junctional melanocytes in areas predominating over nests, and intraspinous involvement are atypical features suspicious for early or small diameter melanoma in situ. The lesion extends closely to the biopsy margins, additional treatment would be prudent.

How do I read this Pathology Report?

MELANOMA, RIGHT LATERAL CHEEK, MEASURING 0.5 MM IN THICKNESS.

NOTE: The melanoma extends in epidermal fashion to the peripheral biopsy margins, and additional treatment which assures removal is recommended.

MELANOCYTIC NEVUS?

There is a broad, not entirely symmetric, predominantly intraepidermal melanocytic proliferation composed of nests of varying size, and single melanocytes distributed along, and above the basal layer. Most of the melanocytic nuclei are enlarged, and irregularly shaped, and most of the cells contain increased amounts of amphophilic cytoplasm. There is a sparse underlying lymphocytic infiltrate.

MELANOMA?

MELANOMA?

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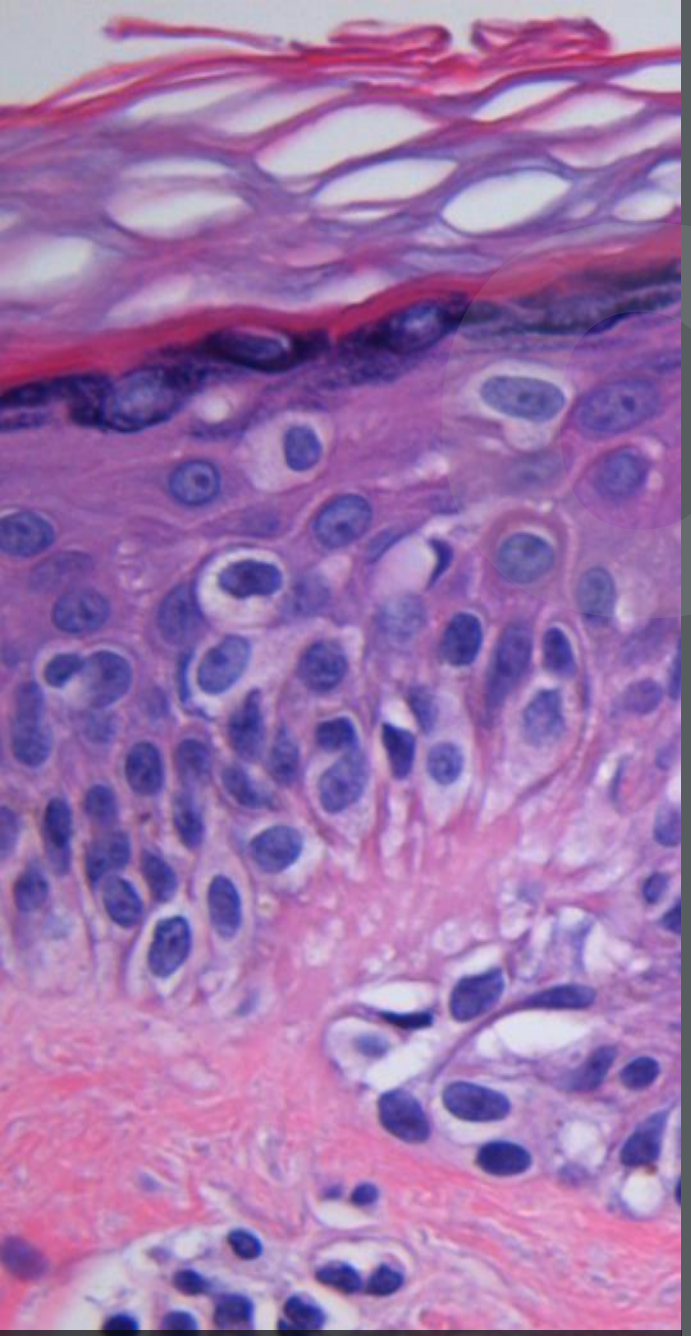
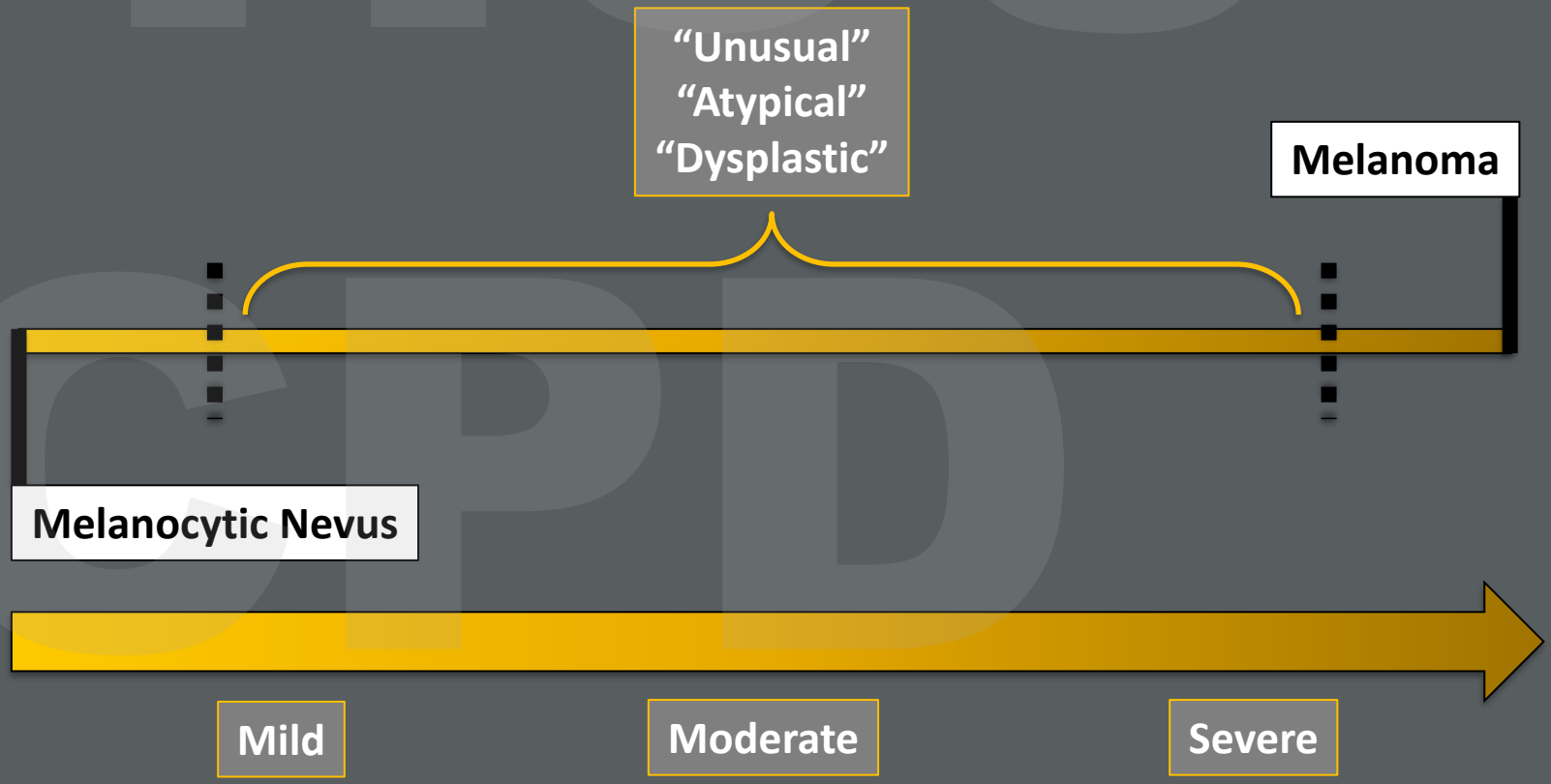


Photo Credit: Dr. Stephanie Mengden-Koon

Diagnostic Uncertainty For Melanoma

Different Dermatopathologists use different systems and terms to determine whether a skin lesion should be considered Melanoma



MAIN MENU

60 Minute Training

Chapters contain slides, videos and quiz questions.

Pre-Test

01 Identify High Risk Patients

02 Perform Rapid Screenings

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10 Staging, Treatments, Follow Up

Photo Credit: OHSU Dermatology

What Do I Expect To See?

Final Pathologic Diagnosis:

The DIAGNOSIS

NOTE Section:

- Other possible skin conditions to consider
- What is present, and what is not present on the tissue microscopically to support the diagnosis
- Recommendations for further treatment*

*It is common for Dermatopathologists at most academic institutions to make recommendations in their Pathology Reports

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Photo Credit: OHSU Dermatology

Benign Melanocytic Nevus Diagnosis

Final Pathologic Diagnosis:

~~Example of a Benign Melanocytic Nevus Diagnosis~~

MELANOCYTIC NEVUS, COMPOUND TYPE.

NOTE: The nevus extends closely to the deep biopsy margin, appearing excised in these sections.

OHSU

Photo Credit: OHSU Dermatology

Atypical Nevus Diagnosis

Final Pathologic Diagnosis:

Example of a Melanocytic Nevus with Atypical Features suspicious for Melanoma Diagnosis

MELANOCYTIC NEVUS, JUNCTIONAL TYPE, WITH ATYPICAL FEATURES SUSPICIOUS FOR EARLY MELANOMA IN SITU.

NOTE: Incomplete circumscription, increased single junctional melanocytes in areas predominating over nests, and intraspinous involvement are atypical features suspicious for early or small diameter melanoma in situ. The lesion extends closely to the biopsy margins, **additional treatment would be prudent.**

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Photo Credit: OHSU Dermatology

Melanoma *in situ* Diagnosis

Final Pathologic Diagnosis:

~~Example of a Melanoma *in situ* Diagnosis~~

MELANOMA *IN SITU*, RIGHT INFERIOR POSTERIOR THIGH.

NOTE: The melanoma *in situ* extends closely to the peripheral margins. Additional treatment is recommended.

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Photo Credit: OHSU Dermatology

Melanoma Diagnosis

Final Pathologic Diagnosis:

~~Example of a Melanoma Diagnosis~~

MELANOMA, CENTER CHEST, MEASURING 1.4 MM IN THICKNESS, NON-ULCERATED, IN ASSOCIATION WITH A PRE-EXISTING NEVUS.

NOTE: There is fibrosis and dense inflammation, suggesting possible regression. The melanoma extends closely to the peripheral margins. Additional treatment is recommended.

*Unlike Melanoma *in situ*, a Melanoma diagnosis includes a Breslow Depth

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MAIN MENU

Chapters 1-6 can be completed in around 60 minutes.

The training contains video clips which will need headphones or speakers.

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Reference: Visual Perception Training, Northwestern

Wide Local Excision (WLE) for Melanoma *in situ* and T1a Melanomas

PRINCIPLES OF SURGICAL MARGINS FOR WIDE EXCISION OF PRIMARY MELANOMA

Tumor Thickness	Recommended Clinical Margins[2]
In situ[1]	0.5–1.0 cm
≤1.0 mm	1.0 cm (category 1)
>1.0–2 mm	1–2 cm (category 1)
>2.0–4 mm	2.0 cm (category 1)
>4 mm	2.0 cm (category 1)

Margins may be modified to accommodate individual anatomic or functional considerations.

Guidelines from National Comprehensive Cancer Network on Melanoma (2016). Kunishige JH, Brodland DG, Zitelli JA. Margins for standard excision of melanoma in situ. J Am Acad Dermatol. 2013;69(1):164.

Melanoma Treatment Beyond Surgery

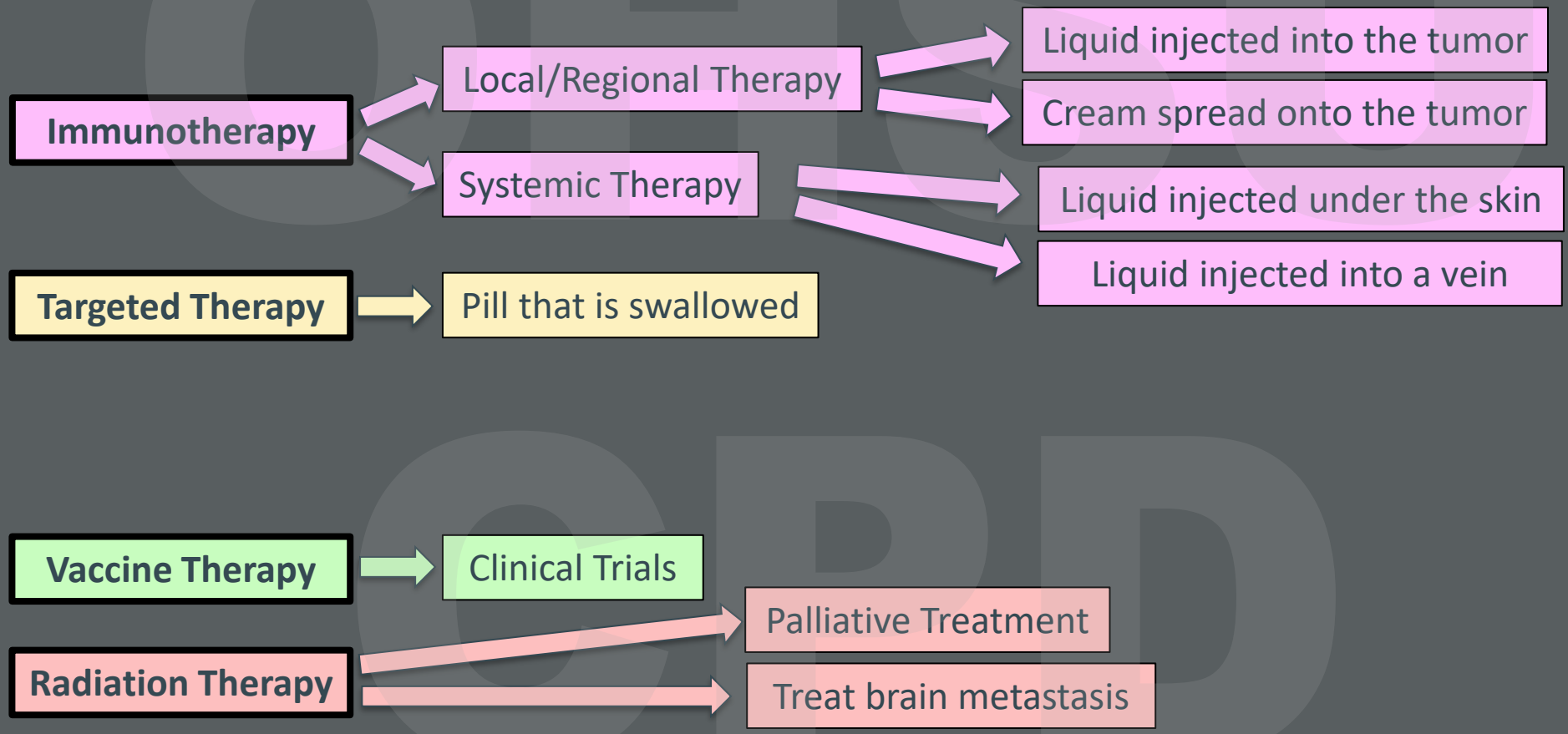


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Photo Credit: OHSU Dermatology

Follow-up For Patients With A History Of Melanoma

- Clinical Stages IA-IIA
  - Medical History and Physical Exam (Skin & Lymph Nodes)
    - Every 6-12 months for 5 years, then
    - Every year as needed

- Clinical Stages IIB-IIC, III, and IV
  - Medical History and Physical Exam (Skin & Lymph Nodes)
    - Every 3-6 months for 2 years, then
    - Every 3-12 months for 3 years, then
    - Every year as needed
  - Possible Imaging every 3-12 months

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