

The ABC's of Radiation Skin Toxicities

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Presenter Disclosure

- Faculty:
 - Jordana Jones, R.N. from Western Manitoba Cancer Centre
- Relationships with commercial interests:
 - None
 - Molylycke Health Care: ***No affiliation***
 - Mepilex, Mepitel, Melgisorb, Mepilex Ag, ect.

Mitigating Potential Bias

- Not Applicable

Learning Objectives

- What questions do I ask as a health care provider to conduct a thorough **A**ssessment before and after treatment?
- What issues can a radiation patient anticipate during their treatments and **B**eyond?
- How do I treat/ manage/ **C**are for these skin toxicities?

Prevalence

- >95% will have some sort of skin reaction during or shortly after treatment
- 80-90% will develop a “mild” reaction
- 10-15% will develop a “severe” reaction

Definitions

- Radiation Dermatitis
 - *A common* side effect of radiation treatment
 - It is a combination of radiation injury and the subsequent inflammatory response
 - It is **not** a burn

Radiation Dermatitis Risk Factors

- Patient Risk Factors
 - Co-morbidities (anemia, diabetes, suppression of the immune system)
 - Tobacco Use
 - Age
 - Nutritional Status
 - Breast size
 - Skin folds
- Treatment Risk Factors
 - Type of radiation and energy
 - Treatment technique
 - Location of treatment field
 - Volume of treated tissue
 - Dose, time and fractionation parameters

Assessment

- Baseline assessment
- General recommendations
 - Washing
 - Use of deodorants
 - Skin products
 - Hair removal
 - Swimming
 - Application of heat and cold
 - Band-aids, tape, and clothing
 - Sun exposure

Assessment

- Assessing radiation dermatitis during treatment
 - NOPQRSTUV

Grade 1: “Mild”

- Faint or dull erythema
- Inflammation
- Heat and pain
- Sometime accompanied with itchiness



Grade 1: “Mild”

- Wash the skin daily
- Avoid friction and other trauma to the skin
- Use moisturizer daily
- Dressing Recommendation
 - Mepitel Film
 - Mepilex Lite





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Grade 2: “Moderate”

- Tender or bright erythema
- Dry desquamation
- Patchy moist desquamation



Grade 2: “Moderate”

- Dry Desquamation
 - Continue to use moisturizer
 - 0.5-1.0% steroid cream for unbroken skin
 - Mepilex Lite
- Moist Desquamation
 - Principles of moist wound healing
 - Mepilex Transfer
 - Mepitel
 - Hydrogels
 - Flamazine*
 - Polysporin*





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Grade 3: “Severe”

- Moist desquamation in areas other than skin folds
- Pitting edema
- Occasional bleeding
- Very painful



Grade 3: “Severe”

- Analgesics
- Culture wound
- Hydrocolloid dressing
- Mepilex
- Mepitel
- Mepilex Ag
- Melgisorb
- Stop chemotherapy





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Post Radiation Reactions

- Late Reactions
- Recall Phenomenon

Late Reactions

Dermatitis occurring six or more months after completion of radiation therapy

- Pigmentation changes
- Permanent hair loss
- Telangiectasia
- Fibrous changes
- Atrophy
- Ulceration



Late Reactions

- Apply water based lotions or creams to the affected area
- Avoid excessive sun exposure
- Administer analgesics
- Monitor for signs of infection
- Maintain regular follow-ups



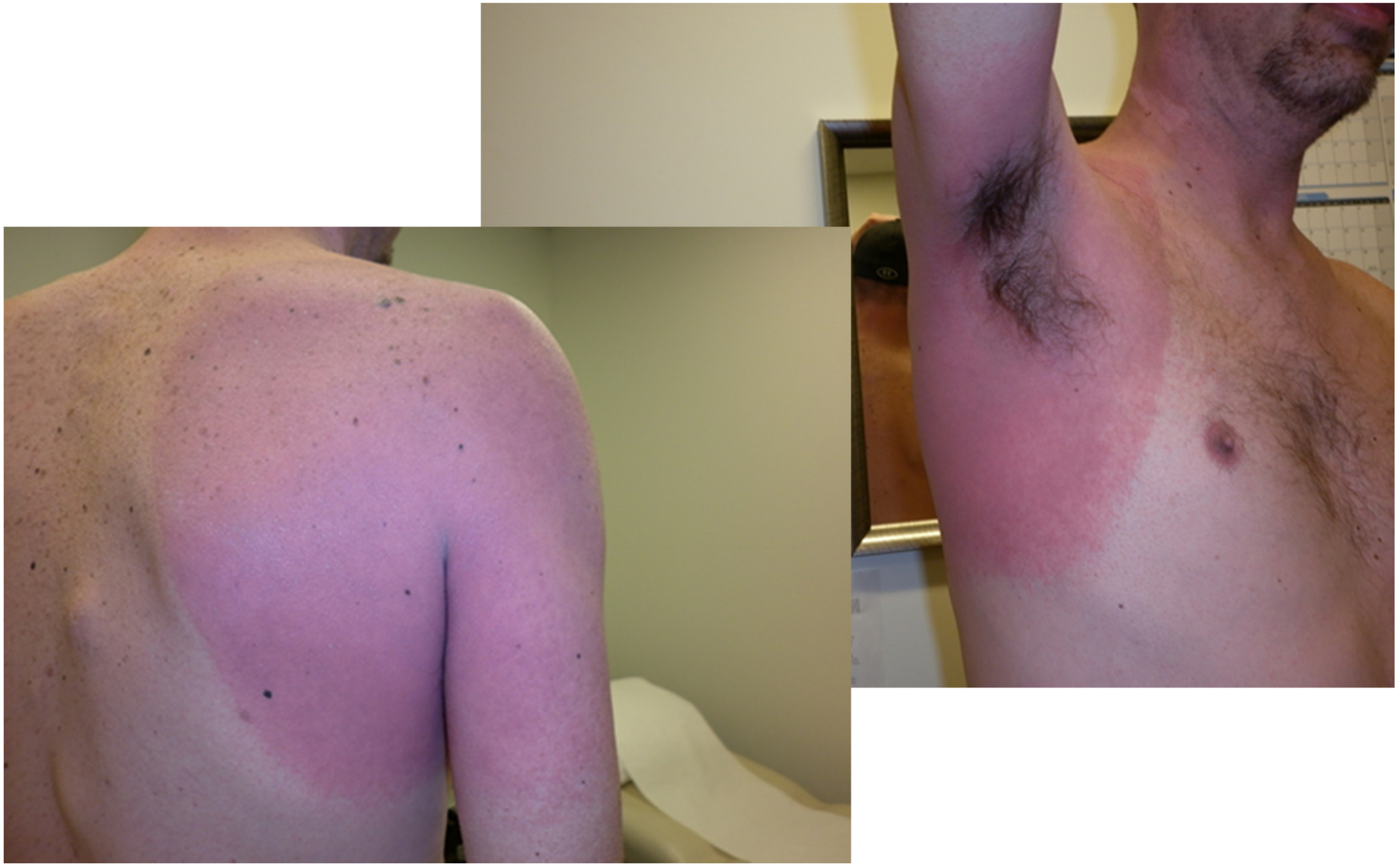
Recall Phenomenon

- Occurs when dermatitis manifests very rapidly (following the administration of chemotherapy drugs) within a previously treated radiation field.
- Signs and symptoms of moist desquamation
- Rapid onset and progression

Recall Phenomenon



Recall Phenomenon



Take Home Messages

- Baseline assessment and general skin care recommendations are crucial to helping prevent and manage skin reactions
- Understanding that radiation skin toxicities are normal, common, and often expected
- How to effectively treat/ manage radiation skin toxicities
- Identify late reactions and involve the appropriate personnel

Questions?

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