SKIN CARE
IN CANCER PATIENTS

July 30, 2017
Tri-State Summer Meeting/Cancer Congress
Disclosures

- Fees received for consulting services to the National Organization for Rare Diseases (NORD)
- Fees received for consulting services to the Mycoses Study Group Education and Research Consortium (MSGERC)
What We Will Cover

- Relationship of skin to life and satisfaction with life
- Cancer Related Effects on Skin
- Impact of Skin Toxicities
- Treatment Related Toxicities
  - Radiation
  - Chemotherapy
  - Targeted Therapy and Immunotherapy
- Assessment and Description
- Management
  - OTC
  - RX
  - Home Remedies
Why Talk About Skin?

- Largest Organ in Human Body
- Critical for Health and Life
  - Barrier to the External Environment
  - Transmission of Sensory Information
  - Maintenance of Homeostasis
- Disclaimer – Reference A&P Texts

- Effects our Patients’ Quantity of Life and Quality of Life
  - OS, Ability to Continue Critical Therapies
  - Perception of Quality and Value of Life
Cancer Related Skin Effects

• Sign or Symptom of Developmental, Environmental or Pre-existing Process

• Sign or Symptom of the Disease Process
  • Primary Skin Cancers
  • Breast Cancer
  • Sarcomas
  • Leukemias/Lymphomas

• Result of the Disease Process
  • Dehydration
  • Malnutrition
  • Immobility
  • Deficiency in self care
    • Hygiene, nail care, eye care, nasal discharge, bowel/bladder

• Result of the Treatment Process
Effects Beyond the Skin

- Major Depression
- Suicidal Thoughts
- Anxiety and Loss of Confidence
- Anger and Frustration
- Discontinuation of Normal Daily Activities
- Social Isolation
- Unemployment

- Degree of Emotional Effect Inconsistent with Degree of Skin Condition
Money Considerations

- Cost of Lost Income
- Cost of Interventions
  - Clothing
  - Supplies
  - OTC Products
  - Prescription Products
    - Generic vs Brand
    - Amount Prescribed
Special Populations

- Mature - Aging
- Pediatric
- SOT/SCT
- HIV+
- Co-morbidities
  - Autoimmune Disorders
  - Cardiovascular Disorders
  - Endocrine Disorders
  - Pre-existing Dermatologic Conditions
  - Substance Abuse History
"Regular" Rashes

- Roseola
- Acne
- Rosacea
- Shingles
- Sunburn
- Disease

- Developmental
- Environmental/Infectious/STDs
- Disease or Treatment Related

Don’t Ignore the Obvious and the Routine
Confounding Factors in Management

• Pre-existing Attitudes
  • Quality of Life perceived less important than Quantity of Life in early stages
  • Skin Problems are not Real Problems
  • Scarlett O’hara approach to concerns and planning – “I'll worry about that tomorrow.”

• Information
  • More may be Less
    • Phone Apps
    • Limited Human Storage
    • Frustration
Dermatologic toxicities occurred in 90% of patients and were severe (NCI-d); not indicated for the treatment of patients with colorectal cancer that harbor somatic mutations in exon 5 or for whom therapy if acute or worsening dermatologic or soft tissue toxicity associated with severe or life threatening inflammatory or infectious complications. Dose modifications for Vectibix® concerning dermatologic toxicity are provided hereafter and hereafter is referred to as “RAS.”

Retrospective subset analyses across several randomized clinical trials were conducted to investigate the role of RAS mutations on the clinical effects of anti-EGFR-directed monoclonal antibodies (panitumumab or cetuximab). Anti-EGFR antibodies in patients with tumors containing RAS mutations resulted in exposing those patients to anti-EGFR related adverse reactions without clinical benefit from these agents. Additionally, in Study 20050203, 272 patients with RAS-mutant mCRC tumors received Vectibix® in combination with FOLFOX and 276 patients received FOLFOX alone. In an exploratory subgroup analysis, OS was shorter (HR = 1.21, 95% CI: 1.01-1.45) in patients with RAS-mutant mCRC who received Vectibix® and FOLFOX versus FOLFOX alone. Progressive decreasing serum magnesium levels leading to severe (grade 3-4) hypomagnesemia occurred in up to 7% (in Study 20080763) of patients across clinical trials. Monitor patients for hypomagnesemia and hypocalcemia prior to initiating Vectibix® treatment, periodically during Vectibix® treatment, and for up to 8 weeks after the completion of treatment. Other electrolyte disturbances, including hypokalemia, have also been observed. Replete magnesium and other electrolytes as appropriate.

In an interim analysis of an open-label, multicenter, randomized clinical trial in the first-line setting in patients with mCRC, the addition of bevacizumab and chemotherapy resulted in decreased OS and increased incidence of NCI-CTC grade 3-5 (87% vs 72%) adverse reactions. NCI-CTC grade 3-4 adverse reactions occurring at a higher rate in Vectibix®-treated patients included rash/acneform dermatitis (26% vs 1%), diarrhea (23% vs 12%), dehydration (16% vs 5%), primarily occurring in patients with diarrhea, hypokalemia (10% vs 4%), stomatitis/mucositis (4% vs < 1%), and hypomagnesemia (4% vs 0%).

In Study 20020408, 4% of patients experienced infusion reactions and 1% of patients experienced severe infusion reactions (NCI-CTC grade 3-4). Infusion reactions, manifesting as fever, chills, dyspnea, bronchospasam, and hypotension, can occur following Vectibix® administration. Fatal infusion reactions occurred in postmarketing experience. Terminate the infusion for severe infusion reactions.

Severe diarrhea and dehydration, leading to acute renal failure and other complications, have been observed in patients treated with Vectibix® in combination with chemotherapy.

Fatal and nonfatal cases of interstitial lung disease (ILD) (1%) and pulmonary fibrosis have been observed in patients treated with Vectibix®. Pulmonary fibrosis occurred in less than 1% (2/4167) of patients enrolled in clinical studies of Vectibix®. In the event of acute onset or worsening of pulmonary symptoms interrupt Vectibix® therapy. Discontinue Vectibix® therapy if ILD is confirmed.

In patients with a history of interstitial pneumonitis or pulmonary fibrosis, or evidence of interstitial pneumonitis or pulmonary fibrosis, the benefits of therapy with Vectibix® versus the risk of pulmonary complications must be carefully considered.

Exposure to sunlight can exacerbate dermatologic toxicity. Advise patients to wear sunscreen and hats and limit sun exposure while receiving Vectibix®.

Keratitis and ulcerative keratitis, leading to permanent keratitis and irreversible keratitis, have been reported with Vectibix® use. Monitor for evidence of keratitis or ulcerative keratitis. Interrupt or discontinue Vectibix® for acute or worsening dermatologic or soft tissue toxicity associated with severe or life threatening inflammatory or infectious complications.

Progressive decreasing serum magnesium levels leading to severe (grade 3-4) hypomagnesemia occurred in up to 7% (in Study 20080763) of patients across clinical trials. Monitor patients for hypomagnesemia and hypocalcemia prior to initiating Vectibix® treatment, periodically during Vectibix® treatment, and for up to 8 weeks after the completion of treatment. Other electrolyte disturbances, including hypokalemia, have also been observed. Replete magnesium and other electrolytes as appropriate.

Progressive decreasing serum magnesium levels leading to severe (grade 3-4) hypomagnesemia occurred in up to 7% (in Study 20080763) of patients across clinical trials. Monitor patients for hypomagnesemia and hypocalcemia prior to initiating Vectibix® treatment, periodically during Vectibix® treatment, and for up to 8 weeks after the completion of treatment. Other electrolyte disturbances, including hypokalemia, have also been observed. Replete magnesium and other electrolytes as appropriate.

A retrospective analysis of all available post-marketing surveillance reports demonstrates a trend toward an increased incidence of dermatologic events during treatment with Vectibix® compared with those randomized to bevacizumab and chemotherapy. As a result of the toxicities experienced, patients randomized to Vectibix®, bevacizumab, and chemotherapy received a lower mean relative dose intensity of each chemotherapeutic agent (oxaliplatin, irinotecan, bolus 5-FU, and infusional 5-FU) over the first 24 weeks on study, compared with those randomized to bevacizumab and chemotherapy.

Dermatologic Toxicity

- Dermatologic toxicities occurred in 90% of patients and were severe (NCI-CTC grade 3 and higher) in 15% of patients receiving Vectibix® monotherapy [see Dosage and Administration (2.3), Warnings and Precautions (5.1), and Adverse Reactions (6.1)].
- In Study 20020408, dermatologic toxicities occurred in 90% of patients and were severe (NCI-CTC grade 3 and higher) in 15% of patients with mCRC receiving Vectibix®. The clinical manifestations included, but were not limited to, acneform dermatitis, pruritus, erythema, rash, skin exfoliation, paronychitis, dry skin, and skin fissures.
- Monitor patients who develop dermatologic or soft tissue toxicities while receiving Vectibix® for the development of inflammatory or infectious sequelae. Life-threatening and fatal infectious complications including necrotizing fasciitis, abscesses, and sepsis have been observed in patients treated with Vectibix®. Life-threatening and fatal bullous mucocutaneous disease with blisters, erosions, and skin sloughing has also been observed in patients treated with Vectibix®. It could not be determined whether these dermatologic adverse reactions were directly related to EGFR inhibition or to diosyncratic immune-related effects (eg, Stevens Johnson syndrome or toxic epidermal necrolysis).
- Withhold or discontinue Vectibix® for dermatologic or soft tissue toxicity associated with severe or life threatening inflammatory or infectious complications. Dose modifications for Vectibix® concerning dermatologic toxicity are provided hereafter.

Important Safety Information

WARNING: DERMATOLOGIC TOXICITY

Importantly, dermatologic toxicities occurred in 90% of patients and were severe (NCI-CTC grade 3 and higher) in 15% of patients receiving Vectibix® monotherapy [see Dosage and Administration (2.3), Warnings and Precautions (5.1), and Adverse Reactions (6.1)]. In Study 20020408, dermatologic toxicities occurred in 90% of patients and were severe (NCI-CTC grade 3 and higher) in 15% of patients with mCRC receiving Vectibix®. The clinical manifestations included, but were not limited to, acneform dermatitis, pruritus, erythema, rash, skin exfoliation, paronychitis, dry skin, and skin fissures. Monitor patients who develop dermatologic or soft tissue toxicities while receiving Vectibix® for the development of inflammatory or infectious sequelae. Life-threatening and fatal infectious complications including necrotizing fasciitis, abscesses, and sepsis have been observed in patients treated with Vectibix®. Life-threatening and fatal bullous mucocutaneous disease with blisters, erosions, and skin sloughing has also been observed in patients treated with Vectibix®. It could not be determined whether these dermatologic adverse reactions were directly related to EGFR inhibition or to diosyncratic immune-related effects (eg, Stevens Johnson syndrome or toxic epidermal necrolysis). Withhold or discontinue Vectibix® for dermatologic or soft tissue toxicity associated with severe or life threatening inflammatory or infectious complications. Dose modifications for Vectibix® concerning dermatologic toxicity are provided hereafter.

Publications

Major Interventions

- Surgery
- Radiation Therapy
- Chemotherapy
- Immunotherapy and Targeted Therapy
- Hormone Therapy
- Stem Cell Transplant
- Precision Medicine
Major Interventions

• **Radiation Therapy**
  - [https://www.nccn.org/professionals/radiation/content/](https://www.nccn.org/professionals/radiation/content/)
  - Acute Changes
  - Chronic Changes
  - Preventive Measures
  - Treatment Measures

• Surgery
• Chemotherapy
• Immunotherapy and Targeted Therapy
• Hormone Therapy
• Stem Cell Transplant
• Precision Medicine
Common Radiation Skin Effects

- RTOG/EORTC, NCI's CTCAE and LENTSOMA for Late Effects measurement
- Categories of Effect
  - Erythema (Inflammatory Processes)
  - Dry Desquamation
  - Moist Desquamation
  - Necrosis
- Combination therapy increases incidence and severity of effects (Targeted Drugs)
- Most serious consequences observed in breast, head and neck and perineum.
Radiation Recall
## Management Options

<table>
<thead>
<tr>
<th>Signs/Symptoms</th>
<th>Grade 1</th>
<th>Grade 2</th>
<th>Grade 3</th>
<th>Late Reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Faint or dull erythema, heat, pain, occasional itchiness</td>
<td>Tender, bright erythema, dry desquamation, patchy mois desquamation</td>
<td>Moist desquamation in areas other than skin folds, pitting edema, occasional bleeding, significant pain</td>
<td>Dermatitis six or more months after completion of radiation therapy: pigmentation, permanent alopecia, telangiectasia, fibrous changes, atrophy, ulceration</td>
</tr>
</tbody>
</table>

### Intervention Options

<table>
<thead>
<tr>
<th></th>
<th>Basics plus reduce friction, moisturize BID, consider film or silicone dssg for high risk areas, eg folds, friction</th>
<th>For dry desquamation increase frequency of moisturizer, ointment type, OTC steroid cream for unbroken skin For moist desquamation Mepilex Transfer, Mepitel, Hydrogels, Flamazine/Silvadene</th>
<th>Analgesics, consider wound culture, hydrocolloid dressings, Melgisorb, consider chemo reduction or vacation</th>
<th>Water based lotions or creams, reduce sun exposure, analgesics, regular follow-ups</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Define your department's &quot;Basics&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Radiation Recall
Management of Radiation Skin Toxicities

- 2014 European Journal of Cancer Care Survey of Radiation Oncology Departments in *US and Europe (except UK – previously surveyed) (25% response rate with only 20 US organizations responding)
  - 17 departments reported that they did not assess the skin before treatment and 37 only assessed patients considered at risk
  - Over 40 products were actively used in prevention and treatment of toxicities including aqueous creams, silicone dressings eg Mepiex, aloe vera, OTC hydrocortison, Hydrogel, calendula, Blafine, Hyaluronic acid, paraffin, lanolin gauze, Gentian violet, sucralfate, Dermofilm, Chamomile and Almond Oil, saline soaks, Dexpanthenol cream, Chamomile tea, silver nylon leaf dressings, Diprobase Cream, Mometasone, Silvadene, Cavilon, Lyfoam, Eosine.

- "There is insufficient evidence to support, and therefore the panel recommends against the use of trolamine, topical sulcrate, hyaluronic acid, ascorbic acid, silver leaf dressing, light-emitting diode lasers, Theta cream, dexpanthenol, calendula, proteolytic enzymes, sucralfate, oral zinc, and pentoxifylline. Moreover, there is no evidence to support the superiority for any specific intervention in a reactive fashion. For patients with established radiation-induced telangiectasia and fibrosis, the panel suggests the use of pulse dye laser for visual appearance, and the use of pentoxifylline and vitamin E for the reduction of fibrosis." (Wong, et al Support Care Cancer 2013)

*Note Literature Review Table (Kumar, S et al Journal of Medical Imaging and Radiation Oncology, 2010)
Major Interventions

• Surgery
• Radiation

• Chemotherapy
  • Immunotherapy and Targeted Therapy
  • Hormone Therapy
  • Stem Cell Transplant
  • Precision Medicine
Common Chemotherapy Skin Toxicities

- Dry Skin
- Cellulitis
- Flushing
- Ecchymosis
- Petechiae
- Purpura
- Rashes
- Blisters and Calluses
- Photosensitivity
- Thickening
- Pigmentation Changes
  - Serpentine Tracks
  - Discoloration under tape/dressings
  - Flag sign
- Mucositis
  - Inflammation
  - Swelling
  - Pain
  - Vulnerability to Infections, eg Candida
- Nail changes

(Images from NEJM, Chan and Lin, 2010)
Target Therapy and Immunotherapy

• EGFR Skin Effects
  • Epidermis, Follicle, Sebaceous Eccrine Glands, Dendritic APCs

• EGFR Inhibition
  • Inflammation
  • Atrophy
  • Telangiectasias
  • Photosensitivity and loss of protection
  • Apoptosis (Lacouture 2001)

• Presentation of Skin Related Effects
  • Acne-like rash first 2-5 weeks
  • Dry Skin after 5 weeks
  • Fissures after 6 weeks
  • Paronychia after 8 weeks
  • These effects are NOT Self-Limiting
EGFR Inhibitor Related Rash

- Papulopustules and Pruritis

- Occurrence
  - Cetuximab – 85% (Grade 3 - 10%)
  - Panitumumab – 90 (Grade 3 - 16%)
  - Lapatinib – 27% (Grade 3 - 1%)
  - Erlotinib - 75% (Grade 3 - 9%)

- Scope et al 2007 –
  - CRC pts on Cetuximab Minocycline or Tazarotene for Rash Prevention
  - Measured by lesion count
  - Tazarotene had no effect
  - Minocycline 100mg/qd expanded time before rash occurred and decreased severity of rash in first month of tx

Pan Canadian Trial

- Pan Canadian Trial *
  - Pts with Mets Lung Ca receiving erlotinib 2\textsuperscript{nd} or 3\textsuperscript{rd} line tx, prophylactically txd with minocycline significantly lengthened the time to most severe grade of rash.
  - Pts randomized to 3 arms – no treatment unless severe (Gr3); reactive treatment; prophylactic tx with minocycline 100mg bid x 4wks
  - Gr 3 Rash significantly higher in no-treatment arm
  - Efficacy unchanged. No difference in OS.
  - Severity of toxicity was effected. Incidence of grade 3 skin toxicities was reduced in patients who were tx’d with prophylactic minocycline.

(*JCO 2015 Melosky et al)
It's Not Completely Clear

- **Four Studies Analyzed - Erlotinib**
  - Each study evaluated the effect of prophylactic tx for EGFR related skin rash
  - Overall conclusions:
    - No reduction in the incidence of EGFR Inhibitor-induced rash
    - Reduction by 42% of relative risk of severe rash without compromising effectiveness

  Both prophylactic and reactive treatment of erlotinib-induced rashes are effective.  
  
  (J Ocvirk et al)

- **German Study – Cetuximab**
  
  Cetuximab-induced skin exanthema: prophylactic and reactive skin therapy are equally effective.
  
  Retrospective Study and did not measure time to severe rash.
  
  Reactive treatment is as effective as prophylactic treatment and reduces unnecessary exposure to drugs.
  
  (Wehler, T. et al.)
## Acneiform Rash Management

<table>
<thead>
<tr>
<th>Preventive</th>
<th>Recommend</th>
<th>Not Recommended</th>
<th>Evidence</th>
<th>Grades</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topical</td>
<td>Hydrocortisone 1% cream with moisturizer, sunscreen twice daily</td>
<td>Pimecrolimus 1% cream</td>
<td>II</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tazarotene 0.05% cream</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sunscreen as single agent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Doxycycline is preferred in patients with renal impairment; minocycline is less photosensitizing</td>
</tr>
<tr>
<td>Systemic</td>
<td>Minocycline 100 mg/day</td>
<td>Tetracycline 500 mg BID</td>
<td>II</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Doxycycline 100 mg BID</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>Recommend</td>
<td>Not Recommended</td>
<td>Evidence</td>
<td>Grades</td>
<td>Comments</td>
</tr>
<tr>
<td>Topical</td>
<td>Alclometasone 0.05% cream</td>
<td>Vitamin K1 cream</td>
<td>IV</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fluocinonide 0.05% cream BID</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clindamycin 1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systemic</td>
<td>Doxycycline 100 mg BID</td>
<td>Acitretin</td>
<td>IV</td>
<td>C</td>
<td>Photosensitizing agents</td>
</tr>
<tr>
<td></td>
<td>Minocycline 100 mg/day</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Isotretinoin at low doses (20-30 mg/day)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Management beyond Acneiform Rash

• **Preventive**
  - Mild Soap, Unscented Bath Oil
  - Tepid Water
  - Moisturizing Creams
  - Avoid extreme environmental temperatures
  - Avoid direct sunlight exposure

• **Treatment**
  - Alcohol/irritant/fragrance free emollient creams or ointments
  - Occlusive emollients including urea creams, colloidal oatmeals and petroleum-based products
  - Scaly areas consider ammonium lactate or lactic acid cream
  - Severe effects consider medium to high potency steroid creams, oral steroids
  - Avoid anything containing retinoids, benzoyl peroxide or alcohol
  - HFS – Urea, strong corticosteroids, Gel insoles, thick, comfortable socks
  - Cetirizine or diphenhydramine for pruritis

• **Products**

• **Soaps**
  - Aveeno Moisturizing Bar, Olivella Face and Body Soap FF, Basic Sensitive Skin Bar, Dr. Bonner’s Unscented Baby Mild Castile Bar Soap, Tom’s, Dove, Vani-cream Gentle, Eucerin Soap-Free

• **Emollients and Moisturizers**
  - Aquaphor, GlucanPro, Bag Balm, Lindi Skin (ONS White Paper)
  - (Pure Formulas Inc for single content items, eg. Aloe vera gel, shea butter, liquid lanolin)
Additional EGFR Inhibitor Skin Toxicities

- Effects
  - Xerosis
  - Paronychia
  - Alopecia
  - Hair Modifications

- Patients receiving EGFR inhibitors > 6 mos (n = 16)
  - Range on therapy (6-27 mos)

- **Cutaneous toxicities in 100%**

- Dose mod in 37.5%
B-RAF Inhibitors

- Cutaneous toxicities are the most common adverse effects (>50%)
- Photosensitivity in 52% of patients treated with vemurafenib
- Papillomas, non-painful polypoid lesions, nodules
- Hyperkeratosis (location)
  - Benefit from exfoliative ointment containing salicylic acid and topical steroids
  - Consider urea based ointment related to site
- Keratoacanthoma
- Cutaneous squamous cell carcinoma
- Interventions aimed at reducing hyperkeratotic lesions, particularly on soles of feet; reducing painful nodules by excision/cryotherapy; skin hydration with urea based ointments
Primary lesions (originating from previously normal skin)

**Type:** Macule
**Description:** Flat, discolored spot on skin with sharp borders
**Example:** Freckle

**Type:** Papule
**Description:** Solid elevations without fluid with sharp borders
**Example:** Mole

**Type:** Nodule, tumor
**Description:** Palpable, solid, elevated mass
**Example:** Wart (nodule)
Large lipoma (tumor)

**Type:** Vesicle
**Description:** Small distinct elevation with fluid
**Example:** Blisters caused by herpes simplex

**Type:** Bulla
**Description:** Large distinct elevation with fluid
**Example:** Large friction or burn blister

**Type:** Pustule
**Description:** Vesicle or bulla filled with purulent fluid
**Example:** Acne, carbuncles

**Type:** Wheal
**Description:** Localized area of edema, often irregular and of variable size and color
**Example:** Hives, insect bite

**Type:** Plaque
**Description:** Large, flat, elevated, solid surface
**Example:** Psoriasis

Secondary lesions (originating from a primary lesion)

**Type:** Scale
**Description:** Thin or thick flake of skin varying in color; usually secondary to desquamated, dead epithelium
**Example:** Dandruff

**Type:** Crust
**Description:** Dried residue of exudates
**Example:** Residue of impetigo

**Type:** Fissure
**Description:** Linear crack in the skin
**Example:** Athlete's foot

**Type:** Ulcer
**Description:** Opening in the skin caused by sloughing of necrotic tissue, extending past the epidermis
**Example:** Pressure ulcer, stasis ulcer
What We Can Measure

• Time to Onset of Rash
• Time to Onset of Severity of Rash
• Extent of Rash
• Co-occurring conditions and complaints
• Length of Presence
• Time to Improvement
• Time to Resolution
What We Can Map

- Location, color, shape and distribution
- Circumference
- Depth of Swelling/Induration
- Margins
- Perimeter
- Confluence
- Pattern
- Density/Volume/Population
What You Already Know

- Mild Soaps
- Pat, Don't Rub
- Wear Sunscreen
- Wear Hats
- Avoid Known Allergens; expect new irritations
- Temperature
  - No extreme hot or cold anything!
- Content
  - Alcohol Free (Free-ish)
  - Fragrance Free
  - Select other contents based on Intention/Need
Skin Care: What We Can Do

- **Pre-treatment Assessment and Preparation**
  - Photography
  - Description
  - Teaching with Pictures

- **Communicate with the Team**
  - What's the Plan
  - When to Start
  - Duration
  - Expectations
  - Reassessment
  - Consultations

- **Participate in Trials**
Tracking Symptoms

- Important to Provider
  - Relationship to Dz and Tx
  - Progression/Improvement
  - Scan in to DMR
- Important to Patient
  - Actionable Item
  - Relationship to Aggravating and Alleviating Factors
- Communication Tool
Ideas and Tools


• Interactive Therapy Checker from Clinical Care Options
  • https://www.clinicaloptions.com/Oncology/Treatment%20Updates/Immune%20Related%20AEs/Algorithm%20Tool/Interactive_Algorithm_Tool.aspx

• Skin Reaction Symptom Tracker
  • Patient Resource Publishing
  • http://www.patientresource.com/Derm_Reactions_Symptom_Tracker.aspx
Now my rash smells like bacon, and it doesn’t itch anymore!
Home Remedies

YES

• Aloe Vera (American Academy of Dermatology endorsed for inflammation)
• Cabbage Leaves (apply refrigerated leaves to skin)
• Oatmeal (beta-glucan, make at home)
• Vinegar and Water (1:4)
• Calendula (soak)
  Cucumber (paste)
• Relaxation Techniques

NO

• Acai
• Clorox and Water
• Oxygen
• Comfrey (for inflammation)
• Witch Hazel (*beware drying)
• Oak Bark
• Clay
• Apple Cider Vinegar
• Chamomile (*drug interactions, allergies) (Journal of Clinical And Aesthetic Dermatology, Jan 2009)
• Peppermint Leaves
• Basil Leaves (Camphor and Thymol)

National Center for Complementary and Integrative Health (NCCIH)
Take Action

1. Communication that should be interdisciplinary and effectively communicate findings between programs, departments and organizations.

2. Pretreatment Assessments

3. Education for Staff

4. Education for Patients

5. Interdisciplinary Tracking of Toxicities
   - Measurable Factors (Pain scale, 5-D Itch Scale, Skindex-29, NCI-CTCAE)
   - Progress Notes versus tabular reporting
   - Patient Diaries
   - Follow-up Phone Calls Between Visits

6. Document Interventions with clear start and stop times.

7. Track what you learn locally and share your experience.

8. Develop or participate in a Clinical Trial.
References


Schwartz R. Immunotherapy and Targeted Therapy. Updates in Oncology Nursing. ONS Highlights from Congress. Sep 16, 2016.

