# Dermatology Basics for the WOC Nurse

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No financial disclosures
No off-label uses

## Skin

- Largest organ
  - Barrier against irritants, toxins, organisms
  - Moisture barrier
  - Heat, pain, touch and pressure sensors
- Skin disorders can be a symptom of systemic disease
- Skin disorders or injury can cause a systemic disease

## Dermatology Tool Box

- Dermatology resource-book, cards, on-line
- Good penlight or flashlight
- Ruler

**Recommended**:

www.visualdx.com/learnderm

5 interactive lessons

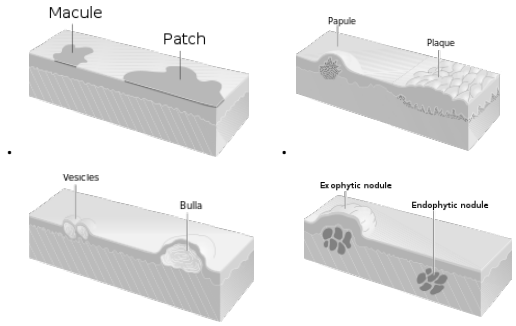

## Morphology of lesions

- Primary or secondary
- Why is terminology important?
  - Develop differential diagnosis
  - Document changes
  - Communicate with other professionals

## Primary lesions

| **<1cm** | | **>1cm** |
|---|---|---|
| Macule | flat | patch |
| Papule | raised | plaque |
| Vesicle | fluid filled | bulla |
| Nodule | firm | tumor |

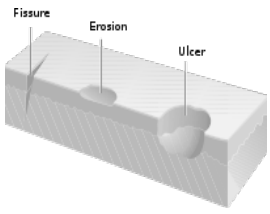
## Primary lesions




## Secondary lesions

- Atrophy
- Crust
- Desquamation
- Eczematous
- Erosion
- Excoriation
- Fissure
- Hyperkeratotic
- Lichenified
- Indurated
- Scale
- Umbilicated

## Secondary lesions



## Patterns

- Acral
- Annular
- Confluent
- Discrete
- Follicular
- Linear
- Livedo/reticulate
- Hypopigmented
- Hyperpigmented
- Petechiae
- Purpura
- Telangiectasia
- Morbilliform
- Papulosquamous
- Photodistribution

## History

- Previous infections or major illnesses
- Exposure to infection, irritants
- Allergies
- Travel
- Meds- Rx, OTC, home remedies
- Keeping you awake at night

## History-OLDCART

- **O**nset
- **L**ocation (where did it start, spread to)
- **D**uration (has it changed in any way)
- **C**haracter (pain, tender, itchy)
- **A**ggravating/associated factors
- **R**elieving factors
- **T**emporal factors- severity, meds, txs, etc.

## Diagnosis

I. Fluid filled
   A. Clear
   B. Pustular
I. Solid, non-red
II. Solid, red
   A. Non-scaling
   B. Scaling
      1. Papulosquamous
      2. Eczematous

## I. A. - Fluid filled- clear

**Clear- vesicobullous diseases**

- Vesicular diseases (small):
  - Herpes simplex
  - Varicella zoster
  - Tines pedis
  - Dermatitis herpetiformis
- Bullous diseases (large)
  - Pemphigus vulgaris
  - Stevens-Johnson syndrome
  - Poison ivy-type contact dermatitis
  - Bullous impetigo

## I. B. - Fluid filled - pustular

**Pustular diseases**

- Acne vulgaris
- Rosacea
- Bacterial or fungal folliculitis
- Candidiasis

## II. - Solid, non-red

- **Flesh/skin colored papules**- wart, actinic keratosis, corns and calluses, basal or squamous cell cancer, cysts
- **White lesions**- vitiligo, tinea versicolor, milia, molluscum
- **Brown-black color**- freckles, melanoma, seborrheic keratosis, dermatofibromas, nevi
- **Yellow color**- xanthelasma, necrobiosis lipoidica, actinic keratosis

## III. A.- Solid, red, non-scaling

**Dome shaped**:

- Papules- insect bites, cherry angiomas
- Nodules- furuncles, epidermoid cysts, hidradenitis

**Flat topped**- vascular reaction (wheal, hive)

- Transcient- urticaria and angioedema
- Persistent- erythema multiforme or nodosum
- Purpuric erythemas- vasculitis

## III. B. - Solid, red, scaling

**Papulosquamous-** No epithelial disruption

- Sharply marginated
- Can have eczema if the person is scratching it

**Eczematous-** Epithelial disruption

- Erosions, weeping, crusts, fissures, yellow scale
- Poorly marginated
- Lichenification

## III. B. - Solid, red, scaling

**Papulosquamous**

- Plaque formation:
  - Psoriasis
  - Tinea
  - Lupus
  - Mycosis fungoides
- Nonconfluent papules:
  - Pityriasis rosea
  - Lichen planus
  - Secondary syphillis

## III. B. - Solid, red, scaling

**Eczematous**

- Lot of excoriation
  - Atopic dermatitis
  - Stasis dermatitis
  - Scabies
- Little excoriation
  - Seborrheic dermatitis
  - Irritant or allergic contact dermatitis
- Eczematous reaction pattern

## Treatment-Topicals

| Vehicles | Potency | Use |
|---|---|---|
| Ointment | strong | hydrating |
| Cream | moderate | some hydration |
| Gel | strong | drying |
| Lotion/soln | low | drying |

Powders (used to dry, intact skin)

## What to use where

- Ointments- non-intertriginous, thick areas
- Creams- anywhere
- Gels- oral, scalp, very hairy skin sites
- Lotions/soln- scalp, ears, hairy sites, intertriginous areas
- Powders- intact intertriginous sites

## To dry wet lesions

- Wet dressings or compresses> inflammation suppression, debride, drying
- Wet the gauze and wring it out so that it is not running nor just damp
- Place it on the affected area for 20-30 minutes 3-4 times/day- usually not longer than 3 days
- Stop applications when weeping stops or will get cracking and fissures
- Don't cover with a towel or plastic> inhibits evaporation, promotes maceration, potential bacterial growth
- Burrow's solution , Domeboro (aluminum acetate)

## Topical steroids

- Potency goes from High(1) to Low(7)
- Super-high potency (I)- halobetasol, clobetasol, betamethasone dipropionate
- High potency (II, III)- fluocinonide, mometasone, amcinonide
- Mid potency (IV, V)- betamethasone valerate, fluticasone, triamcinolone, fluocinolone
- Low potency (VI, VII)- hydrocortisone, desonide, dexamethasone, aclometasone

## Clinical indications

- Atopic dermatitis
- Psoriasis
- Bechet's
- Patch stage MF
- Peristomal dermatoses
- Lichen planus
- Granuloma annulare
- Acne keloidalis
- Lichen sclerosis
- Seborrheic dermatitis
- Bullous
- Dermatoses
- Pyoderma gangrenosum
- Alopecia areata
- Vitiligo

## Pruritus

- Common causes
  - Old age
  - Cholestasis; jaundice
  - Hematologic/oncologic disorders
  - Renal failure
  - Neuropathy
  - Primary skin disorder

## Pruritus- Non-pharmacologic treatment

- Cool environment
- Tepid showers, baths
- Avoid spicy foods or alcohol
- Stress reduction
- Keep nails short

## Pruritus- Pharmacologic treatment

**Topical**

- Menthol or phenol formulations
- Antihistamine creams
- Topical anesthetics
- Capsaicin 0.025%
- Topical corticosteroids

## Pruritus- Pharmacologic treatment

**Systemic**

- H1 blockers
- H2 blockers
- Others- doxepin (Sinequan), ondansetron (Zofran), Paroxetine (Paxil), mirtazapine (Remeron), sertraline (Zoloft), gabapentin (Neurontin)

## Dermatologic Emergencies

- Stevens-Johnson Syndrome (SJS) and Toxic Epidermal Necrolysis (TEN)
- Necrotizing fasciitis
- Staph and Strep TSS
- Drug reaction with eosinophilia and systemic symptoms syndrome (DRESS)
- Child abuse

## References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- Short, T., "Management of Pruritus" in Short Talks on Palliative Care, *Midwest Palliative & Hospice Care Center, Vol. 2, Np. 6, June 2012*


## Resources

- Dermatology Nurses Association
- Nurse Practitioner Society of the Dermatology Nurses Association
- American Academy of Dermatology
- American Cancer Society
- Centers for Disease Control
- Dermnet
- National Institutes of Health

## Questions


Thank You