Common Dermatologic Conditions in Aging Skin

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The Aging Skin

Normal maturation and sun exposure

• Too much-
  Tumors, lentigenes, seborrheic keratoses, leg veins, hair, muscle tone
• Too little-
  Collagen, fat and elastic tissue
• Sunscreens- Australian study randomized residents to daily use vs discretionary use between 1992 and 1996
• Risk for developing any melanoma reduced by 50% and invasive melanoma risk reduced by 73%
• Same trial also showed reduction of risk of developing squamous cell cancer

Tanning Beds
• International Agency for Research on Cancer
• Comprehensive metaanalysis found that risk of melanoma (skin and eye) increases by 75% when tanning begins before age 30.
• Cite this to your young patients
“I’m Here for a Skin Check”

- Can screening by Primary MD reduce morbidity/mortality from skin cancer?
- Hard to do study-need to follow 800,000 persons over long period of time to determine this-studies not done

Bottom line:

- Not enough evidence for or against to advise that patients have routine full body exams BUT
- Know risk factors and incorporate exam into full physical and teach patients what to look for
Actinic Keratosis (AK)

• Who is at risk?
  – Over age 35-40
  – Fair-skinned persons
  – Sun-exposed sites
    • Face, forearms, hands, upper trunk
  – History of chronic sun exposure

Clinical Features of AK

• Red, adherent, scaly lesions, usually < 5mm
• Sandpapery, rough texture
• Tender when touched or shaved
• Thick, warty character (cutaneous horn)
Diagnosis of AK

• Diagnosis
  – Clinical features
  – Shave or punch biopsy

• Differential Diagnosis
  – BCC/SCC
  – Seborrheic keratosis
  – Wart

Treatment of AK

• Cryotherapy-goal is 2x15 sec thaws
• Topical chemotherapy/chemical peel
  – Efudex (5FU crème) 2x’s/day x 6 wks or
  Imiquimod-3X’s /wk and 3 mos.
Diagnosis of BCC: Shave or Punch Biopsy

Recommended Treatment of BCC

• Surgical excision (head and neck)
• Curettage and desiccation (trunk)
• Radiation therapy (debilitated patient)
• Microscopically controlled surgery (Mohs)
  – Recurrent/sclerotic BCC’s
  – BCC’s on eyelid and nasal tip
Aldara (Imiquimod)

- Topical therapy designed for wart treatment
- Upregulates interferon/ down regulates tumor necrosis factor/works on toll like receptors
- Seems to have efficacy in superficial BCC’s
- Do Not use in BCC’s that are nodular or invasive
- Biopsy to confirm diagnosis **BEFORE** treatment

Treatments **NOT** Recommended

- Cryotherapy
- Topical chemotherapy
  - 5 Fleurourical (Efudex)
- Radiation therapy (good surgical candidate)
Squamous Cell Carcinoma (SCC)

• Who is at risk?
  – Age 50+
  – Chronic sun exposure
    • Head, neck, lower lip, ears, dorsal hands, trunk
  – Special circumstances
    • Immunosuppression (organ transplant)
    • Radiation therapy

Clinical Features of SCC

• Papule, nodule or tumor
• Non-healing erosion or ulcer
• Cutaneous horn (wart-like lesion)
• Fixed, red, scaling patch/plaque (Bowen’s-SCC-in-situ)
How to Diagnose

- Punch or excisional/incisional biopsy
- Shave biopsy for flat, non-elevated lesion

Treatment of SCC

- **Recommended treatment**
  - Excision
  - Radiation therapy (in debilitated patient)
- **Treatments NOT recommended**
  - Curettage and desiccation
  - Topical chemotherapy
Melasma

- Hyperpigmentation of cheeks, chin, forehead
- Seen in pregnancy and in hormone replacement
- Also seen in females and males without hormone treatment
- Treatment - Hydroquinone 4%, (Solaquin forte) sunscreen, Trilumma (retinoid, hydroquinone and steroid)

Acne Rosacea

- Common in women over 40
- Often seen in persons of Irish decent
- Associated with seborrheic dermatitis
- Characterized by papules, erythema, telangiectasia
- Sun exposure, alcohol and spicy foods exacerbate rosacea
Acne Rosacea

- Oral antibiotics for 6-8 weeks clears skin for some amount of time
- Add topical flagyl for maintenance
- Topicals alone work slowly and less frequently

Perioral Dermatitis

- Characterized by small papules and pustules
- In 30-40 year olds, centered around mouth and eyes (perioral/orbital dermatitis)
- These patients may never have had history of acne as teens
Seborrheic Dermatitis

- Scale - hairline, eyebrows, nasolabial area
- Heat and stress exacerbate it
- Seen with rosacea in some patients

Treatment

- Keep scale off scale
  - Tar shampoo
  - Selenium sulfide
  - Nizoral 2% shampoo
- HC 1% ointment & Nizoral creme BID
- Chronic, no cure
- Use when needed
Urticaria

- Acute < 6 weeks
- Chronic > 6 weeks
  - 85% of chronic cases, no etiology
- Check CBC, LFT’s, PPD, hepatitis A, B and C, tinea and candida
- Treatment - treat underlying condition, antihistamines (sedating and non-sedating)
- NO PREDNISONE

Intertrigo

- Pendulous breasts or pannus
- Always component of candida
- Blow dry area
- Apply topical antifungals
- Tucks pads
Lichen simplex chronica

- Often seen on the labia
- Pts have had multiple anticandidal treatment
- Stop itch /scratch cycle with potent topical steroids
- Stop the washing/cleaning habits

Dry skin on feet

- Keratoderma climacterum-seen in menopause/post-menopause
- Often present with deep fissures
- Urea 40% /topical steroid
Pruritus and Xerosis

- Aging skin loses its barrier functions and gets drier and itchier
- New onset dryness and itchiness in the elderly - CBC, TSH, LFT’s and renal function
- Lubrication is key
- Decrease water use, NO soap
  - Sedating antihistamines such as benadryl, atarax, doxepin are useful

Herpes Zoster

- Zoster vaccine available - boosts older person’s cell-mediated immunity to VZV
- Study done on 38,000 persons 60 yrs and older (Kimberlin et al NEJM March 2007)
- Incidence of zoster was 51% lower in those that received vaccine vs placebo
- Post-herpetic neuralgia was 67% lower in vaccinated group
- Worked best in 60-69 yr olds
## Treatment

- ACV 800 mg 5 x’s/day
- Famvir 500mg tid
- Valacyclovir 1000 tid
- begin within 48 hrs of onset of blister. Any time in immunosuppressed host
- Pain control
  - NSAIDS/Tylenol
  - Neurontin: 100 mg tid
  - Elavil: 25 mg qhs or q 8 hrs
- Prednisone: no role

## Additional Information

- Can it be used in pts with previous zoster-yes
- How about use in younger age groups?
- Needs to be give within ½ hour of reconstitution
- $150.00 for injection
-uptake in most communities is only around 30%
-recommended now before giving patients immunosuppressive drugs like MTX or TNF blockers.

Too Much Hair

• Vaniqa
  – topical cream that breaks the chemical bond of hair
  – apply 2x’s/day forever
  – 30% effective
  – $30/month
Hair Removal

- pigment of hair absorbs the light and gets destroyed
- dark hair responds
- hair is always in different growth phases, so treatment has to be repeated several times to catch the phase (expensive)
- pigment changes of surrounding skin and scarring
- fast and minimal scarring

Hair Loss

- If not scarring and diffuse:
- Check recent surgeries/illness, nutrition, anemia, TSH, estrogen replacement, medication history, VDRL.
- If hirsute with scalp hair loss-DHEAS and free testosterone
- If lactating- check prolactin
If all negative

- Androgenetic Alopecia-
  Minoxidil 5% bid topically (even in women)
  Can make hair oily—may want to start with minoxidil 2% or use
  2% by day and 5% at night
  Minoxidil foam—once at night
  Use for at least 6 months for results and what you see after 1
  yr. is the effect you can expect.

What about finasteride (propecia)?—Does not work in women.

Hair Biology

- Normal to lose 100 hairs/day
- Duration of Anagen defines hair length
- Human hair cycling is not in sync
Androgenetic Alopecia

Men

- No Tx necessary
- Minoxidil 5% Solution bid or Foam qd.
- Finasteride 1mg q.d. (5 a-reductase inhibitor)

Women

- Minoxidil 2-5% Solution bid or Foam qd.
Telogen Effluvium

- Alteration in normal hair cycle
- Triggering event 3-6 mths before onset
- Gentle hair pull test is positive
- Labs: cbc, tsh, Fe/ferritin
- Rx: reassurance

Stop the Motion

- Botulinum Toxin
  - FDA approved (two types available)
  - paralyzes muscles so that the wrinkles relax
  - excellent for crow’s feet, glabellar wrinkles, and nasolabial fold
  - ptosis and necrosis if not done right
  - lasts for 3 months
– Also being used for hyperhidrosis in palms and axilla
– anal fissures
– migraine headaches
– tics/dysphonia
– muscle spasm in stroke victims

Build up the understructure

• Can you build collagen with creme?
• Retinoids (topical): with daily use over long periods of time, may increase the thickness of collagen
• Retin A- 0.025-0.1 %. Start with crème and move to gel
To Fill and Create Understructure

• Collagen
• Hyaluronic Acid (Restalyne)
• Silicone
• Poly-L-lactic Acid (Sculptra)
• Polymethacralate (Artefill)
• Fat Transfer-pts own material

What’s it made of?

• Collagen-bovine plus human fibers
• Hyaluronic Acid -fermented strep
• Silicone-not a human byproduct-foreign body
• Poly-L-lactic acid-biodegradable suture material
• Polymethacrolate-plexiglass beads
• Fat Transfer-natural and not foreign
How Long does it Last?

- Collagen-3-6 months
- Hylaronic Acid-6-12 months
- Silicone-PERMANENT
- Poly-L-lactic Acid-biodegradable so need multiple treatments but eventually causes permanent scarring
- Polymethacralate-PERMANENT criss-cross base on which collagen develops
- Fat Transfer- 3 months

Points to consider

- Allergy testing
- Pain on injection-some of these have preservatives
- Overcorrection vs undercorrection-pts are happier after they leave office overcorrected with non-permanents
Cautionary points

- Expensive
- May need touch-ups
- Can form granulomas
- Non-permanent is more forgiving but still technique is 90%
- For permanent fillers, technique is 99%-refer to persons who are experienced

Ablative Therapy

- Involves wounding the skin with chemicals or light (laser)
- Take into account skin type and amount of damage from sun and aging
What to expect

- Redness, swelling
- HC should be used
- Patient will be out for 2 weeks
- Deep peels-can cause cardiac toxicity-should be in the hands of experts

Economics

- Most providers using these techniques will use a combination-i.e.-they will fill in some cracks, ablate tumors and stop the motion
- Costly and not covered by insurance
- Expectations are often high-many providers who are good will spend time understanding expectations and discuss reality and cost
- Lawsuits are very common
- Addiction to procedures not uncommon
Body Dysmorphic Syndrome

- Patients complain of ugliness/physical flaws
- Thinking about this consumes many hours of their day
- Mirror-looking/ changing clothes/ picking of skin- often associated
- Can be associated with psychosis but does not have to be, drug use not uncommon
- Pts often do their own surgery

- Seek dermatologic and surgical care
- Very dissatisfied with results- onus is on doctor to figure it out
- Recognition by providers is helpful although patients often deny situation
- Conveying to patient that treatment (other than cosmetic) will help with functionality i.e. recognizing that hours of thinking of this gets in the way with other aspects of life-help patients get beyond the pain of their dis-ease
• SSRI’s have been helpful in some studies—usually high dose for at least 12 weeks
• Cognitive behavioral therapy has also been helpful in small studies—time consuming and expensive—pts keep journals of their behavior, substitute pleasurable behaviors, keep track of lapses and what made them lapse