Osteopathic Approach in Dermatology

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Conflict of Interest Disclosure

• No conflict of interest to disclose
Objectives

• Delivering Bad News to Patient
• Cutaneous manifestations of systemic disease and OMM findings
  • Hepatitis C
  • Diabetes Mellitus
  • Hypo or Hyperthyroidism
  • Pruritus
• Multifactorial approach to treatment
Delivering Bad News to Patients - Overview

- Appropriate Setting
- Provide your expertise and helpful supportive information
- Explain in banal terms
- The Difficult Patient
- Set expectations for treatments
- Provide hope
- Consider patient’s lifestyle and financial means

Together, these methods enhance the relationship between physician and patient and provide a holistic/osteopathic approach to delivering bad diagnosis.
Tenets of Osteopathic Medicine

- The body is a unit; the person is a unit of body, mind and spirit.
- The body is capable of self regulation, self-healing, and self maintenance
- Structure and function are reciprocally interrelated
- Rational treatment is based upon an understanding of the basic principles of body unit, self regulation, and the interrelationship of structure and function.
<table>
<thead>
<tr>
<th>Osteopathic Approach in Dermatology</th>
<th>Dermatologic Disease</th>
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<tbody>
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<td>stasis dermatitis, primary hyperhidrosis, brachioradialis pruritis, notalgia paresthetica</td>
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<td>Patients with skin conditions may benefit from osteopathic manipulative treatment as adjunctive therapy</td>
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<td><strong>Principle 1. The body is a unit.</strong></td>
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<td>□ Skin disease may affect the mind</td>
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The Art of Medicine

- Tone of voice
- Empathy
- Body language
- Communication
Tone of Voice

• Serious
• Quiet
• Focused
• Compassion
Empathy

- Showing concerns
- Relating to the patient
- Understanding
Body Language

- Standing vs Seated
- Eye contact
- Arm position
- Touching the patient
Communication

• Succinct
• No medical jargon
• Have patient repeat information back to you
• Helping patient with the next step
• Family members
Appropriate Setting

- Create a trusting environment between physician and patient
  - Private setting
  - Provide tissues
  - Sit down and engage in eye contact
  - Put away your cell phone
Provide your expertise and helpful supportive information

- Provide reliable websites, pamphlets, and articles for patient to reference
- Provide information for support group or counseling
- Shows your competency and holistic practice
Explain in banal terms

• Explain the disease in simple terms for the patient to understand
• Avoid using medical jargons or abbreviations
# The Difficult Patient

## How do you treat the difficult patient?

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<th>Patient Type</th>
<th>Characteristics</th>
<th>Treatment Goal</th>
<th>Therapeutic Tactic</th>
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<td>Demanding</td>
<td>Doesn't take “no” for an answer</td>
<td>Turn patient from a client into a patient</td>
<td>Set expectations (role induction), and follow through with consequences</td>
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<td>Noncompliant</td>
<td>Is unable or unwilling to comply with treatment</td>
<td>Understand why they either “can’t” or “won’t” comply</td>
<td>Address the root cause, which can be anything from untreated depression (can’t) to drug diversion (won’t)</td>
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<td>High-utilizing</td>
<td>High distress, unexplained symptoms, many previous treatment failures</td>
<td>Recognize and validate distress</td>
<td>Identify and treat the cause of the underlying distress</td>
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Set expectations for treatments

• Be honest
• Show concern and compassion
• “I know this is difficult for you..”
Provide hope

• Provide all available treatment options
• Have a top plan in place
• Explain to patient each person may respond differently to each treatment
• Help provide motivation for compliance
Consider patient’s life style and financial means

- Affordability for medications and treatments
- Practicality and adherence
### Osteopathic Approach in Dermatology

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| Principle 4. Rational treatment is based on an understanding of the 3 main principles. | |
| Examining the patient as a whole | |
| Cutaneous signs of internal disease | acne vulgaris, psoriasis, occupational dermatoses, dermatomyositis |
| acanthosis nigricans, recurrent dermatophyte infections, eruptive xanthomas, pruritus | |
Hepatitis C
Cutaneous Manifestations

- Lichen Planus
- Necrolytic Acral Erythema
- Polyarteritis Nodosa
- Acquired porphyria cutanea tarda
- Pruritus
Lichen planus

The “Ps” : Pruritic, Purple, Polygonal, Planar, Papules, Plaques.
Necrolytic Acral Erythema

- Well defined, tender, dusky, erythematous plaques on the dorsa of feet
- Center of plaques thicken with disease progression, acquiring a velvety appearance and surrounded by a rim of erythema.
- Does not respond to steroids
- Scale is darker and more verrucous than psoriasis; pain + itch
- Strong association with Hepatitis C; responds to antiviral therapy and zinc supplementation (although normal zinc plasma levels).
Necrolytic Acral Erythema
Polyarteritis Nodosa

- Segmental necrotizing vasculitis
- Punched out ulcers, livedo reticularis, subcutaneous nodules, and acral gangrene.
Polyarteritis Nodosa
Porphyria Cutanea Tarda

- Due to a defective enzyme in the liver (uroporphyrinogen decarboxylase)
- Patients present with increasingly fragile skin on the back of the hands and forearms
  - Erosions following minor injuries
  - Vesicles and bullae
  - Milia
  - Increased sensitivity to the sun
- Mottled brown patches around the eyes
- Alopecia
Porphyria cutanea Tarda
OMM Associations for the Liver

- Sympathetic nervous system
  - Spinal cord T5-T9 (upper GI tract)
  - Greater Splanchnic nerve
  - Celiac ganglion
- Parasympathetic Nervous system
  - Cranial Nerve X
- Chapman point
  - 6th intercostal space, right side only
OMT

• Rib Raising
• Soft tissue paraspinal inhibition
• Celiac ganglion release
• Cranial manipulation
Diabetes Mellitus
Cutaneous Manifestations

- Acanthosis Nigricans
- Diabetic bullae
- Eruptive Xanthomas
- Necrobiosis Lipoidica
- Perforating dermatoses
Acanthosis Nigricans
Diabetic Bullae

Spontaneous, non inflammatory, blistering condition occurring in the setting of DM

Blisters are large and often have asymmetrical shape

Most common on acral sites and lower legs

DDX: friction blister, bullous fixed drug, BP, bullous SLE, EBA
Eruptive Xanthomas

Erupt as crops of small, red-yellow papules

Most common over the buttocks, shoulders, arms, and legs

Rare in face or inside the mouth

Lesions may be tender and usually itchy

May resolve spontaneously

Associated with hypertriglyceridemia and DM
Necrobiosis Lipoidica

Most common in women associated with DM

Average age of onset is 30 yrs

One or more tender yellowish brown patches on the lower legs >>>> the center becomes shiny, pale, thinned, with prominent blood vessels.

Painful ulceration in 15% of cases, SCC a rare complication
Acquired Perforating Dermatosis

Large papules with central keratin plugs, some form larger plaques. Most common on the legs but can develop on the arms and in the head and neck region.

Associated with hepatic, renal or diabetic disorders.

Average time of presentation is 30 yr old

Lesions may self-heal without any treatment but often new lesions develop.
OMM Associations

- Sympathetic Nervous system
  - T5-T9 (Upper GI tract)
  - T10-T11 (Middle GI tract)
    - Kidneys
  - Greater and lesser splanchnic nerve
  - Superior and inferior mesenteric ganglion
- Parasympathetic Nervous system
  - Cranial Nerve X

- Treatment Options
  - Condylar decompression
  - Manipulation of the OA, AA or C2 joints will influence on parasympathetic tone via vagus nerve.
Hyperthyroidism

Fine, velvety smooth skin
Warm and moist skin due to increased sweating
Hyperpigmentation
Pruritus
Pretibial myxedema
Urticaria
Increase incidence of vitiligo
Pretibial Myxedema
OMM

- Sympathetic nervous system
  - T1-T4
- Lymphatic system
- GI system
  - Parasympathetic nervous system CNX

- Treatment options
  - Cervical spine
    - HVLA
    - Soft tissue
  - Cervical paraspinal sympathetic ganglia
  - Lymphatic system
    - Lymphatic pump (liver, pedal, Face)
Urticaria
Hypothyroidism

- Dry, rough, coarse skin; cold and pale
- Boggy and edematous skin
- Yellow discoloration as a result of carotenemia
- Acquired Ichthyosis
- Palmo-plantar keratoderma
- Eruptive or tuberous xanthomas
- Vitiligo
Acquired ichthyosis

Causes:

Vitamin Deficiency: vit A, B6, nicotinic acid
Infections: Leprosy, TB, syphilis
Medications: nicotinic acid, clofazemine
Systemic Diseases: Sarcoid, hypothyroidism, LE, AIDS
Malignancy: Lymphoma especially Hodgkin’s lymphoma; also in NHL, MF, MM
Tuberous Xanthoma

Firm, painless, red-yellow nodules that develop around the pressure areas such as the knees, elbows, heels and buttocks

Lesions can join together to form multilobulated masses

Associated with hypercholesterolemia and hypothyroidism.

Seen in type II (apo B100/LDL defect) and III (apo E defect) familial hyperlipidemia syndromes.
Pruritus

- C-fibers, unmyelinated – conduct pain, itch
- Pruritic mediators include histamine, tryptase, cathepsin, interleukin 31, PGE2, substance P, μ-opioid receptor agonists, NGF, IL2
- Chronic itch components: Peripheral sensitizing, central sensitization and dysfunction of itch inhibitory circuits.
- Associated with many systemic and cutaneous disorders
- Difficult to treat
Clinical presentation
Treatment Options

- Capsaicin
- Doxepin
- Menthol
- Pramoxine
- Tacrolimus/Pimecrolimus
- Barrier repair
- Ketamine/amitriptyline/lidocaine

- Antihistamines
- Naloxone
- Mirtazapine
- Gabapentin/pregabalin
- Aprepitant
OMT approach

- Suboccipital decompression to normalize the PNS
- Muscle energy to upper thoracic and cervical regions
- Rib raising to normalize the sympathetic nerves
- Counterstrain
Conclusions

- Rational treatment is based upon an understanding of the basic principles of body unit, self regulation, and the interrelationship of structure and function.
- Skin diseases have an immunologic basis for pathogenesis and many systemic disease have cutaneous findings.
- Examine the patient as a whole.
- Consider all treatment options to better treat our patients.
- Uphold osteopathic tenets and approaches to patient care.
References


