Complementary Medical Therapies in Lupus

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The Lupus Encyclopedia
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How doctors “think” when recommending treatments
Complementary and Alternative Therapies

- “… group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine”  National Institutes of Health
- CAM = Complementary and Alternative Medicine
Complementary vs Alternative Therapies

- Nonconventional therapies used along with conventional therapies
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- “Complement” conventional therapies
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- Also called “Integrative medicine”
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Large Categories of CAM

- **Mind-Body Medicine**
  - Biofeedback, prayer, meditation, relaxation and art therapies

- **Biologically Based Practices**
  - Dietary supplements, herbal therapies, folk medicine

- **Manipulative and Body-Based Practices**
  - Chiropractic therapy, massage, colonic irrigation and cleansing

- **Energy Therapies**
  - Qi gong, Tai chi, Reiki, therapeutic touch, magnetic therapy

- **Whole Body Systems**
  - Chinese medicine, acupuncture, Ayurveda, witchcraft, homeopathy, naturopathy
MIND-BODY MEDICINE:

- Belief = mental and emotional factors influence health and well-being
- Becoming a part of mainstream medicine
- Most commonly used for:
  - Pain
  - Anxiety
  - Panic disorder
  - Insomnia
  - Headaches
  - Depression
MIND-BODY MEDICINE: Biofeedback

- Teach brain to control processes not under conscious control
MIND-BODY MEDICINE: Biofeedback

- Teach brain to control processes not under conscious control
  - Blood pressure
  - Brain waves
  - Heart rate
  - Muscle tension
  - Temperature
MIND-BODY MEDICINE: Biofeedback

- Teach brain to control processes not under conscious control
  - Blood pressure
  - Brain waves
  - Heart rate
  - Muscle tension
  - Temperature
    - Raynaud’s phenomenon
MIND-BODY MEDICINE: Biofeedback

- Do I recommend this?
  - Yes, for:
    - Raynaud’s phenomenon
    - Stress
    - Pain
    - Insomnia
MIND-BODY MEDICINE: Relaxation Therapies

- Large group of techniques
  - Stress reduction
  - Prayer
    - 57% of studies have + results
  - Meditation
    - RA studies show ↓ joint pain and tenderness
  - Hypnosis
    - Studies show ↓ anxiety and cancer pain
    - 2012 fibromyalgia study = ↓ pain/fatigue and ↑ sleep
  - Art Therapy
    - Can help to lessen emotional impact of chronic disease
Relaxation Therapies: Stress reduction

- Studies show stress can cause lupus flares
  - Divorce
  - Death of loved one
  - Intermittent normal stress (“daily hassles”)
  - Immune system → more active during stress

- 2006 study looked at a stress gene
  - Gene predisposes people to become more stressed than normal
  - Gene makes it more difficult to produce serotonin in brain
    - Serotonin required for mood stabilization and pain relief
  - Lupus patients with this gene had increased lupus nephritis flares when exposed to stress

- Many lupus patients have difficulty with memory
  - Cognitive dysfunction
  - Associated with increased stress
Relaxation Therapies: Stress reduction techniques part 1

- **Learn to say “no”**
  - Ask for help
  - Proactively lighten your load
  - Prioritize things in life
  - Yoga and T’ai chi
  - Biofeedback to learn to decrease anxiety and stress
  - Learn deep breathing exercises and “mental imagery”
  - Prepare well ahead of any major activity
  - Learn to practice good time management
  - Schedule rest and relaxation time EVERY DAY
Relaxation Therapies:
Stress reduction techniques part 2

- Say positive things to yourself daily; Complement yourself
  - Don’t say negative things; don’t criticize

- **Plan on arriving early for all appointments and events**
  - Get ready/prepare for all events earlier than you think is needed
Relaxation Therapies:
Stress reduction techniques part 3

- **Learn not to argue with others**
  - Learn to accept that everyone has differing ways of doing things
  - Many conflicts are not important in the scheme of life
  - Learn to relax, take a deep breath, leave before an argument occurs
  - Leave before you say something you may regret
Relaxation Therapies:
Stress reduction techniques part 4

Learn to live at or below your means

- Too much stress is caused by money problems
- Don’t try to keep up with the “Joneses”, friends, and other family members
- Studies show that happiness is not increased by material things
- Ask “is this something I truly need?” OR “is it just something I want?”
Relaxation Therapies: Stress reduction techniques part 5

- **Exercise regularly**
  - Schedule in at least 8 hours of sleep a night
  - Do not skip healthy, planned meals
- **Avoid unhealthy meals** (sweets, carbs, greasy foods, “fast food”)
  - Learn better communications skills if you have difficulties with relationships
  - Pray, meditate, hypnosis, art therapy
BIOLOGIC-BASED PRACTICES:

- Dietary supplements
- Herbal therapies
- Folk medicines
Dietary Supplements: Supplements Possibly Helpful in Some People with SLE

- DHEA
- Omega-3 fatty acids
  - Fish oil
  - Flax seed oil
  - Walnuts
- Vitamin D
Dietary Supplements: DHEA

- **DHEA** = DeHydroEpiAndrosterone
  - A steroid hormone
  - Produced by adrenal glands
  - Converted in body to male sex hormones
Dietary Supplements: DHEA

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- Lower levels than normal in SLE
Dietary Supplements: DHEA

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  - A steroid hormone
  - Produced by adrenal glands
  - Converted in body to male sex hormones
- Lower levels than normal in SLE
- Taking DHEA in studies:
  - Decreases # of lupus flares
  - May help decrease mild lupus symptoms
  - May help decrease doses of steroids
  - Increases bone density
Dietary Supplements: DHEA

- Potential side effects:
  - Acne (55%)
  - Increased hair growth (15%)
  - Decreases in HDL (good cholesterol)
  - Elevated liver enzymes
  - Elevated blood pressure

- Do not take if:
  - You have significant liver disease
  - Polycystic ovarian syndrome
  - Without checking with your doctor 1st
Dietary Supplements: DHEA

- Dosage used in studies:
  - 200 mg a day

- Best obtained by prescription:
  - Compounding pharmacist
    - Village Green Apothecary, Bethesda MD
    - ComCare Pharmacy, Bowie MD
Dietary Supplements: Omega-3 Fatty Acids

- Have beneficial effects on cholesterol and inflammation
- American diets relatively deficient in these fats
  - Higher in omega-6 fatty acids from non-fish meats
  - Omega-6 fatty acids increase cholesterol and inflammation
Dietary Supplements: Omega-3 Fatty Acids

- Omega-3 fatty acids abundant in:
  - Flax seed (highest concentration found)
  - Walnuts
  - Tofu
  - Shrimp
  - Scallops
  - Cold water fish
    - Salmon
    - Halibut
    - Snapper
    - Mackerel
    - Albacore
    - Sardines
Dietary Supplements: Omega-3 Fatty Acids

- Lupus mice fed diet high in omega-3 fatty acids:
  - Less immune system activity
  - Lower autoantibody production
    - Anti-ds DNA
    - Antiphospholipid antibodies
  - Less lupus kidney inflammation (nephritis)
  - Less kidney damage
Dietary Supplements: Omega-3 Fatty Acids

- Human study: 12 patients
  - 5 weeks, 6 grams fish oil daily
  - Followed by 5 weeks “normal diet”
  - Followed by 5 weeks 18 grams fish oil a day
  - Cholesterol levels improved on higher dose of fish oil
  - No differences in their lupus

- Another human study: 26 patients with lupus nephritis
  - 2 years
    - Part time on high doses of fish oil
    - Part time on “normal diet”
  - Cholesterol improved
  - Lupus kidney disease did not improve
Dietary Supplements: Omega-3 Fatty Acids

- Human study: 27 patients
  - Diet high in fish oils
  - Decreased lupus activity compared to placebo
  - Improved blood work compared to placebo
- Another study: 22 pregnant women with antiphospholipid antibody syndrome with recurrent miscarriages
  - Took omega-3 fatty acid supplements daily
  - Only one premature fetal death (lower than expected)
Dietary Supplements: Omega-3 Fatty Acids

- Sjogren’s syndrome
  - Several studies
  - Omega-3 fatty acids improve eye tear production
Dietary Supplements: Omega-3 Fatty Acids

- Summary of studies:
  - Cholesterol values improved in all studies
  - Mice studies encouraging for improving lupus activity
  - Human studies mixed results
    - Only study with positive results used diet, not supplements
- Questions:
  - Possibly better to do studies in milder lupus?
  - Which is better? Supplements vs diet?
  - Need larger, better human studies in lupus
  - May improve tear production in Sjogren’s syndrome
Dietary Supplements: Vitamin D

- Most lupus patients have low vitamin D levels
- Vitamin D is essential for proper immune system function
- More severe SLE associated with lower vitamin D levels
Dietary Supplements:
Vitamin D

- Have your levels checked by your doctor
  - Take a supplement if low
  - Eat vitamin D rich foods:
    - Cod liver oil
    - Salmon
    - Mackerel
    - Tuna fish
    - Vitamin D fortified milk and orange juice
- Vitamin D level goal?
  - Johns Hopkins study suggests a level of around 40 mg/dL.
Dietary Supplements: Controversies

Melatonin

- Released by pineal gland in when less light
  - Signals brain to prepare to sleep
  - Used as a sleep aid
  - Used when traveling across many time zones
  - May increase immune system activity
- 2 lupus mouse studies
  - Female mice lupus improved
  - Male mice lupus worsened
- No human lupus study
- 1 rheumatoid arthritis human study
  - Melatonin → no difference in disease activity
- My recommendation based on this:
  - Melatonin used for sleep may be safe in women with lupus
  - Men with lupus should avoid melatonin
Dietary Supplements: Controversies

- Garlic
  - Some lupus sources recommend not eating garlic or taking garlic supplements
  - I can find no studies in lupus to back this recommendation
  - Some naturopaths advocate using garlic to “decrease inflammation”
  - My recommendation
    - Eat garlic!
Lupus Diet:

- Avoid alfalfa and mung bean sprouts
- Lower than average calorie diet
- Low fat
- Olive oil
- Alcohol in moderation?
- Rich in omega-3 fatty acids
  - Flaxseed
  - Cold water fish
  - Walnuts
- Vitamin D rich foods
Lupus Diet: Avoid mung bean and alfalfa sprouts

- Contain amino acid L-canavanine
- Stimulates the immune system → more active
- 2 studies in monkeys:
  - Fed ground alfalfa sprouts
  - 3 of 5 macaque monkeys developed lupus symptoms
    - Lupus nephritis
    - Hemolytic anemia
  - Developed abnormal lupus blood results
    - + ANA, +DNA, low complement levels
- Baltimore Lupus Environmental Study
  - Eating alfalfa sprouts →
  - Increased chance of lupus
Lupus Diet:
Less calories than average
Low fat diet

- Mice with lupus fed low calorie diet
  - Live longer
  - Less lupus kidney disease
  - Less salivary gland inflammation (Sjogren’s syndrome)
- Lupus mice fed high fat diet
  - Increased immune system activity
  - Increased autoantibody formation
Lupus Diet: Olive Oil

- Rich in eicosapentaenoic acid (a type of omega-3 fatty acid)
- One study, 27 patients
  - 20 grams olive oil daily (close to 1 ½ tablespoons)
  - Lupus activity improved over 34 weeks
  - 17 patients completed study
  - Lupus activity improved
Lupus Diet: Alcohol in moderation?

- Several studies show that moderate intakes of alcohol
  - Lower risk for lupus in some studies
  - No increased risk for lupus in others
- Many studies show that moderate intake of alcohol →
  - Decreased cardiovascular problems (#1 cause of death in lupus)
  - Increases good cholesterol levels (HDL)
  - May decrease certain cancers
Lupus Diet: Alcohol in moderation?

- Definition of “moderate” alcohol allowable per 24 hours
  - **Women** = no more than
    - 5 oz wine daily
    - 12 oz beer
    - ½ ounce liquor
  - **Men** = no more than
    - 10 oz wine daily
    - 24 oz beer
    - 1 oz liquor
Lupus Diet: Alcohol in moderation?

- Cautions!
  - May ↑ risk of breast cancer in genetically predisposed women
  - Do not drink if you have had a substance abuse problem
  - Do not drink if alcoholism runs in your family
  - Should restrict alcohol amounts with certain medications
    - NSAIDs → increased risk of ulcers
    - Tylenol → liver problems if you drink too much alcohol
    - Narcotics and pain relievers → too drowsy
    - Methotrexate → liver problems
  - TALK TO YOUR DOCTOR 1st
Herbal Therapies:
Tripterygium wilfordii hook F

- **TwHF**
  - Chinese herb
  - Has anti-inflammatory properties
  - 5 small studies in total of 249 lupus patients
  - Showed improvements in some lupus symptoms
    - Fatigue
    - Joint pains
    - Fever
    - Rash
    - Lupus nephritis
    - Improved platelet counts

- **Side effects:**
  - Diarrhea, nausea, vomiting, hair loss, mouth sores, high blood pressure, infertility, fetal malformations
  - One death (man died from heart toxicity)
Herbal Therapies: Tripterygium wilfordii hook F

- Do I recommend this?
Herbal Therapies:
Tripterygium wilfordii hook F

- Do I recommend this?
  - NO!
Herbal Therapies:
Tripterygium wilfordii hook F

- Do I recommend this?
  - NO!

- However, it should be studied further, purified, and the benefits and potential side effects defined better
Herbal Therapies: Echinacea

- From the cone flower (Echinacea purpurea)
- Used to treat colds and flu
  - Though refuted in larger medical studies
- Increases immune system activity
- Can worsen lupus
  - Series of lupus patients at Johns Hopkins Hospital got worse while taking Echinacea
  - 2 patients required strong chemotherapy for lupus nephritis
Herbal Therapies: Echinacea

- Never take Echinacea
Folk medicine biological therapies:

- Vary from culture to culture
  - Botanicas = Stores common in Latin cultures
- Rattlesnake capsules
  - Reports of lupus patients getting Salmonella poisoning
  - Reports of deaths in other patients
Manipulative and Body-Based:

- Chiropractic therapy
  - No lupus studies
  - Lupus does not affect joints of the spine
- Massage therapy
  - May help ↓ stress and muscle spasm pain
- Colonic irrigation and cleansing
Manipulative and Body-Based: Colonic irrigation and cleansing

- Belief: “toxins” in colon are unhealthy and cause disease
- Fluids are used to clean out the colon
- There are NO studies for ANY disease to show benefit
Manipulative and Body-Based: Colonic irrigation and cleansing

- Potential dangers in lupus
  - Dehydration
  - Bowel perforation
  - Increased risk of infection

- Do I recommend this?
Manipulative and Body-Based: Colonic irrigation and cleansing

- Potential dangers in lupus
  - Dehydration
  - Bowel perforation
  - Increased risk of infection
- Do I recommend this?
  - NO!
ENERGY THERAPIES

- Attempt to manipulate energy fields in and around the body
  - **Qi gong**
    - Studies show ↓ arthritis and neck pain
  - **T’ai chi**
    - Studies show ↓ pain from fibromyalgia and osteoarthritis
  - **Reiki**
    - 2011 Cancer study = ↓ pain/anxiety, ↑ sleep
  - **Therapeutic touch**
    - Studies show ↓ pain and anxiety
  - **Magnetic therapy**
ENERGY THERAPIES:
Magnetic therapy

- Help with pain 30 - 35% of the time
WHOLE BODY SYSTEMS: Traditional Chinese Medicine

- Thousands of years old
WHOLE BODY SYSTEMS: Traditional Chinese Medicine

- Thousands of years old
- Theory: Improper flows of energy through the body → disease
  - Opposing forces of yin and yang
  - Proper balance is essential
WHOLE BODY SYSTEMS:
Traditional Chinese Medicine

- Thousands of years old
- Theory: Improper flows of energy through the body → disease
  - Opposing forces of yin and yang
  - Proper balance is essential
- Combines:
  - Diet
  - Chinese herbs
  - Massage
  - Meditation
  - Acupuncture
  - Tai chi
Traditional Chinese Medicine: Chinese Herbs

- Lupus nephritis = deficiency of kidney yin or liver-kidney yin
- At least 8 studies performed in lupus nephritis
  - Better results when used in combination with conventional medicines
  - Fewer side effects in the Chinese herb + conventional medicine groups
- Vast majority of studies = in Chinese medical journals
- No large, well done studies done in Western journals
Traditional Chinese Medicine: Chinese Herbs

- Potential downsides
  - Herbs do have medicinal effects on the body
    - Side effects reported =
      - Severe kidney disease
      - Anemia
      - Heart problems
  - No agency regulates quality
  - A Chinese study studied 430 samples
    - From Taiwan hospitals, medical centers and herb stands
    - 1/3 adulterated with Western medicines
Traditional Chinese Medicine: Chinese Herbs

- Do I recommend using Chinese herbs?
Traditional Chinese Medicine: Chinese Herbs

- Do I recommend using Chinese herbs?
  - NO!
Traditional Chinese Medicine:
Chinese Herbs

Summary

- Need larger, better studies critically assessed internationally by lupus experts
- If found to be helpful and safe, need to be regulated to ensure high quality products
Traditional Chinese Medicine: Acupuncture

- Affects the flow of energy (qi)
- Restores balance of yin and yang
- Some studies show benefits for pain and arthritis
Traditional Chinese Medicine: Acupuncture

- Lupus studies
  - 2008 study for fatigue and pain showed no benefit
    - Study was small
  - Chinese study showed benefit for discoid lupus
    - Only 15 patients
    - No placebo group

- Rheumatoid arthritis studies
  - The best study = no benefit
Traditional Chinese Medicine: Acupuncture

- What is my recommendation?
Traditional Chinese Medicine: Acupuncture

- What is my recommendation?
  - “Depends”
    - Lack of proven benefit vs expense makes it hard to recommend
    - However, it is safe, and some arthritis studies suggest benefits to decrease pain
WHOLE BODY SYSTEMS: Ayurveda

- India
- Thousands of years older
  - Older than traditional Chinese medicine
- Belief = Imbalance of body’s life forces → illness
WHOLE BODY SYSTEMS: Ayurveda

- India
- Thousands of years older
  - Older than traditional Chinese medicine
- Belief = Imbalance of body’s life forces → illness
- Combination of:
  - Diet
  - Herbs
  - Massage
  - Meditation
  - Yoga
  - Fasting
  - Internal cleansing
Ayurveda: Yoga

- A Hindu healing system
- Many different forms
- Includes:
  - Breathing control
  - Simple meditation
  - Holding body in specific postures
Ayurveda: Yoga

- No lupus studies
- Beneficial studies in fibromyalgia
  - Especially “Yoga of Awareness” or “Kundalini yoga”
  - Decreased pain
  - Improved mood
  - Decreased fatigue
Ayurveda: Yoga

- Do I recommend this?
Ayurveda: Yoga

- Do I recommend this?
  - YES
  - Especially for lupus patients who also have fibromyalgia
    - “Yoga of Awareness” or “Kundalini yoga”
WHOLE BODY SYSTEMS:
Witchcraft

- Use of magical and supernatural powers
WHOLE BODY SYSTEMS: Witchcraft

- One case of severe lupus nephritis
  - Filipino witch doctor
  - Removed a curse put on her by previous boyfriend
  - “Cured” a few weeks later
WHOLE BODY SYSTEMS: Witchcraft

- Do I recommend this?
WHOLE BODY SYSTEMS: Witchcraft

- Do I recommend this?
  - No!
WHOLE BODY SYSTEMS: Homeopathy

- **Homeo**
  - Greek for *like*
- **-opathy**
  - Greek for *disease*
- "Like cures like"
  - If something causes problems or a disease when given in large doses
  - It may cure the disease when given in tiny doses
WHOLE BODY SYSTEMS: Homeopathy

- No lupus studies
- 6 studies in fibromyalgia
  - All the studies had major study design flaws
  - Therefore, no proof of benefit
WHOLE BODY SYSTEMS: Homeopathy

- Do I recommend this?
WHOLE BODY SYSTEMS: Homeopathy

- Do I recommend this?
  - NO
WHOLE BODY SYSTEMS: Naturopathy

- Emphasizes prevention and treatment of disease through healthy lifestyle
WHOLE BODY SYSTEMS:
Naturopathy

- Emphasizes prevention and treatment of disease through healthy lifestyle
- Combines:
  - Herbs
  - Homeopathy
  - Physical Therapy
  - Mind body therapy
  - Exercise
  - Diet
  - Stress reduction
How to choose a naturopathic (or integrative medicine) doctor

- Graduated with a degree from a recognized institution
  - N.D. (doctor of naturopathy)
  - N.M.D. (doctor of naturopathic medicine)
- Currently licensed by the ruling state or national agency
- Carries malpractice insurance
- Member in good standing with a professional organization for naturopathic doctors
- The office and doctor’s manners are professional
- Doctor provides diagnoses, treatments and has reasonable expectations of results of treatment
- Keeps accurate records
- Willing to send notes to your other doctors
Never take in lupus summary

- Mung bean and alfalfa sprouts
- Melatonin (if male)
- Any herbal supplements
  - Echinacea
  - Anything that “boosts” or “supports” the immune system
- Folk medicine pills
- Colonic cleansings
Probably helpful in lupus summary

- Biofeedback
  - Especially for Raynaud’s
- Stress reduction techniques (page 4)
- DHEA
- Vitamin D supplements
Possibly helpful in lupus summary

- Prayer, meditation, hypnosis
- Omega-3 fatty acid foods
  - Fish, flax seed, walnuts
- Olive oil in diet
- Low fat, low calorie diet
- Vitamin D rich foods
- Alcohol in moderation
- Massage
- Qigong, Tai chi, Reiki, therapeutic touch
- Acupuncture
- Yoga
Probably not helpful, but safe

- Chiropractic therapy
- Magnetic therapy
- Witchcraft
- Homeopathy
Help Us Solve The Cruel Mystery

LU?US™

FOUNDATION OF AMERICA
DC/MD/VA CHAPTER