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Integrative Approach to the Management of Depression - Concurrent Workshop Repeated

Friday, 21 June 2013	Start 11:00am	Duration: 55mins	Skellerup
	Start 12:05pm	Duration: 55mins	Skellerup

Integrative Approach to Depression

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Disclaimers

- Nothing to disclose.
- I have no financial interest associated with this session.

Barriers to the Treatment of Depression

- Time
- Money
- Stigma
- Home/Work situation
- Feeling of helplessness

Integrative Approach

- Patient-practitioner partnership
  - Encouragement
  - Empowerment
  - Positivity
  - Inspiration
  - Openmindedness
- Compliance is linked to the perceived relationship with the doctor

Pathophysiology of Depression

- Stress-diathesis model
- “kindling” effect
- Biochemical imbalance
- Learned helplessness
- Psychoneuroimmunology

Options for Depression

- Pharmaceuticals
- Psychotherapy
- Physical Activity
- Supplements
- Botanicals
- ECT
- TMS (transcranial magnetic stim)
- Acupuncture
- Mind-Body/Relaxation
- Other
  - Estrogen therapy
  - Phototherapy
  - Aromatherapy
  - Massage
  - Music therapy
  - Homeopathy

Pharmaceuticals

- SSRIs: 1st line antidepressant
  - SE: GI, sexual dysfxn
- SNRIs (ie, venlafaxine)
- TCAs (ie, amitrip, doxepin)
  - SE: anticholinergic, arrythmias, wt gain, sex dysfxn
- Heterocyclics (ie, trazodone, buproprion, mirtazapine)
  - SE profile varies
- Atypical antipsychotics (ie, quetiapine, risperidone)

Psychotherapy

- Cognitive
  - Replace negative thought patterns
  - As effective as antidepressants
- Interpersonal
  - Identify and re-negotiate interpersonal problems
  - As effective as antidepressants
- Confidant

Physical Activity

- Rationale:
  - "Natural high" release of ST and endorphins
  - Active role in recovery→self-esteem, confidence
  - Distraction
  - Social interaction
- Evidence:
  - Better than nothing
  - As effective as psychotherapy
  - Both aerobic and anaerobic activities help
  - Assoc w/ decreased likelihood of depression (preventative)

Supplements

- SAMe (S-adenosylmethionine)
  - Rationale:
    - ↑ brain monoamines (serotonin)
    - ↑ binding of neurotransmitters to receptors
    - ↑ brain cell membrane fluidity
  - Evidence (good):
    - Better than placebo
    - Comparable to std antidepressants (short-term studies) and better tolerated
    - Faster onset of action than std antidepressants
  - Dose: start 200mg QD/BID and titrate up to 1600mg/d
    - 1,4 butane-disulfonate (Actimet) most stable and best bioavail
  - SE (at high doses): GI upset, HA

Supplements (cont)

- Folate
  - Rationale:
    - Involved in SAMe and neurotransmitter metabolism
    - 31-35% of depressed adults have low folate levels
    - Depression is most common sx of folate deficiency
    - ↓ folate assoc w/ poorer response to SSRI
  - Evidence (good):
    - Folate + antidep better than antidep alone
  - Dose: 400mcg-1mg/d
  - SE (at high doses): altered sleep, ↑ sz, irritability, GI

Supplements (cont)

- Omega-3 FA (fish oil)
  - Rationale:
    - Improves membrane fluidity
  - Evidence:
    - PUFA+med better than placebo+med
    - Insuff evidence for PUFA itself vs placebo
    - EPA more important than DHA
  - Dose: 1gm/d (>60% EPA)
    - Small, cold water fish 2-3x/week (kahawai, sole, monkfish, hoki)
    - Vege options: flaxseed oil/ground flaxseed meal 2tbsp/d
  - SE: nausea, loose stools, “fishy” breath, bleeding (at doses >3gm/d)

Supplements (cont)

- Inositol (isomer of glucose)
  - Rationale:
    - Supporting role in cellular communication
  - Evidence:
    - 12gm/d better than placebo over 4 wks
    - Rapid relapse when stopped
    - Hasn't been shown to augment SSRI
  - Found in fruits/veges, whole grains
  - Pretty safe. Mild SE: nausea, HA, dizziness

Supplements (cont)

- B Vitamins
  - Vit B_6 (pyridoxine) :
    - Weak evidence though may be useful as adjunct for premenopausal women
    - SE (dose > 200mg/d): neurotoxicity
  - Vit B_{12}
    - helps with SAMe and neurotransmitter metabolism
    - No diff vs placebo
  - Vit B complex 100mg/d
- Vit C, D, E? Zinc?

Supplements (cont)

- 5-HTP (hydroxytryptophan)
  - Rationale:
    - Intermediate metabolite of TRP to ST
  - Evidence:
    - Better than placebo
    - Maybe as effective as antidepressants
  - Dose: 100-200mg TIDAC
  - SE: EMS-like syndrome, ST syndrome
- Tryptophan
  - Taken off the market in the US for EMS (eosin myalgia syn) in 1989

Botanicals

- St. John's Wort (hypericum perforatum)
  - Rationale:
    - Inhibits reuptake of ST, DA, NE, GABA
    - Inhibits IL-6, ↑ cortisol production
    - 1st line Rx med in Germany since 1984
  - Evidence (good):
    - Better than placebo
    - similarly effective as std antidep
    - Better tolerated than std antidep
  - Dose: 900mg/d divided BID/TID
    - Minimum 2% hyperforin or 0.3% hypericin
  - SE (mild): GI upset, fatigue, photosensitivity
    - induces CYP 3A4

Botanicals (cont)

- Gingko biloba
  - Rationale:
    - Useful for cerebral insufficiency which may have some overlapping symptoms of depression
  - Evidence (weak):
    - Better than placebo
    - Gingko+antidep better than placebo+antidep
  - Dose: 40-80mg TID extract
    - 24% ginkgo flavonglycosides
    - 6% terpenes
  - SE (mild): GI upset, HA, anticoag effect

Botanicals (cont)

- Saffron
  - Traditional Persian spice to treat depression
  - Evidence:
    - better than placebo after 6wks
    - as effective as imipramine 100mg/day after 6wks
    - as effective as fluox 10mg BID after 8wks
  - Dose: extract 30mg/day (can be divided BID)
  - Expensive

ECT (electroconvulsive therapy)

- Rationale:
  - Induce sz to refocus brain waves
  - Sensitize 5-HT1A receptors
- Evidence:
  - Effective in achieving remission in 90% of patients w/depression w/in 7-14d
- Reserved for suicidal, psychotic, catatonic patients or refractory cases
- Dose: 3x/week for 4 weeks
- SE: memory loss

TMS (transcranial magnetic stim)

- Selective mild e-stim to L anterolat prefrontal cortex
- Evidence:
  - Better than sham
  - Not as effective as ECT
  - Less side effects than ECT
- Variables: freq, # txs, # stims, positioning
- Dose: 3x/week for 2-4 weeks

Acupuncture

- Rationale:
  - Restore balance
  - Release endorphins
- Evidence (insuff):
  - ? Diff b/w acu and sham acu
  - ? Diff b/w acu and waitlist
  - No diff b/w acu+meds vs acu+placebo
  - acu+meds better than meds alone
  - Electroacu as effective as amitriptyline short term

Mind-Body/Relaxation

- Meditation
- Yoga
- Breath work
- Hypnosis
- Guided imagery
- Progressive muscle relaxation
- Biofeedback/HRV monitoring

- Evidence: weak but promising

Other Options

- Estrogen therapy
  - Effective for perimenopausal depression
  - Weigh risk/benefits
- Phototherapy
  - Better than placebo esp in AM for winter depression
  - 30-60min QD
- Aromatherapy
  - lavender, chamomile, rosemary
- Massage
- Music therapy
- Homeopathy

Other Issues to Consider

- Caffeine
  - Stimulates CNS to ↑ ST and DA levels
  - Increased caffeine consumption associated with depression (cause or effect?)
- EtOH
  - EtOH problems more common in depression (cause or effect?)

Bottom Line

- Mod/Severe Depression
  - meds, psychotherapy
  - supplement with omega 3 and folate
- Mild/Mod Depression
  - SAMe or St. John's Wort
- Refractory cases: ECT or TMS
- Regular physical activity for everyone
- Consider multivit or vit B complex
- Optional adjuncts: acupuncture, mind-body and relaxation techniques, lavender, homeopathy, light
- Relationships/Community

Main References

- Fugh-Bergman A, Cott JM. “Dietary Supplements and Natural Products as Psychotherapeutic Agents.” *Psychosomatic Medicine* 61: 712-728. 1999.
- Jorm AF, Christensen H, et al. “Effectiveness of complementary and self-help treatments for depression.” *Medical Journal of Australia* 176: S84-S95. 2002.
- Rakel, David. Integrative Medicine. 2007.