Traditional Chinese Medicine & Pain Management

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Traditional Chinese Medicine (TCM)

Traditional Korean Medicine
- Evolved same time as TCM
- Microsystems: Hand and Feet
- Few needles

Traditional Japanese Medicine
- 7th – 9th century ACE
- Kanpo—standardized herbal formulas
- Palpation based, great masters were blind
Accredited program including:

- 462 hours of Basic/lab sciences
- 1100 hours of acupuncture studies
- 385 hours of Chinese herbal studies
- 1200 combined clinical hours in the United States and China

**TCM: Traditional Chinese Medicine**
Traditional Chinese Medicine

- Acupuncture
- Chinese Herbal Medicine
- Asian Massage/Acupressure
- Cupping
- Dietary advice
What is TCM?

Eastern Ideas

- Based on compounding literature dating back to ~2500 BCE
  - Over 30 classical texts (before 1911)—Very specific disease patterns and treatments
  - 100’s have been added in the past 40 years

- Conditions are related to patients’ relationship to themselves and their environment affecting:
  - Physical
  - Emotional
  - Mental
  - Spiritual—slowly being added back by certain groups—*non-religious*—connection to body
Acupuncture involves the insertion of extremely thin needles in your skin at strategic points on your body.
365 body points
14 channels with points
Mirrored bilateral
Auricular acupuncture

• over 300 pts in the ear

• Based mainly on the work of French neurologist, Paul Nogier

• Allows treatment in larger scale and concurrent with other therapies.
- **Dry Needling**
  - Direct acupuncture on a point

- **Electro acupuncture**
  - Use of electrical stimulation of the needles to reduce pain and sedate
  - In lieu of manual stimulation

- **Heated Acupuncture**
  - Burning herbs on the needle to tonify the acupoint
  - Artemisia vulgaris
Tools of Assessment

- Pulse
- Tongue and visual inspection
- Auscultation and Olfaction
- Inquiry
Pulse

- Indicative of Organ Functions

- Assessment dependent upon pulse: Depth, rate, regularity, width, length, smoothness, stiffness, and strength

- 80% accuracy in diagnosing hypertension
Tongue

- Tongue Body and Shape
- Tongue Color
- Cracks and Channels
- Tongue coat
Auscultation and Olfaction

- **Listening**– Voice indicative of organ dysfunction
  - giggling, sing song, weeping, groaning, shouting

- **Smelling**– General smell of person as well as smelling the cubital crease
7 attributes of chief complaint
- Location, Quality, Severity, Duration, Timing, Modifying Factors, Associated Signs & Symptoms.

10 Questions related to overall constitution
- Zhang Jie-bing in 1624
  1. Cold and Heat, Chills and Fever
  2. Perspiration
  3. Pains in Head and Body
  4. Urine and Bowel Movements
  5. Diet and Appetite
  6. Thirst
  7. Mental or emotional state
  8. Hearing
  9. Sleep
  10. Gynecological issues
How does it work?

That's odd... my neck suddenly feels better...

Early Acupuncture
How does it work?

Eastern Ideas

- **Energetic pathways**: meridians—acupuncture points are anatomically located along these meridians
  - Points have individual functions

- Symptoms indicate imbalance/disharmony
- Acupuncture point stimulation along meridians balances energy/removes blockages
- Body rebalances itself
Daily Wellness in China

- **Daily Self-Care/Exercises - Teach Patients:** 5–10 minutes (parks, escalators, office, gym, home)

- **Chi–Qi–Ki–Prana:** Energy!
  - Patty Cake Exercise
  - Energy Shower Exercise
  - Arm Swing Exercise
Five Elements–Interrelationships
How Does Acupuncture Work
Western Ideas

- Neural innervation: Site effects can be blocked by local anesthesia.  Lim, 1977
Acupuncture triggers a sequence of events involving the release of endogenous opioid–like substances that modulate pain signals processed along the pathway.

- enkephalin,
- β-endorphin
- endomorphin

Imaging studies demonstrate that the limbic system plays an important role in acupuncture–induced analgesia

Effective acupuncture increased and prolonged the activity of serotonergic neurons in the reward system pathway of the brain.

- UB-23
- Supportive treatment for emotional disorders, drug abuse, IBS.

Yoshimoto K. et.al. 2006
Acupuncture enhances the synaptic dopamine availability to improve motor function in mouse models of Parkinson’s Disease

- Gallbladder 34
- Supportive treatment Parkinson's Disease

Experimental schedule

1. Control: Saline
2. Restrain stress
3. MPTP
4. Restrain stress
5. MPTP
6. Acupuncture at AP (GB34)
7. MPTP
8. Acupuncture at CP (control)
Safety

**Adults**

- The risk of serious events occurring in association with acupuncture is very low, below that of many common medical treatments. The range of adverse events reported is wide and some events, specifically trauma and some episodes of infection, are likely to be avoidable.
  - White A, 2004

- Less than 0.5% were not willing to try acupuncture again.
  - MacPherson, H 2005
Our results support those from adult studies, which have found that acupuncture is safe (for children) when performed by appropriately trained practitioners.

Adams D. et.al. 2011
1. Diseases, symptoms or conditions for which acupuncture has been proved—through controlled trials—to be an effective treatment:

- Adverse reactions to radiotherapy and/or chemotherapy
- Allergic rhinitis (including hay fever)
- Biliary colic
- Depression (including depressive neurosis and depression following stroke)
- Dysmenorrhoea, primary
- Epigastralgia, acute (in peptic ulcer, acute and chronic gastritis, and gastrosasm)
- Facial pain (including craniomandibular disorders)
- Headache
- Hypertension, essential
- Hypotension, primary
- Induction of labour
- Knee pain
- Leukopenia
- Low back pain
- Malposition of fetus, correction of
- Morning sickness
- Nausea and vomiting
- Neck pain
- Pain in dentistry (including dental pain and temporomandibular dysfunction)
- Periarthritis of shoulder
- Postoperative pain
- Renal colic
- Rheumatoid arthritis
- Sciatica
- Sprain
- Stroke
- Tennis elbow
2. Diseases, symptoms or conditions for which the therapeutic effect of acupuncture has been shown but for which further proof is needed:

- Abdominal pain (in acute gastroenteritis or due to gastrointestinal spasm)
- Acne vulgaris
- Alcohol dependence and detoxification
- Bell's palsy
- Bronchial asthma
- Cancer pain
- Cardiac neurosis
- Cholecystitis, chronic, with acute exacerbation
- Cholelithiasis
- Competition stress syndrome
- Cranioencephalic injury, closed
- Diabetes mellitus, non-insulin-dependent
- Earache
- Epidemic haemorrhagic fever
- Epistaxis, simple (without generalized or local disease)
- Eye pain due to subconjunctival injection
- Female infertility
- Facial spasm
- Female urethral syndrome
- Fibromyalgia and fasciitis
- Gastrokinetic disturbance
- Gouty arthritis
- Hepatitis B virus carrier status
- Herpes zoster (human (alpha) herpesvirus 3)
- Hyperlipaemia
- Hypo-ovarianism
- Insomnia
- Labour pain
- Lactation, deficiency
- Male sexual dysfunction, non-organic
- Ménière disease
- Neuralgia, post-herpetic
- Neurodermatitis
- Obesity
- Opium, cocaine and heroin dependence
- Osteoarthritis
- Pain due to endoscopic examination
- Pain in thromboangiitis obliterans
- Polycystic ovary syndrome (Stein-Leventhal syndrome)
- Postoperative convalescence
- Premenstrual syndrome
- Prostatitis, chronic
- Pruritus
- Radicular and pseudoradicular pain syndrome
- Raynaud syndrome, primary
- Recurrent lower urinary-tract infection
- Reflex sympathetic dystrophy
- Retention of urine, traumatic
- Schizophrenia
- Sialism, drug-induced
- Sjögren syndrome
- Sore throat (including tonsillitis)
- Spine pain, acute
- Stiff neck
- Temporomandibular joint dysfunction
- Tobacco dependence
- Tourette syndrome
- Ulcerative colitis, chronic
- Urolithiasis
- Vascular dementia
- Whooping cough (pertussis)
Heterogeneity of VA studies

- Sham Acupuncture must be Inert and Believable
- Acupuncture Treatment vs Acupuncture Needling
- Cross correlation between TCM and biomedical diagnosis.

Langevin, et al. 2011
Surveys completed after first-time and repeat visits (n=2,756 surveys) indicated that most participants agreed or strongly agreed they felt more relaxed after acupuncture and acupressure sessions (97.9%), less stress (94.5%), more energy (84.3%), and less pain (78.8%).

Alaine D, Et.al. 2011
Lower Back Pain

German Back Pain Study

10, 30 minute sessions, 2x per week
- 47.6% VA, 44.2% SA after 6 mo follow up
27.4% in the conventional therapy group.

n=1162

(Haake, et al. 2007)
Shoulder Pain

- The German Randomized Acupuncture Trial for chronic shoulder pain (GRASP)
- 424 outpatients with chronic shoulder pain for 6 weeks, 2x per week.
- Pain reduction: VA over SA and COT (p<0.01)
- greater improvement of shoulder mobility (abduction and arm–above–head test) for the VA vs SA & COT immediately after treatment and after 3 months.

(Molsberger, et al, 2010)
- acupuncture was statistically superior to sham acupuncture for pain and function at the short-term (12 weeks).
- The results were still statistically significant at the longer-term (26–52 weeks) follow-up for pain and function. (White, et al. 2007)
Acupuncture Benefits–Pain

- **Fibromyalgia** (Martin, et al. 2006)
  
  42.2 (VA) Fibromyalgia impact questionnaire scores

- **Peripheral Neuropathies from:**
  - Chemotherapy treatments (Donald, et al. 2011)
  - Diabetes (Ahn, et al. 2007)
Cancer Related Pain

- Pain intensity decreased by 36% at 2 months from baseline in the group receiving acupuncture; there was little change for patients receiving placebo (2%). The difference between groups was statistically significant ($P < .0001$).

- The observed reduction in pain represents a clear benefit from acupuncture for these cancer patients who are in pain, *despite stable analgesic treatment.*

Alimi D. 2003
Clinicians consider acupuncture as one possible treatment option for patients with chronic low back pain who do not have a response to self-care.

Chou, et.al 2007
Acupuncture provides better short-term pain relief and functional improvement than no treatment and that the addition of acupuncture to other treatments provides a greater benefit than other treatments alone.

Ammendolia C, et al. 2008
Migraine (without aura)

Auricular Acupuncture (AA) over Sham AA.  p<0.001 VAS scores. N=94  (Allais, et al. 2011)

Cochrane Review:

Acupuncture is an effective and valuable option for patients suffering from migraine or frequent tension type headache.

(Schiapparelli, et al, 2011)
Acupressure the 4 Gates – LI–4 & Liv–3
- Large–Intestine 4: He Gu (Joining the Valleys)
- Acupressure: with opposite thumb, in and out movement, (2–5 minutes).
- Benefits: pain relief, headaches, sore throat, colds.
Pain Relief & Wellness in China

- Acupressure the 4 Gates– LI–4 & Liv–3
  - Liver 3: Taichong (Greater Rushing)
  - Acupressure: In & out 2–5 minutes (often sore).
Pain Relief in Asia

Japan & Singapore & Foot Acupressure/Reflexology:
- Big Toe (Brain),
- Arch (Digestion) &
- Medial Aspect of Foot (heel to toe) spine
Post Herpetic Neuralgia

- Combined use of acupuncture, cupping and herbal medicine.

5 Needle Protocol
- Sympathetic
- Liver
- Lung
- Kidney
- Shenmen

30 to 45 minute retention
Ear Acupressure:

- Self-body massage each day – teach patients
- “My eyes are strained” – rubbing the ear-lobe
- Apex for Allergies, Lobe/Brain, Spine=Spine
- Back Pain: Spine of the Ear
Daily Wellness in China

- Henry and Hong Kong
- Acupressure:
  - Yin Tang “Bright Hall”
  - circular finger pressure or rub with the heel of hand
  - Benefit: Calms the mind, reduces mental anxiety.
  - 5–10 minutes per day
Acupuncture & Addiction History

- 1950’s Chinese Revolution > 20 million Opium Addicts
- Used Acupuncture to treat pain of withdrawal
- Little literature on subject
1974 Dr. Wen
- James Reston public notoriety
  - Neurosurgeon
  - Electro on Lung pt in ear
  - Pt did not have craving for Morphine
Women receiving acupuncture (n = 185)

- ↓ physiological cravings for substances
- felt significantly less depressed
- less anxious
- and were better able to reflect on and resolve difficulties
- control group (n = 101).

Auricular acupuncture, as an adjunct therapy to a comprehensive psycho educational treatment program for women with addictions, shows promise in being an effective, more viable treatment alternative to anxiolytics.

(Courbasson CM, et. al., 2007)
Major Depressive Disorder (MDD)

- Depression during pregnancy (Manber, et al. 2010)
- True double blinding–JA control
  - 63% showed improvement with VA in Hamilton Rating Scale for Depression (HDRS)

**Controls**

- 37.5% SA and
- 50% with massage
- 8 weeks / 12 treatments
- n=150
Insomnia

- Overnight point stimulation of Ht–7 for 20 nights vs. placebo point stimulation.
- Improve quality of sleep
- Reduce anxiety levels in insomnia
- Urinary Melatonin metabolite higher in treatment group (Nordio M, Romanelli F, 2008)
Case Study–24 year old F

- Subjective:
  - Painful periods, before and during 1st day of menses with clotting
  - Focal HA over left eye
  - Premenstrual diarrhea and craving for sweets
  - Acne before menses
Liver Qi and blood stagnation overacting on the Spleen and creating heat

- Acupuncture
  - Move the liver and blood
  - Tonify the spleen
  - Clear heat

- Diet
  - Lemon water
  - No cold or dairy foods
Herbs

- Jia wei xiao yao wan
  - Radix Bupleuri Chinensis (Chai Hu)
  - Radix Angelicae Sinensis (Dang Gui)
  - Radix Paeoniae Lactiflorae (Bai Shao)
  - Rhizoma Atractylodis Macrocephalae (Bai Zhu)
  - Sclerotium Poriae Cocos (Fu Ling)
  - Radix Glycyrrhizae Uralensis (Gan Cao)
  - Cortex Moutan Radicis (Mu Dan Pi)
  - Fructus Gardeniae Jasminoidis (Zhi Zi)
  - Herba Menthae Haplocalycis (Bo He)
  - Rhizoma Zingiberis Recens (Sheng Jiang)
Wellness & Balance in Asia

- Go Green Vegetables! Go Green Tea!
- Rub Kidneys after Exercise!
- Fall/Winter Tea: Cinnamon, Honey, Hot Water
- Anti-Stress Tea: Fresh Lemon & Hot Water (relieve stagnations/pain)
“The Journey of a 1,000 miles begins with one step.”

— Tao Te Ching
Thank you

Questions/Contact

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