THERAPEUTICS OF TRADITIONAL HEALING METHODS

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Definition

• A system of complementary medicine in which fine needles are inserted at specific points along energy channels (meridians), used in the treatment of various physical and mental ailments

• Acupoints have increased electrical conductance and less impedance.

Dates back to…

• 7000 years ago, earliest mentioned in “Suchi Veda” (Suchi=needle; Veda=knowledge)
• Charaka used it to treat syncope.
• One of the Shastras written by Buddha: Documents the usage of Acupuncture
• In China, Acupuncture originated 5000 years ago.
• 1960 → Excavations of Maohing Tomb → Stone needles
• Haung Di and Shen Ning: Ancient gods → Yellow Emperors Classic of Internal Medicine.
• Tsin Dynasty → Tang Dynasty → Han Dynasty (Spread of Yin & Yang Theory)
Principles of Acupuncture Therapy

• Free flow of Qi/Chi/Ki. *(Prana)*
• Balancing Yin and Yang. *(Ida and Pingala)*
• 12 paired Meridians + 8 unpaired Meridians. *(Nadis)*
• Acupoints *(Marma)*
YANG
- External
- Function
- Day
- Hot
- Sky
- Sun
- Fast
- Dryness
- Energy
- Expressive
- Mind
- Birth
- Left Brain
- Analytical
- Linear
- Outcome
- Thinking
- Science

YIN
- Internal
- Structure
- Night
- Cold
- Earth
- Moon
- Slow
- Humidity
- Fluids
- Calm
- Heart
- Death
- Right Brain
- Allowing
- Circular
- Process
- Feeling
- Spirituality
**FIVE ELEMENTS**

- **WOOD**
  - Organs: Liver; Gallbladder
  - Season: Spring
  - Direction: East
  - Color: Green
  - Environment: Windy
  - Taste: Sour
  - Emotion: Anger
  - Sense Organ: Eye
  - Bodily Tissue: Tendons

- **EARTH**
  - Organs: Spleen; Stomach
  - Season: Late summer
  - Direction: Center/Middle
  - Color: Yellow
  - Environment: Damp
  - Taste: Sweet
  - Emotion: Worry
  - Sense Organ: Mouth
  - Bodily Tissue: Muscles

- **WATER**
  - Organs: Kidneys; Urinary Bladder
  - Season: Winter
  - Direction: North
  - Color: Blue
  - Environment: Cold
  - Taste: Salty
  - Emotion: Fear
  - Sense Organ: Ear
  - Bodily Tissue: Bone

- **FIRE**
  - Organs: Heart; Small Intestine
  - Season: Summer
  - Direction: South
  - Color: Orange / Red
  - Environment: Hot
  - Taste: Bitter
  - Emotion: Joy
  - Sense Organ: Tongue
  - Bodily Tissue: Blood vessel

- **METAL**
  - Organs: Lung; Large Intestine
  - Season: Fall
  - Direction: West
  - Color: White / Grey
  - Environment: Dry
  - Taste: Pungent
  - Emotion: Grief
  - Sense Organ: Nose
  - Bodily Tissue: Body hair
Laws of Therapeutics

- Five elements: Constructive and Destructive cycles (Shen-Ko)
  a) Mother-son Law
  b) Husband-wife Law
Nirmana Chakra and Vinasha Chakra

(Ref: The lost Secrets of Ayurvedic acupuncture - Dr. Frank Ros)
Laws of Therapeutics

- Organ clock
(Ref: The lost Secrets of Ayurvedic acupuncture- Dr. Frank Ros)
Meridians (Yin & Yang)- concept of Luo-connecting points

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>YIN (Interior/ Antar Nadi)</th>
<th>YANG (Exterior/Bahya Nadi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire (Major)</td>
<td>Heart</td>
<td>Small Intestine</td>
</tr>
<tr>
<td>Fire (Minor)</td>
<td>Pericardium</td>
<td>Triple Warmer (Tridosha)</td>
</tr>
<tr>
<td>Earth</td>
<td>Stomach</td>
<td>Spleen</td>
</tr>
<tr>
<td>Metal (Wind)</td>
<td>Lung</td>
<td>Large Intestine</td>
</tr>
<tr>
<td>Water</td>
<td>Kidney</td>
<td>Urinary Bladder</td>
</tr>
<tr>
<td>Wood (Ether)</td>
<td>Gall bladder</td>
<td>Liver</td>
</tr>
</tbody>
</table>

- **Vata**
- **Pitta**
- **Kapha**
Yoga and Marmas

• Awareness at Marma points
• Inhalation- infuses Marma with *Prana* and exhalation moves *Prana* from Marma
• Backward bends- Stimulate Marmas
• Forward bends- Calms down the Marmas
• Cultural Asanas Vs Relaxation Asanas
• Meditative poses: Prana internalises into Antar Nadis ➔ into main Nadis ➔ Chakras
• Regulation of Pitta: Uddiyana bandha, Nauli ➔ Marmas of stomach
• Regulation of Kapha: Jalandhara bandha, Ujjayi ➔ Marmas of throat
• Regulation of Vata: Moolabandha ➔ Marmas along spine and pelvis
• Nadishodhana Pranayama: Balances prana in Nadis of both the sides

*Ref: Marma and Ayurveda, Dr. David Frawley*
Methods of Diagnosis:

- Inspection
  - Tongue diagnosis
- Olfaction
- Listening to the patient
- Palpation
  - Alarm points
  - Abdominal Palpation
  - Pulse diagnosis
- Auscultation
- Special Examination
- History of dreams
Diagnostics

- Tongue diagnosis
- Pulse diagnosis
- Alarm points
- Syndrome differentiation
Therapeutics:

Methods used to stimulate the acupoints:
• Needling (*Suchi Vaidya*)
• Moxibustion (*Agnikarma*)
• Electro-Acupuncture (EA)
• Exercise (Tai chi, Qi gong)
• Massage

Main Types of Acupuncture:
• Body Acupuncture
• Auriculotherapy (*Karna Suchi Vaidya*)
• Scalp Acupuncture

(Next slide for images)
Requisites for Needling:

- Thorough knowledge of Anatomy (Surface landmarks, Nerve supply and Vascular supply).
- Complete understanding: Principles of therapy and etiopathogenesis of disorders according to TCM.
- Selection of points (minimal)
- Measurement techniques (Cunometer)
- Posture selection for the patient.
- Choose appropriate needle size according to the area being punctured.
- FDA recommends use of sterile needles and labelled single-use only.
Important Surface landmarks

- root of nose
- dorsum of nose
- tip of nose
- base of nose
- nares
- philtrum
- angle of mouth
- ala nasi
- nasolabial sulcus
- upper lip
- rima oris
- lower lip
- chin
- mentolabial sulcus
Important Surface landmarks

- Acromion
- Deltoid
- Pectoralis major
- Nipple
- Serratus anterior
- External oblique
- Anterior superior iliac spine
- Xiphoid process
- Costal margin
- Costal angle
- Rectus abdominis
- Tendinous intersection
- Linea alba
- Umbilicus
- Sternal notch
- Manubrium
- Sternal angle
- Body
- Acromial end of clavicle
- Teres major muscle
- Triceps brachii muscle, long head
- Triceps brachii muscle, lateral head
- Lateral epicondyle of humerus
- Olecranon
- Anconeous muscle
- Extensor digitorum muscle
- Head of ulna
- Styloid process of radius
- Deltoide muscle
- Biceps brachii muscle
- Brachialis muscle
- Tendon of biceps brachii muscle
- Brachioradialis muscle
- Extensor carpi radialis longus muscle
- Extensor carpi radialis brevis muscle
Important Surface landmarks

- Acromion
- Triceps brachii muscle
- Spinal processes (midline)
- Spine of scapula
- Infraspinatus muscle
- Teres major muscle
- Inferior angle of scapula
- Biceps brachii muscle
- Deltoid muscle
- Trapezius muscle
- Latissimus dorsi muscle
- Erector spinae muscle
Important Surface landmarks

- **Palpation of patella**
- **Tibial tuberosity**: 2.5 cm, Anterior border
- **Gastrocnemius muscle, lateral head**
- **Tendon of biceps femoris muscle**
- **Achille's (Calcaneal) tendon**
- **Lateral malleolus**
- **Medial malleolus**
- **Posterior tibial artery**
- **Soleus muscle**
- **Popliteal fossa**
- **Site for palpation of popliteal artery**
- **Tendon of semitendinosus muscle**
Measurements
(Note: Need to use the size of patient, not the Acupuncturists’)

Cunometer

1.5 cun
2 cun
1 cun
3 cun
Method of Needling

• Sterilize the area being punctured with spirit swab.
• Puncture the Acupoint to the desired depth, at a recommended angle.
• Manipulation, if required
  a) Twirling- rotating
  b) Lifting- thrusting
  c) Flicking
  d) Scraping
  e) Vibration
• Duration and frequency of sessions
Description of Acupuncture point

- Pericardium 6 (Neiguan): 2 cun above the ventral wrist crease between the tendons of palmaris longus and flexor carpi radialis.
  Needling: 0.5 to 1 cun deep, perpendicular

- Marma points:

<table>
<thead>
<tr>
<th>Marma</th>
<th>Location</th>
<th>Meaning</th>
<th>Size</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhipati</td>
<td>Top of the head</td>
<td>Overlord</td>
<td>½ unit</td>
<td>1</td>
</tr>
<tr>
<td>Amsaphalaka</td>
<td>Shoulder blade</td>
<td>Shoulder blade</td>
<td>½ unit</td>
<td>2, 1 on each side</td>
</tr>
<tr>
<td>Amsa</td>
<td>Shoulder</td>
<td>Shoulder</td>
<td>½ unit</td>
<td>2, 1 on each side</td>
</tr>
<tr>
<td>Ani (arm)</td>
<td>Lower region of the upper arm</td>
<td>The point of a needle</td>
<td>½ unit</td>
<td>2, 1 on each arm</td>
</tr>
<tr>
<td>Ani (leg)</td>
<td>Lower region of upper leg</td>
<td>The point of a needle</td>
<td>½ unit</td>
<td>2, 1 on each leg</td>
</tr>
</tbody>
</table>
Arrival of Qi (DeQi)

“The arrival of vital energy”

- Suan (aching or soreness)
- Ma (numbness or tingling)
- Zhang (fullness, distention, or pressure)
- Zhong (heaviness)

Indicates:

- Exuberance
- Qi in the meridian
- Prognosis of the disease
Mechanism Of Action:

Acupuncture analgesia
Mechanism Of Action: Electro-acupuncture

A

2 Hz → Em, Enk, β-End → μ, δ, κ → Synergism → Analgesia

100 Hz → Dyn

B

2 Hz

Arcuate nucleus of hypothalamus → β-End → PAG

100 Hz

Parabrachial nucleus

Medulla

Enk → Dyn → Dorsal Horn
Pain Inhibitory Systems

- PAG, PBN, NRM, LC etc
- opioids
- non-opioids
  - supra-spinal
  - segmental
- descending inhibition
- gate control

Pain Relief

Aδ, C fibre mediated

Acupuncture
Moxibustion
EA
  - high intensity
  - low frequency
DNIC, FSIA

Aβ fibre mediated

TENS
EA
  - Low intensity
  - high frequency
Vibration
Touch
## Conditions for which acupuncture may be indicated (American Academy of Medical Acupuncture)

- Acute and chronic pain control
- Postraumatic and postoperative ileus
- Muscle spasms, tremors, tics, contractures
- Paresthesias
- Anxiety, fright, panic
- Drug detoxification
- Neuralgias (trigeminal, herpes zoster, postherpetic, other)
- Seventh nerve palsy sequelae of cardiovascular accident (aphasia, hemiplegia)
- Certain functional gastrointestinal disorders (nausea and vomiting, esophageal spasm, hyperacidity, irritable bowel, etc)
- Headache, vertigo (Meniere), tinnitus
- Phantom pain
- Frozen shoulder
- Cervical and lumbar spine syndromes
- Plantar fasciitis
- Arthritis/arthritis
- Bursitis, tendonitis, carpal tunnel syndrome
- Sprains and contusions

- In fractures, assisting in pain control, edema, and enhancing healing process
- Temporomandibular joint derangement, bruxism
- Dysmenorrhea, pelvic pain
- Insomnia
- Anorexia
- Atypical chest pain (negative workup)
- Idiopathic palpitations, sinus tachycardia
- Allergic sinusitis
- Persistent hiccups
- Selected dermatoses (urticaria, pruritus, eczema, psoriasis)
- Constipation, diarrhea
- Urinary incontinence, retention (neurogenic, spastic, adverse drug effect)
- Abdominal distention/flatulence
- Severe hyperthermia
- Cough with contraindications for narcotics
- Acupuncture anesthesia for high-risk patients
Contd..

- Parkinson’s disease
- Post Stroke rehabilitation
- Post-operative and Chemotherapy induced nausea & Vomiting
- Diabetes Mellitus Type 2
- Hypertension
- Asthma
- Fibromyalgia
- Sciatica
- Allergic Rhinitis
- Sports injuries
- Infertility
- Malposition of the fetus
Contra-Indications

- Subjects taking anti-coagulants
- Subjects having pacemakers
- Needle phobia
- Extremes of age
- Fasting
- State of intoxication
- Extreme fatigue
- Terminally ill
- Pregnancy

Complications

- Bent needle
- Stuck needle
- Forgotten needle
- Broken needle
- Hematoma
- Dizziness
Research Findings : Neuro-Psychiatry
Efficacy of Acupuncture for Primary Insomnia (PI): A Randomized Controlled Clinical Trial *(Guo J et al, 2013)*

- A single-blinded, randomized, placebo-controlled clinical trial.
- 180 patients with PI, randomised to 3 groups:
  1. Verum group: verum acupuncture + placebo;
  2. Estazolam group: estazolam + sham acupuncture;
  3. Sham group: sham acupuncture + placebo.
- Acupuncture points used: Du 20, Ex-1, HT-7, Du-24, Sp-6
- Scales applied: Pittsburgh Sleep Quality Index (PSQI), Epworth Sleepiness Scale (ESS), 36-item short-form health survey (SF-36).
- Result:
  - 3 groups showed significant improvement compared with the pretreatment baseline.
  - Compared with the other two groups, the verum group reported improved sleep quality (SQ) & vitality (VT), decreased daytime dysfunction (DD) and sleepiness (ESS score).
<table>
<thead>
<tr>
<th>Author (year)</th>
<th>Sample population</th>
<th>Arms</th>
<th>Frequency</th>
<th>Outcome measure</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yang X et al (1994)</td>
<td>41 MDD subjects</td>
<td>Acupuncture needling (n=20); Amitriptyline (n=21)</td>
<td>6 weeks</td>
<td>Measured with Hamilton's scale, factors of anxiety somatization, cognitive disturbance, retardation, sleep disturbance and feeling of despair</td>
<td>Decrease in the mean value, and the change in anxiety somatization was markedly significant in the needling group as compared with that in the controls.</td>
</tr>
<tr>
<td>Zhang ZJ et al. (2010)</td>
<td>38 women with MDD</td>
<td>Active acupuncture (n = 12); an active control acupuncture (n = 21) &amp; wait-list control subjects (n = 11)</td>
<td>12 sessions in 8 weeks</td>
<td>HDRS scores</td>
<td>A significant difference in symptom reduction between the groups was found on the HDRS. Active acupuncture resulted in greater symptom reduction compared with nonspecific acupuncture.</td>
</tr>
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</tr>
<tr>
<td>Xhong X et al. (2002)</td>
<td>61 MDD subjects</td>
<td>Electro-acupuncture (EA) (n=30) and maprotiline (Map) (n=31)</td>
<td>42 days</td>
<td>a) Hamilton Depression Rating Scale (HAMD), Self-Rating Scale for Depression (SDS), Self-Rating Scale for Anxiety (SAS), Clinical Global Impression Scale (CGI) &amp; Asberg Rating Scale for side-effects (ARS) at 14th, 28th and 42nd day.</td>
<td>a) HAMD and SDS scores lowered significantly than before treatment, with insignificant difference between the group. In patients with anxiety somatization syndrome, the scores of SAS, ARS in the EA group were significantly lower than Map group. Efficacy index was higher in the EA group.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>b) Cortisol (CORT) content and the endothelin-1 (ET-1) content</td>
<td>b) Decreased in both groups with insignificant differences</td>
</tr>
<tr>
<td>Zhen C et al. (2010)</td>
<td>300 subjects with PSD</td>
<td>Electro Acupuncture group (EA) (n=150) Fluoxetine (20 mg/d) group (n=150)</td>
<td>2 months daily</td>
<td>HAM-D scores</td>
<td>HAMD scores in both groups decreased significantly and that of acupuncture group was remarkably lower than that of medication group (P &lt; 0.05). Therapeutic effect of acupuncture was significantly superior to that of medication group. EA group, Cho/Cr ratio showed a significant difference with treatment, which also had a positive relevance with the HAMD scores before treatment.</td>
</tr>
</tbody>
</table>
NADA protocol
(National Acupuncture Detoxification Association)

# Opioid Addiction

<table>
<thead>
<tr>
<th>Author (year)</th>
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<tbody>
<tr>
<td>DeLorent et al. (2016)</td>
<td>162 Psychiatric patients with AD (37,29) or MDD (53,43) in Usual care (UC)</td>
<td>NADA (90) vs PMR (72)</td>
<td>NADA 2× per week for 4 weeks 30 min</td>
<td>VAS tension, anxiety, mood, anger, aggression</td>
<td>Both showed improvement on all items</td>
</tr>
<tr>
<td>Carter et al. (2011)</td>
<td>167 Addiction in-patients</td>
<td>NADA + UC vs UC alone</td>
<td>NADA 2× per week for 4 weeks 30–45 min</td>
<td>Self-report 7 common BH symptoms, psychological, and physical</td>
<td>Reduction in all symptoms compared to UC</td>
</tr>
<tr>
<td>Janssen et al. (2012)</td>
<td>89 Pregnant opiate dependent mothers and Neonate abstinence syndrome in newborn infants</td>
<td>50 NADA + methadone vs 39 methadone alone</td>
<td>Daily NADA sessions; 45 min</td>
<td>Number of days of treatment of newborn with morphine</td>
<td>Decrease in number of days and NAS symptoms with NADA</td>
</tr>
</tbody>
</table>

✓ Studies on the mice show that Acupuncture at ST-36 and HT-7 attenuates anxiety-like behaviour which is resultant of increased corticotrophin-releasing factor (CRF) and neuropeptide Y (NPY) mRNA expression in the amygdala during nicotine withdrawal. *(Chae Y, 2008)*
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</tr>
</thead>
<tbody>
<tr>
<td>Streng et al. (2006)</td>
<td>114 subjects with migraine (Migraine prophylaxis)</td>
<td>Acupuncture (n=59) and metoprolol (100 to 200mg) daily (n=55)</td>
<td>12 weeks</td>
<td>Number of migraine days</td>
<td>Number of migraine days decreased by 2.5±2.9 days (baseline 5.8±2.5 days) in the acupuncture group compared to 2.2±2.7 days (baseline 5.8±2.9 days) in the metoprolol group</td>
</tr>
<tr>
<td>Allais et al. (2002)</td>
<td>160 women with Migraine (Migraine prophylaxis)</td>
<td>Acupuncture(A) (n=80) and Flunarizine(F) (n=80)</td>
<td>Once weekly in 1st 2 months; then once a month for next 4 months</td>
<td>Frequency of attacks; use of symptomatic drugs; number of attacks after 2 and 4 months of therapy; analgesic consumption</td>
<td>Frequency of attacks and use of symptomatic drugs significantly decreased during treatment in both groups. Number of attacks after 2 and 4 months of therapy was significantly lower in group A than in group F, and analgesic consumption was significantly lower in group A at 2 months of treatment.</td>
</tr>
</tbody>
</table>
## Neurological disorders

<table>
<thead>
<tr>
<th>Author</th>
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<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yang et al. (2006)</td>
<td>76 subjects with PD</td>
<td>Scalp acupuncture +EA + drug (n=38) and L-DOPA(62.5– 500mgx2–4/d) (n=38)</td>
<td>10 days sessions with a week gap repeated 4 times</td>
<td>UPDRS (Unified Parkinson’s Disease Rating Scale), motor dysfunction rating scale for Parkinson’s disease(MDRSPD) Total efficacy</td>
<td>UPDRS, MDRSPD scores and total efficacy significantly improved in Acupuncture + drug group</td>
</tr>
<tr>
<td>Kopsy et al. (2009)</td>
<td>10 subjects with Multiple sclerosis with Bladder dysfunction</td>
<td>Electroacupuncture</td>
<td>Once a week for 10 weeks, 30 mins/session</td>
<td>Mean urge frequency, Mean number of daytime leaking episodes, Daytime voiding frequency and nocturnal voiding frequency</td>
<td>Mean urge frequency decreased significantly by –2.21 (from 3.89 to 1.68 times a day) and mean number of daytime leaking episodes by –0.78 (from 1.18 to 0.40) Daytime and nocturnal voiding frequencies showed a decrease.</td>
</tr>
</tbody>
</table>
References:


- Marma and Ayurveda, Dr. David Frawley

- The lost Secrets of Ayurvedic acupuncture- Dr. Frank Ros

- Clinical Practice of Acupuncture- Dr A L Agrawal

- Clinical Acupuncture- Dr Anton Jaysuriya
“Orchestra of Music decides the Melody of Life” (principle of Pulse Diagnosis)

Thank You!