An outgrowth of the Philosophical beliefs of the Naturalist school of thought during the Warring States period (475 – 221 BC) of the Zhou Dynasty. A period of the unification of China.

**Huang Di Nei Jing:** Earliest text, written in stages during the Han Dynasty (206 BC – 222 AD)

**Zhen Jiu Jia Yi Jing:** Updated text, 282 AD, edited by Huang-Fu Mi
Zhen Jiu Jia Yi Jing

• The superior physician controls disease before any illness has declared itself;
• The average physician practices acupuncture before the disease comes to crisis;
• The inferior practitioner treats a patient when the illness is already dying away.
The Characteristics of the superior physician

The Four Examinations:

- **Observe** *(Wang zhen)*
- **Listen** *(Wen zhen)*
- **Question** *(We zhen)*
- **Examine** *(Qie zhen)*
Qing Dynasty 1644 - 1911

- In 1822 the Qing Emperor ordered that Acupuncture no longer be taught at the Imperial Medical College.
- Wide spread promotion of Western Medicine during 19th Century brought to China by missionary physicians and those in the employ of the Dutch East India Company.
1949, Communism, Mao

• The Great Proletariat Cultural Revolution
• Insufficient training facilities for Western Medicine in developing China
• Reemergence of Acupuncture trained physicians to treat the rural masses
• “The Barefoot Doctor” – treated 80% of the Chinese population with TCM (acupuncture and herbs)
North American Experience
(Pre-James Reston)

• **Memoir on Acupuncture** by S. Morand (France) 1825 Translated in the USA by Franklin Bache (grandson of Benj. Franklin)

• **American Civil War Field Surgeon’s Manual**
  1876 and 1880 Editions

• **The Principals and Practice of Medicine**
  Sir William Osler (1<sup>st</sup> Edition 1892 – 16<sup>th</sup> Edition 1947) Management of Sciatica
Now, About My Operation in Peking

By JAMES RESTON

PEKING, July 26—There is something a little absurd about a man publishing an obituary notice on his own appendix, but for the last 10 days this correspondent has had a chance to learn a little about the professional and political direction of a major Chinese hospital from the inside, and this is a report on how I got there and what I found.

In brief summary, the facts are that with the assistance of 11 of the leading medical specialists in Peking, who were asked by Premier Chou En-lai to cooperate on the case, Prof. Wu Wei-juan of the Anti-Imperialist Hospital’s surgical staff removed my appendix on July 17 after a normal injection of Xylocain and Benzocain, which anesthetized the middle of my body.

There were no complications, nausea or vomiting. I was conscious throughout, followed the instructions of Prof. Wu as translated to me by Ma Yu-chan of the Chinese Foreign Ministry during the operation, and was back in my bedroom in the hospital in two and a half hours.

However, I was in considerable discomfort if not pain during the second night after the operation, and Li Chang-yuan, doctor of acupuncture at the hospital, with my approval, inserted three long, thin needles into the outer part of my right elbow and below my knees and manipulated them in order to stimulate the intestine and relieve the pressure and distension of the stomach.

That sent ripples of pain racing through my limbs and, at least, had the effect of diverting my attention from the distress in my stomach. Meanwhile, Doctor Li lit two pieces of an herb called a, which looked like the burning stamps of a broken cheap cigar, and held them close to my abdomen while occasionally twirling the needles into action.

All this took about 20 minutes, during which I remem-

Continued on Page 6, Column 3
The Rise of Acupuncture in the USA

• Pre-James Reston acupuncture was limited to Asian communities and classically trained practitioners
• Development of American Schools for Licensed Acupuncturists (not MDs or DOs)
DOCTOR JOE HELMS

Joseph M. Helms, M.D. has been the driving force behind the emergence of medical acupuncture as a discipline in modern medicine. He is a graduate of the Johns Hopkins University and UCLA School of Medicine. His qualifications include family medicine, pain management, medical acupuncture, and homeopathy.

Dr. Helms has been teaching acupuncture to physicians since 1977. He has trained over five thousand doctors in the United States through Helms Medical Institute courses, in collaboration with the continuing medical education divisions of Stanford and UCLA Schools of Medicine. He is the author of Acupuncture Energetics: A Clinical Approach for Physicians.

Dr. Helms is the founding president of the American Academy of Medical Acupuncture, has served on the acupuncture advisory committees for the World Health Organization and the National Center for Complementary and Alternative Medicine of the National Institutes of Health.

Dr. Helms is a professor of medical acupuncture on the adjunct clinical faculty at Stanford University School of Medicine, and has a private practice in medical acupuncture in Berkeley, California.

Medical Acupuncture in the USA

American Academy of Medical Acupuncture

Founded 1987
Jiffy Seto  MD  CPE  FAAFP

Former Commander of 436th Aerospace Medicine Squadron
Dover Air Force Base  Dover, Delaware

Current Commander 579 Medical Operations Squadron
Bolling Air Force Base, DC

Graduate of HMI Acupuncture
The Air Force Medical Service's first full-time Acupuncture Clinic is located in Malcolm Grow Medical Clinics and Surgery Center. The Acupuncture Clinic, part of the 779th Medical Operations Squadron, works from 3 clinics at Joint Base Andrews, Walter Reed National Military Medical Center & the Pentagon Flight Medical Clinic, providing medical acupuncture.

Key Programs:
- Support Walter Reed National Military Medical Center treating OIF/OEF war wounded (inpatient & outpatient)
- Support Pentagon Flight Med Clinic - treating flag rank, cabinet members, and Active Duty of all services
- Support White House Medical Unit as requested

Some of the Medical Conditions which we have treated with acupuncture are:

- Allergies/asthma
- Anxiety (fear of flying, etc)
- Arthritis/joint problems
- Back pain
- Bladder/Kidney problems
- Blindness (macular degeneration)
- Burn out / mild depression / dysthymia
- Cervical plexus injury / cervical radicular pain
- Chronic pain, the longer & more intense, the better
- Complex regional pain syndrome
- Constipation/Diarrhea / IBS / Ulcerative Colitis/ Crohn's
- Chronic Cough
- Dizziness / Vertigo
- Drug addiction/smoking
- Fatigue / Chronic Fatigue syndrome / Seasonal Affective disorder
- Fertility disorders
- "Frozen" shoulder / decreased range of motion
- GERD / gastroparesis
- Gout (acute or subacute)
Acupuncture Theory

**Qi:** Life Energy

**Wei Qi:** (defensive)

**Rong Qi:** (nourishing)

**Yuan Qi:** (genetic)
The Basic Constituents

• **Qi**  (life energy, Yang in nature)
• **Xue**  (blood: material form of Qi, Yin in nature)
• **Jin Ye**  (body fluids, Yin in nature)
• **Jing**  (life essence, Yin form of Yuan Qi)
• **Shen**  (spirit, product of Jing and Qi)
Yin vs Yang

Yin
- Ventral surface
  - Interior
  - Earth
- Solid Organs
  - Cold
  - Liquid
- Deficiency
  - Receptive
  - Nourishing

Yang
- Dorsal surface
  - Exterior
  - Heaven
- Hollow Organs
  - Hot
  - Vapor
  - Excess
  - Creative
  - Dynamic
Meridian Theory

- **Qi** flows through a series of channels/meridians, that are named after the 12 major organs. Each meridian has point locations with a **structural** influence on the local anatomy in addition to **energetic** and **physiologic** influences on the body.
Principal Meridians and Points
Principal Meridians

- Synergistic
- Coupled
- Small Intestine
- Heart
- Bladder
- Kidney
- Triple Heater
- Master of the Heart
- Gall Bladder
- Liver
- Large Intestine
- Stomach
- Spleen
Shao Yin/Tai Yang

Diagram: A diagram showing the relationship between TAI YANG and SHAO YIN with corresponding organ systems. The diagram includes labels for TAI YANG, SMALL INTESTINE, HEART, KIDNEY, and SHAO YIN.
Jue Yin/Shao Yang
Tai Yin/Yang Ming
Anatomic Relevance of Meridians

• There are no direct anatomic correlates for the Principal Meridians (not specifically nerves, vessels or lymphatics alone)
• No discreet anatomic structures representing a Meridian can be isolated in an anatomic dissection
• Meridians seem to follow major muscle groups and are thought to be represented as the cleavage planes between adjacent muscles and muscle groups
Ventral Muscular/Fascial Planes
Dorsal and Lateral Muscular/Fascial Planes
Fascial Planes and Principal Meridian Correlations

Bladder Meridian

Superficial Back Line
Superficial Front Line/Stomach Meridian
Lateral Line/Gall Bladder Meridian
Superficial Arm Line/Pericardium Meridian
Deep Arm Line/Lung Meridian
Deep Front Line
Deep Front Line/Liver Meridian
Deep Front Line/Liver Meridian
Dermatome and Myotomes
Other Channels and Points

Curious Meridians
Distinct Meridians
Tendinomuscular System
Shu/Mu System
Auricular Acupuncture
Chinese Scalp Acupuncture
Korean Hand Acupuncture
Hui Points
Special Command Points
Luo Points
Exceptional Points
Root and Node Points
Barrier Points
5 Phases and 5 Elements
Not to forget the work of:

Travell and Simons

C. Chan Gunn
The Science:
What happens physiologically with the insertion of an acupuncture needle?

Fig. 1. Pain transmission

Fig. 2. Acupuncture (low frequency, high intensity)
The Science
DNIC: Diffuse Noxious Inhibitory Control?
*Does not explain mechanism of action*
Pain Transmission

Legend:
- Painful Stimulus
- Direction of Impulses
- Nerve Cell
- Excitatory Synapse
- Inhibitory Synapse
- Sensory Nerve
- Acupuncture Needle
- Sensory Receptor
- Blood Vessel

STT = Spinothalamic Tract
Acupuncture: Low Frequency /High Intensity

Legend:
- Painful Stimulus
- Direction of Impulses
- Nerve Cell
- Excitatory Synapse
- Inhibitory Synapse
- Acupuncture Needle
- Sensory Nerve
- Sensory Receptor
- Blood Vessel

STT = Spinothalamic Tract
Electrical Stimulation

Low Frequency/High Intensity

- Slow in onset
- Generalized throughout body
- Continues after stimulation ceased
- Cumulative effect
- Endorphin dependent
- Blocked by Naloxone
- (2 – 4 Hertz)

High Frequency/Low Intensity

- Rapid in onset
- Segmental effect
- Ceases when stimulation stopped
- No cumulative effect
- Not endorphin dependent
- Mediated by Serotonin, norepinephrine and dynorphins
- (>70 Hertz)
And now for something completely different...
The Art of Acupuncture and the Eastern Philosophy of Disease
The role of Eastern Diagnosis and the interpretation of disease processes, environmental influences and pathologic states

The importance of Biopsychototypes

Each organ has a classical function and sphere of influence
“Heart” Symptoms (Shao Yin-Fire)

- Shao Yin-Fire Biopsychotype: expansive, talkative, happy to be alive, creative, nervous, extreme form borders on hysteria or delirium
- Shao Yin-Fire channel structural symptoms: uncommon, usually brachial pain or sternal discomfort
- Shao Yin-Fire energetic symptoms: insomnia, explosive anger, impulsive
- The Heart stores Shen (Spirit), is the seat of consciousness and mental function
“Kidney” Symptoms (Shao Yin-Water)

- Shao Yin-Water Biopsychotype: shy, anxious, withdrawn, may border on paranoid
- Shao Yin-Water channel-structural symptoms: lumbar ache, stiffness, non-radiating pain, improved with movement and heat
- Shao Yin-Water energetic symptoms: chilliness, arthralgias, problems with will, motivation and decisiveness, fatigue
- The Kidney rules the bones and marrow, is the root of Qi, stores Jing (life essence)
Five Element Theory
5 Elements/Phases
Seasons, Color and Taste Preferences
5 Elements/Phases
External Vulnerability and Emotional Characteristics
5 Elements and Principal Meridians
5 Elements and Correspondences

Sheng and Ke Cycle

Table 3.3. The five-phase system of equivalents

<table>
<thead>
<tr>
<th>Elements</th>
<th>Directions</th>
<th>Seasons</th>
<th>Climatic factors</th>
<th>Colors</th>
<th>Stages of development</th>
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</thead>
<tbody>
<tr>
<td>Wood</td>
<td>East</td>
<td>Spring</td>
<td>Wind</td>
<td>Green</td>
<td>Birth</td>
</tr>
<tr>
<td>Fire</td>
<td>South</td>
<td>Summer</td>
<td>Heat</td>
<td>Red</td>
<td>Growth</td>
</tr>
<tr>
<td>Earth</td>
<td>Center</td>
<td>Late summer</td>
<td>Damp</td>
<td>Yellow</td>
<td>Change</td>
</tr>
<tr>
<td>Metal</td>
<td>West</td>
<td>Autumn</td>
<td>Dryness</td>
<td>White</td>
<td>Harvest</td>
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<tr>
<td>Water</td>
<td>North</td>
<td>Winter</td>
<td>Cold</td>
<td>Black</td>
<td>Composure</td>
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</tbody>
</table>

### Table 3.4. Classification by the five phases

<table>
<thead>
<tr>
<th>Elements</th>
<th>Internal organs</th>
<th>Hollow organs</th>
<th>Sensory organs</th>
<th>Body layer</th>
<th>Emotion</th>
<th>Taste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood</td>
<td>Liver</td>
<td>Gallbladder</td>
<td>Eye</td>
<td>Muscle</td>
<td>Anger</td>
<td>Sour</td>
</tr>
<tr>
<td>Fire</td>
<td>Heart</td>
<td>Small intestine</td>
<td>Tongue</td>
<td>Blood vessels</td>
<td>Joy</td>
<td>Bitter</td>
</tr>
<tr>
<td>Earth</td>
<td>Spleen</td>
<td>Stomach</td>
<td>Mouth</td>
<td>Connective tissue “flesh”</td>
<td>Brooding</td>
<td>Sweet</td>
</tr>
<tr>
<td>Metal</td>
<td>Lung</td>
<td>Large intestine</td>
<td>Nose</td>
<td>Skin</td>
<td>Sadness</td>
<td>Spicy</td>
</tr>
<tr>
<td>Water</td>
<td>Kidney</td>
<td>Urinary bladder</td>
<td>Ear</td>
<td>Bone, joints</td>
<td>Fear</td>
<td>Salty</td>
</tr>
</tbody>
</table>
Command Points and Elemental Qualities
The Acupuncture Diagnosis
(Neuromuscular Condition)

- Every patient has an underlying biopsychotype (constitution) with characteristics of a Yin or Yang presentation of an individual or combination of Energy Axes (Principal Meridians)
- Observe/Listen/Ask/Examine
- What is patient’s Biopsychotype?
- What Principal Meridian(s) is involved?
- What organ system is involved energetically?
- What organ system if involved physiologically?
- Physical Exam, Tongue and Pulse Inspection
- Is it a Yin or a Yang problem? (actually: yin/yang, interior/exterior, cold/hot, deficiency/excess)
- What are the most effective points?
- Tonification or Dispersion?
Needle Placement

Dispersion

Tonification
The Acupuncture Needle

How Tiny Is An Acupuncture Needle?

- Acupuncture Needle: 0.25 mm
- Sewing Needle: 1.02 mm
- Medical Syringe: 28.5 mm
- Match Stick: 42 mm
Fundamentals of treatment

- The problem is identified to a specific circuit
- The problem is determined to be Yin or Yang in nature
- A Yin or deficient condition needs to be re-enforced
- A Yang condition results from a blockage and needs to be opened
- Needle insertion needs sense of “De Qi” (Type III muscle afferents)
- The \( N \to N+1 \) treatment creates a dynamic disequilibrium of Qi in the circuit being treated
Basic Meridian Treatment
Principal Meridians

- Small Intestine
  - Heart
  - Bladder
  - Kidney

- Triple Heater
  - Master of the Heart
  - Gall Bladder
  - Liver

- Large Intestine
  - Lung
  - Stomach
  - Spleen

- Coupled
- Synergistic
Principal Meridian Treatments

Slide 1: Reinforcement of Yin (N → N+1)
Slide 2: Movement through Yang (N+1 ← N)
# Acupuncture Treatment for Neuromusculoskeletal Pain

<table>
<thead>
<tr>
<th>Level of Pain and Depth of Needling</th>
<th>Proximity to Affected Body Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Local</td>
</tr>
<tr>
<td>Level 1: Surface</td>
<td>Surface release technique</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Level 2: Myofascial</td>
<td>Ah Shi point deactivation</td>
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<tr>
<td></td>
<td>Two-Needle Technique</td>
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<tr>
<td></td>
<td>Trigger point deactivation:</td>
</tr>
<tr>
<td></td>
<td>• Single Needle</td>
</tr>
<tr>
<td></td>
<td>• Daisy Chain</td>
</tr>
<tr>
<td>Level 3: Neuromuscular</td>
<td>One Needle Technique</td>
</tr>
<tr>
<td></td>
<td>Peripheral PENS</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 4: Periosteal</td>
<td>Articular periosteal stimulation</td>
</tr>
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</tbody>
</table>
LOONEY TUNES

“Thats all Folks!”
Shoulder PENS Treatment
Anode (Black Electrode): LI15, TH14, SI10
Cathode (Red Electrode): LU1’, SI12, SI11
Lumbar PENS Treatment

Needle placement on Inner Bladder Line covering symptomatic region
Auricular Acupuncture
ATP: Auricular Trauma Protocol

HYPOTHALMUS   AMYGDALA
HIPPOCAMPUS   MASTER CEREBRAL
POINT ZERO    SHEN MEN
BFA: Battlefield Acupuncture
NADA Protocol for alcohol and drug withdrawal
Auricular Acupuncture for LBP

Needle Placement: Shen Men  Point Zero  Lumbago, External Thalmus