



Improving People's Lives Through Innovations in Personalized Health Care

Intro to Acupressure

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Outline

- What is acupressure?
- Acupressure VS Acupuncture
- The brief history of acupressure
- The theoretical basis of acupressure
- How it works
- What can acupuncture help?
- The process of acupressure
- The contraindications of acupressure
- The commonly used acupressure points (FYI)



What is Acupressure?

Acupressure —————> Acu + Pressure
Acu—acupuncture points

Acupressure is an ancient **healing art** using the power and sensitivity of the **hand** to gradually **press acupoints**, which stimulate the body's natural self-curative abilities to **release tension, increase circulation, reduce pain, develop spirituality and vibrant health.**



Acupressure VS Acupuncture

■ The commonalities:

- Using acupuncture theories as theoretical basis (meridian theory, acupuncture point theory, etc.)
- Using acupuncture points as stimulating sites

■ The differences:

➤ Acupuncture:

- the insertion of fine needle(s) into acupuncture point(s)
- Performed by qualified, licensed healthcare practitioners such as licensed acupuncturists, physicians, etc.

➤ Acupressure:

- The application of pressure on acupuncture point(s)
- can be used by healthcare professionals, caregivers, family members and patients themselves.



Brief History

- Acupressure originated in China
- Over 5000 years ago, the Chinese discovered that pressing certain points on the body relieved pain where it occurred and also benefited other parts of the body more remote from the pain and the pressure point.
- Gradually, they found other locations that not only alleviated pain but also influenced the functioning of certain internal organs.



The Theoretical Basis of Acupressure

Main basis:

- The meridian theory
- The point location theory



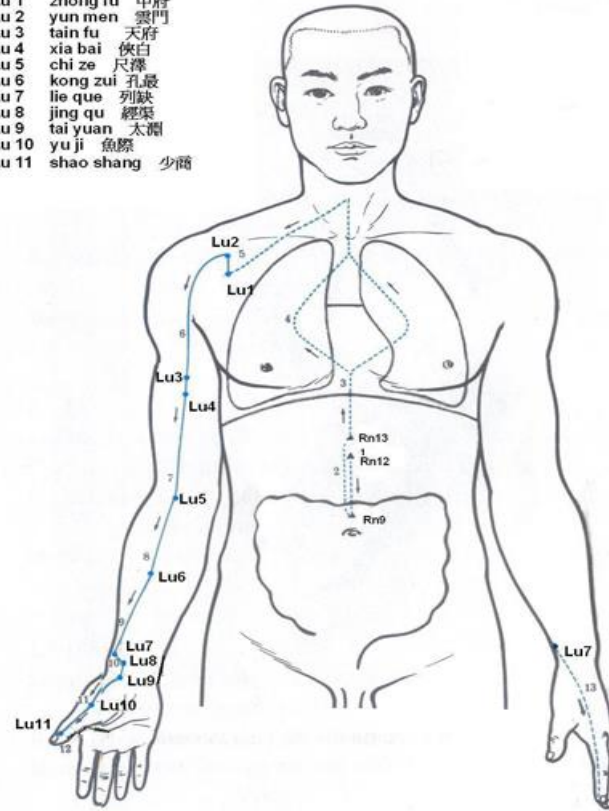
The meridians

- A series of **passages** in which Qi and Blood circulate in the body
- Like **network**—internally link internal organs, externally connect with the extremities, the sense organs, openings, pores, tendons, bones and muscles, etc.
- Unite the body into an organic whole



The Arm Tai Yin Lung Meridian
 手太陰肺經

- Lu 1 zhong fu 中府
- Lu 2 yun men 雲門
- Lu 3 tain fu 天府
- Lu 4 xia bai 俠白
- Lu 5 chi ze 尺澤
- Lu 6 kong zui 孔最
- Lu 7 lie que 列缺
- Lu 8 jing qu 經渠
- Lu 9 tai yuan 太淵
- Lu 10 yu ji 魚際
- Lu 11 shao shang 少商



The meridian system

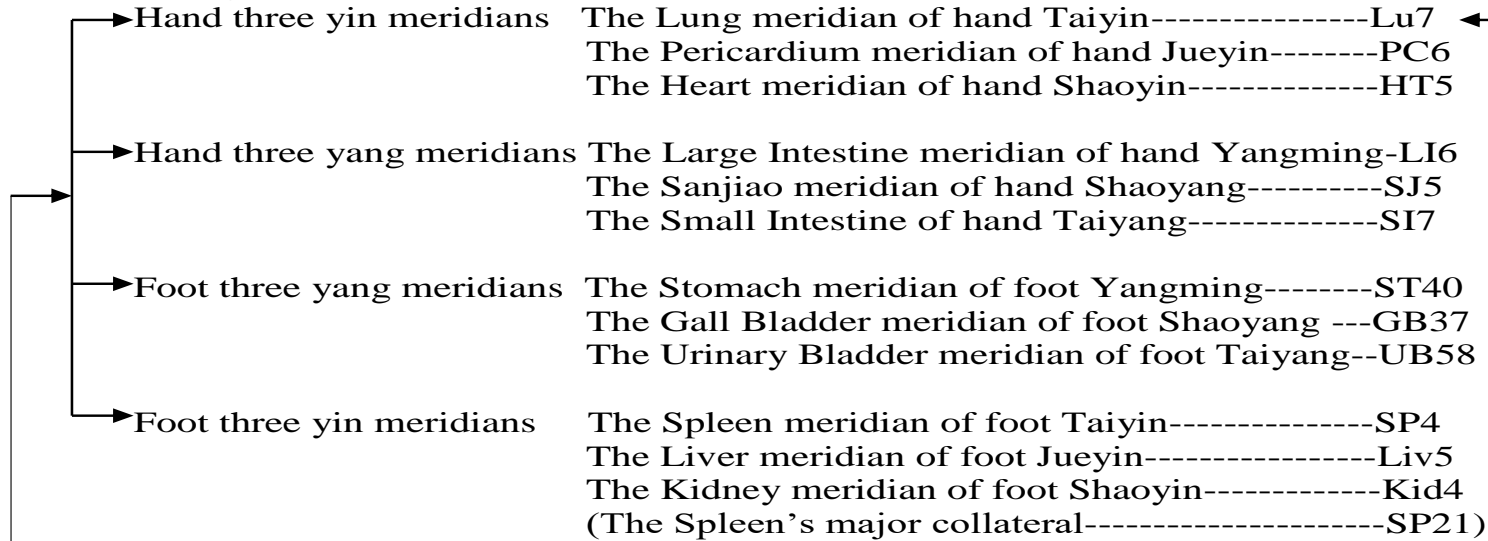
- Is composed of the meridians and their collateral meridians.
- Can be divided into regular and extraordinary meridians.
- Includes:
 - 12 regular meridians,
 - 8 extra meridians,
 - 12 divergent meridians,
 - 12 sinew regions,
 - 12 cutaneous regions affiliated to the 12 regular meridians.
- The collaterals include 15 major collaterals, superficial collaterals and tertiary collaterals.



Meridian System

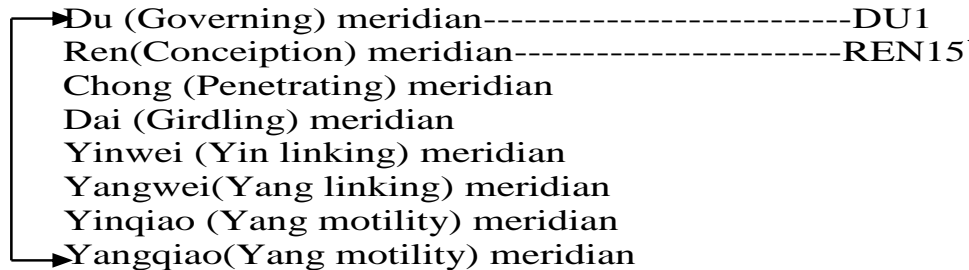
Meridians:

12 regular meridians:



:

8 extra meridians



12 divergent meridians

12 sinew meridians

12 cutaneous regions

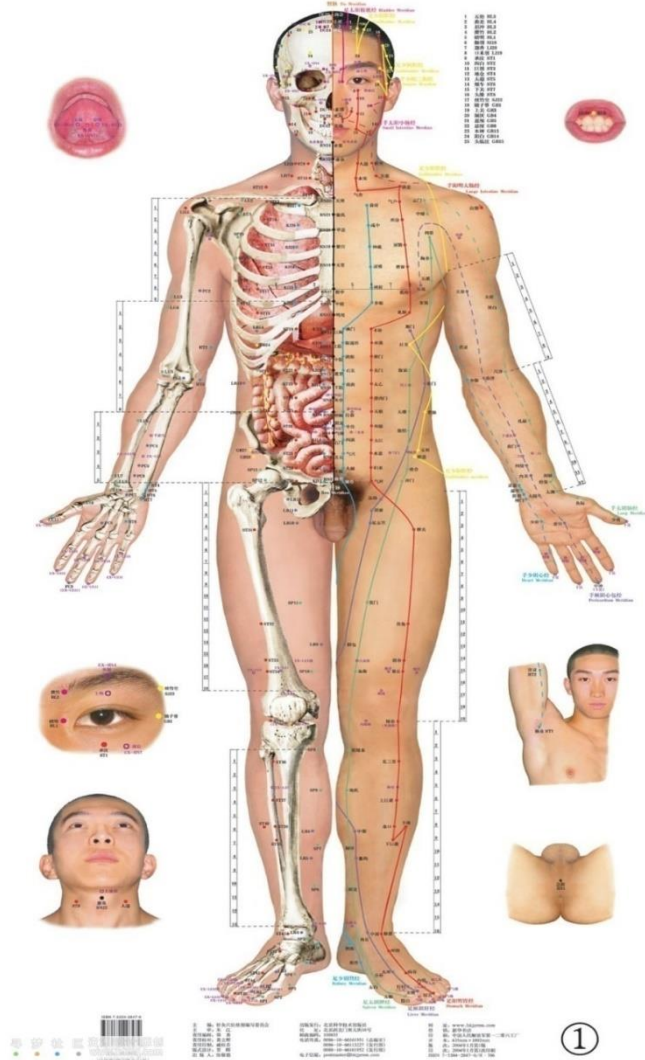
Collaterals:

- 15 major collaterals
- Superficial collaterals
- Tertiary collaterals



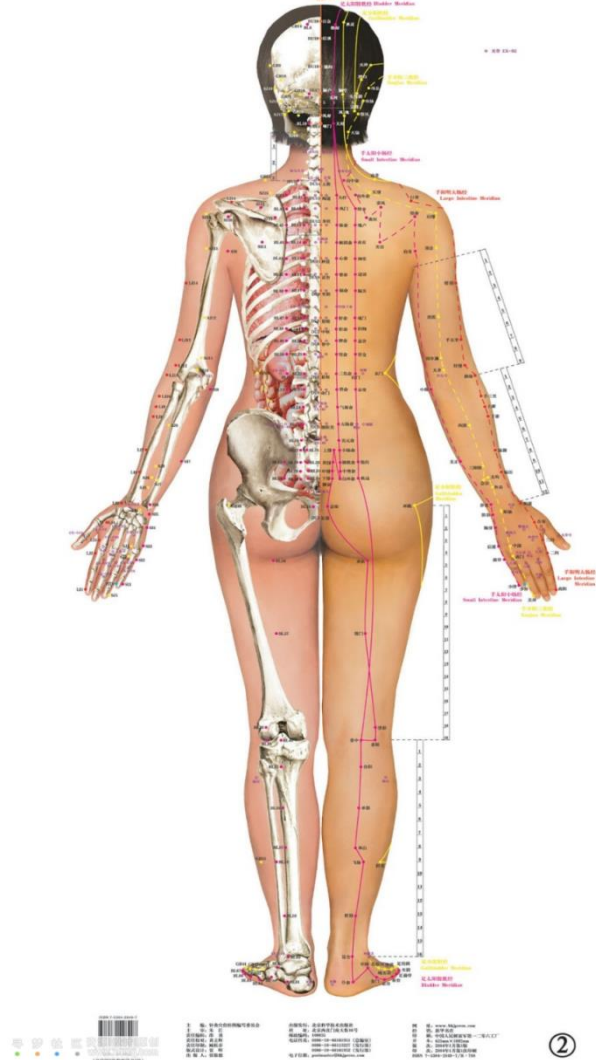
针灸穴位挂图

Acupuncture Point Wall Chart



针灸穴位挂图

Acupuncture Point Wall Chart



Acupuncture Points (Acupoints)

➤ the specific sites

(through which the Qi of the internal organs and meridians is transported to the body surface)

Shu Xue (腧穴) : Shu: transportation; Xue: hole

Most of the acupoints are in the depressions where the joints and muscles meet, hence, the name of Shu Xue)

➤ the stimulating spots

➤ the spots of response to diseases



Classification of Acupoints

- Regular points
- Extraordinary points
- Ashi points



Regular points

- Distributed along the 12 regular meridians and the DU and REN meridians
- The points on the 12 regular meridians are distributed symmetrically (total: 309 points)
- The points on the DU and REN meridians are single ones, aligning on the posterior and anterior midlines respectively (total: 52 points)
- They have their: regular location, regular name, pertaining channels
- The majority of the points were found before the Jin Dynasty (265-420AD)



Extraordinary points(Extra points)

- They are experiential points
- They have: specific names, definite locations
- They are not attributed to the 14 meridians
- They are the supplement to regular points
- They were discovered by later generations



Ashi points (reflexing points, unfixed points)

- A: pain
- Shi: Yes
- They don't have: specific names and definite locations
- They are mostly used for treating pain



The therapeutic functions of acupoints

- Treating diseases at the location
 - All the points have this function.
 - UB1, UB2: eye diseases
 - SI19, GB2: ear diseases
- Treating disease away from the point
 - LI4: large intestine problems, five sense organs problems
 - ST 36: digestive system problems, abdominal pain
 - UB40: lower back pain
- Two way regulative functions
 - ST25: diarrhea, constipation
 - PC6: tachycardia, bradycardia
- Relative specificity
 - DU26: stimulating respiration, raising blood pressure
 - DU14: relieving fever



How acupressure works

- The Traditional Chinese Medicine explanation of how acupressure works (similar to acupuncture) is that channels or meridians, of energy run in regular patterns throughout the body and over its surface.
- These energy channels flow through the body to irrigate and nourish the tissues and organs.
- An obstruction in the movement of the energy is like a dam that can cause obstruction in the flow of blood, bodily fluids and metabolic waste, thereby creating imbalances in the body



How Acupressure Works (continued)

- Applying pressure on the acupoints can influence the meridian by unblocking the obstructions and by re-establishing a healthy flow through the meridians.
- Since the meridians link with the organs, a treatment can therefore, also help to improve the function of the internal organs.
- The improved energy flow and biochemical balance produced by acupressure results in stimulating the body's natural healing abilities and in promoting physical and emotional well-being



What can acupressure help?

The ailments from which acupressure can offer relief are numerous. The following are some examples:

1. Pain: back pain, muscular pain, headache/migraine, joints pain, menstrual pain
2. Nausea/vomiting
3. Depression, Anxiety, sleeping problem, stress
4. Cancer: reduce stress, improve energy levels, relieve pain



Effect of self-acupressure for symptom management: A systematic review

Objectives: To assess the efficacy and safety of self-administered acupressure to alleviate symptoms of various health problems, including allergic disease, cancer, respiratory disease, dysmenorrhea, perceived stress, insomnia, and sleep disturbances.

Methods: We searched core, Korean, Chinese, and Japanese databases, including Ovid-MEDLINE, Ovid-EMBASE, the Cochrane Central Register of Controlled Trials (CENTRAL), the Cumulative Index to Nursing and Allied Health Literature (CINAHL), six representative electronic Korean medical databases, China National Knowledge Infrastructure (CNKI), and Japan Science and Technology Information Aggregator (J-STAGE). We included randomized controlled trials (RCTs) and quasi-RCTs that examined disease-specific effects or symptom relief, adverse reactions, and quality-of-life (QOL) for self-administered acupressure. Data collection and assessment of the methodological quality of the included studies were conducted by two independent reviewers.

Results: Eight RCTs and two quasi-RCTs showed positive effects and safety of self-acupressure therapy in clinically diverse populations. Quality assessment revealed moderate quality for the RCTs, with 50% or more of the trials assessed as presenting a low risk of bias in seven domains. All of the selected 10 studies reported positive effects for primary outcomes of self-acupressure therapy for symptom management, including significant improvements in symptom scores in allergic disease, nausea and vomiting in cancer, symptom scores in respiratory disease, pain symptoms in dysmenorrhea, and stress/fatigue scores and sleep disturbances in healthy people.

Hyun Jin Song, Hyun-Ju Seob et al, Complementary Therapies in Medicine (2015) 23, 68—78



Headache/Migraine

- ✓ Yin Tang
- ✓ UB2
- ✓ Tai Yang
- ✓ DU20
- ✓ GB20
- ✓ LI4
- ✓ LV3



Effect of acupressure and trigger points in treating headache: a randomized controlled trial

Twenty-eight patients suffering chronic headache were randomly assigned to the acupressure group (n = 14) or the muscle relaxant medication group (n = 14). Outcome measures regarding self-appraised pain scores (measured on a visual analogue scale; VAS) and ratings of how headaches affected life quality were recorded at baseline, 1 month after treatment, and at a 6-month follow-up. Pain areas were recorded in order to establish trigger points.

Results showed that mean scores on the VAS at post-treatment assessment were significantly lower in the acupressure group (32.9+/-26.0) than in the muscle relaxant medication group (55.7+/-28.7) (p = 0.047). The superiority of acupressure over muscle relaxant medication remained at 6-month follow-up assessments (p = 0.002). The quality of life ratings related to headache showed similar differences between the two groups in the post treatment and at six-month assessments. Trigger points BL2, GV20, GB20, TH21, and GB5 were used most commonly for etiological assessment.

In conclusion, our study suggests that 1 month of acupressure treatment is more effective in reducing chronic headache than 1 month of muscle relaxant treatment, and that the effect remains 6 months after treatment. Trigger points help demonstrate the treatment technique recommended if a larger-scale study is conducted in the future

Hsieh LL et al, Am J Chi Med, 2010;38(1):1-14



Anxiety, depression, stress, insomnia

- ✓ Yin Tang
- ✓ HT7
- ✓ SP6
- ✓ DU20
- ✓ DU24
- ✓ REN17
- ✓ LI4
- ✓ LV3



The effects of acupressure on depression, anxiety and stress in patients with hemodialysis: a randomized controlled trial

A total of 108 patients with hemodialysis were randomly recruited into the acupressure group (n=54) and the control group (n=54).

The acupressure group received routine hemodialysis treatment plus 15 min acupressure applied three times a week for four weeks.

The control group received only usual care with routine hemodialysis treatment

The acupressure group had significantly lower DASS (Depression, Anxiety Stress Scales) scores and GHQ (General Health Questionnaire) scores compared to the control group, signifying improvements in depression, anxiety, stress and general psychological distress.

Hmwe NT et al. Int J Nurs Stud 2015 Feb;52(2):509-18





Conclusion

Findings from this study indicates that acupressure therapy delivered three times a week for four weeks was able to significantly reduce depression, anxiety, stress, and general psychological distress in patients with hemodialysis. This positive finding suggests that acupressure may have a role in promoting psychological wellbeing of patients. Promoting psychological wellness will improve patients' quality of life, and reduce negative outcomes associated with psychological illnesses and distress experienced by patients with hemodialysis

Hmwe NT et al. Int J Nurs Stud 2015 Feb;52(2):509-18



An integrative review of acupressure interventions for older people: A focus on sleep quality, depression, anxiety, and agitation

- A total of 19 studies were included in this review
- Nine studies consistently showed positive effects of acupressure on sleep quality, and four studies consistently showed that acupressure reduced depression.
- The outcomes of acupressure on anxiety and agitation showed inconsistent findings, in which three studies measured anxiety and five studies measured agitation. There was also variation of acupressure techniques applied in the reviewed studies
- **Conclusion:** This review found some emerging evidences that acupressure can be beneficial for older people who suffer from sleep problems and depression. Use of specific acupressure points, with standardized acupressure treatment protocols, may improve sleep quality and possibly psychological wellbeing of older people. Future research with well-designed mixed method studies are required to produce stronger evidence, as well as in-depth understanding of acupressure intervention in aged care context.

Hmwe NT, Browne G, et al. Int J Geriatr Psychiatry. 2019 Mar;34(3):381-396.



The effect of acupressure on sleep quality of older people: A systematic review and meta-analysis of randomized controlled trials

- The total of 11 randomized controlled trials included in this systematic review and meta-analysis was 722 (experiment: 363 and control: 359)
- The sleep quality of the acupressure group in the elderly was significantly increased compared to the control group (MD: -1.71, 95% CI: -2.31 to -1.11, $Z = 5.60$, $p < 0.00001$, $I^2 = 91\%$).
- After the subjects received training for acupressure application and applied acupressure themselves, their sleep quality improved compared to the control group (MD: -0.86, 95% CI: -1.39 to -0.32, $p < 0.001$).

Conclusions

- We have utilized meta-analysis to try to reveal statistical significance by pooling small studies with high quality. This meta-analysis provided a potentially effective intervention on the quality of sleep in elderly people.

Dincer B, İnangil D, et al. Explore (NY). 2022 Nov-Dec;18(6):635-645



Nausea

- ✓ PC6
- ✓ ST36



The effects of acupressure on postoperative nausea and vomiting among patients undergoing laparoscopic surgery: A meta-analysis of randomized controlled trials

- Eleven trials were included in the meta-analysis, comprising 941 patients
- Acupressure significantly lowered the incidence of nausea and vomiting, within the early phase (RR = 0.62, 95% CI [0.44 to 0.88]; $p = 0.008$), (RR = 0.5, 95% CI [0.30 to 0.84]; $p = 0.008$), and the extended phase (RR = 0.65, 95% CI [0.52 to 0.83]; $p = 0.0003$), (RR = 0.44, 95% CI [0.32 to 0.61]; $p < 0.00001$), respectively.
- Moreover, acupressure significantly reduced the need for rescue antiemetic drugs in both phases ($p < 0.05$).
- **Conclusion:** Acupressure is an effective procedure for reducing nausea, vomiting, and the need for antiemetic drugs after laparoscopic surgery.

Salamah HM, Elsayed E, et al. Explore (NY). 2022 Oct 26:S1550-8307(22)00199-9



Effect of Acupressure on Fatigue in Hemodialysis Patients: A Single-Blinded Randomized Controlled Trial

- One hundred and six patients who had been receiving HD for at least 3 months were enrolled in this study and randomly assigned to two groups
- The experimental group received acupressure at K1, ST36, and SP6 acupoints. In contrast, the control group received sham acupressure at 1 cun from these three acupoints. Subjects received acupressure thrice per week for 4 weeks, and pressure on each acupoint was applied for 3 min bilaterally
- **Results:** Acupressure induced a **significant** medium to large effect on **improvement in fatigue** ($b = -1.71$, confidence interval [95% CI]: -1.90 to -1.51, $\Delta R^2 = 0.744$), **sleep quality** ($b = -5.81$, 95% CI: -6.80 to -4.81, $\Delta R^2 = 0.525$), and **anxiety** (Estimate = -3.213, 95% CI: -4.238 to -2.188, pseudo $R^2 = 0.292$)/**depression** (Estimate = -3.378, 95% CI: -4.432 to -2.325, pseudo $R^2 = 0.268$) **in experimental group patients** compared to controls. No adverse events of acupressure were reported during the study process.
- **Conclusions:** Acupressure significantly and independently improved fatigue, depression/anxiety, and sleep quality in ESRD (end-stage renal disease) patients receiving HD(hemodialysis)

Suandika M, Chen SY, et al. J Integr Complement Med. 2022 Nov 22. doi: 10.1089/jicm.2022.0644.
Online ahead of print



Contra-Indications for Acupressure

- Life-threatening diseases and serious medical problems
- Medical emergency situation, such as a stroke or heart attack
- Sole treatment for cancer, contagious skin diseases, or sexually transmitted diseases.
- Varicose veins



Process of Acupressure

- Environment
- List of Equipment
- Techniques: three different levels of forces
- Process



Environment

- Acupressure can be done any place, but a quiet environment is most ideal.
- Massage room is preferred



List of equipment

- Massage table
- Chair
- Fabric sheets
- Pillows
- Others



Process

- Collecting clinic information, figure out what condition it is
- ‘Pick up’ acupressure points
- Apply pressure on the points
 1. Lie fully clothed on a soft massage table
 2. Use fingers, knuckles, palms, elbows or feet, or special devices to press on acupoints gradually and slowly
 3. Breathe slowly, smoothly, and deeply
 4. Do not press longer than 3 minutes
 5. Avoid pressing on cuts, wounds, tumors
 6. A session could last about 30 to 60 minutes
 7. Usually need several sessions for the best results



Three different levels of physical force on the acupoints

➤ Light

➤ Medium

➤ Deep



Cautions to consider

- ✓ Apply finger pressure in a slow, rhythmic manner to enable the layers of tissue and the internal organs to respond. Never press any area in an abrupt, forceful, or jarring way.
- ✓ Use the abdominal points cautiously, especially if **the patient is ill**. Avoid the abdominal area entirely if they have a life-threatening disease, especially intestinal cancer, tuberculosis, serious cardiac conditions. Avoid the abdominal area during pregnancy as well.
- ✓ Pregnancy - special care should be taken during pregnancy (Avoid the points that can induce contractions for pregnant women, such as LI4, SP6 etc.)
- ✓ Lymph areas, such as the groin, the area of the throat just below the ears, and the outer breast near the armpits, are very sensitive. These areas should be touched only lightly and not pressed.
- ✓ Burns & infections: Do not work directly on a serious burn, an ulcerous condition, or an infection: for these conditions, medical care alone is indicated.



Cautions to consider (continued)

- ✓ Scars and injuries: Do not work directly on a recently formed scar. During the first month after an injury or operation, do not apply pressure directly on the affected site. However, gentle continuous holding a few inches away from the periphery of the injury will stimulate the area and help it heal.
- ✓ (For the patient:) After an acupressure session, your body heat is lowered; thus your resistance to cold is also lower. Because the tensions have been released, your body's vital energies are concentrating inward to maximize healing. Your body will be more vulnerable, so be sure to wear extra clothing and keep warm when you finish an acupressure routine.







*Thank
♡♡ you*





Commonly Used Points for Acupressure

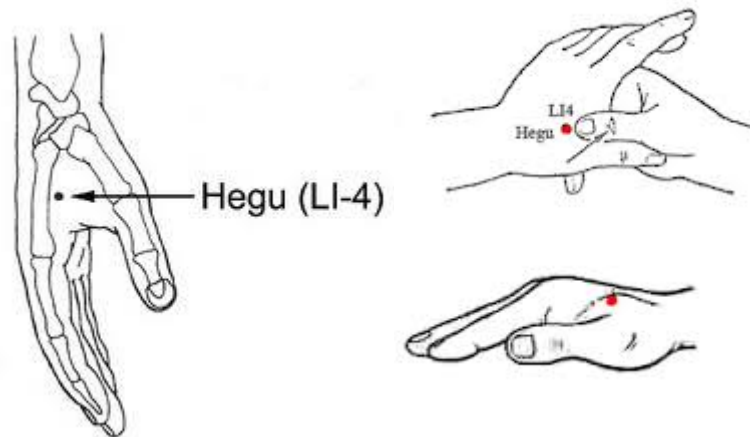
(For Your Study, For Your Reference)



LI4 He Gu 合谷

- Location:

- On the dorsum of the hand
- Between the 1st and 2nd metacarpal bones
- Approximately in the middle of the 2nd metacarpal bone on the radial side





- Indications:

- 1. Disorders of the facial region, mouth and throat

- Headache, toothache, sore throat, swelling and pain of the eyes,
 - Nasal congestion, rhinorrhea, epistaxis
 - Deafness
 - Facial paralysis, parotitis

- 2. Febrile disease

- 3. Dysentery, constipation

- 4. Amenorrhea

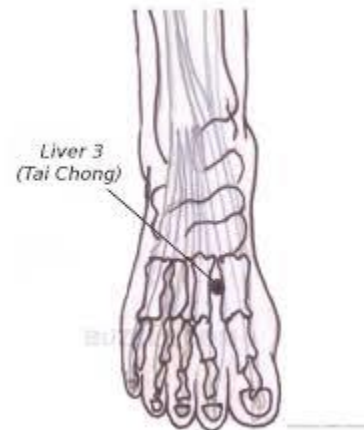
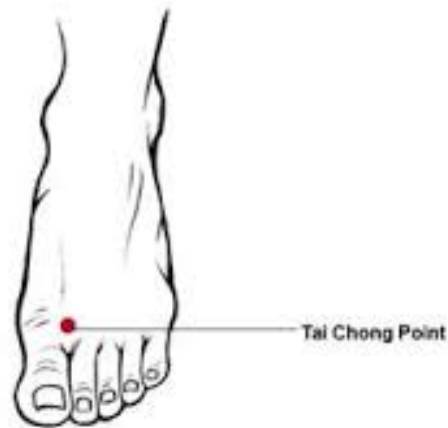
- Contraindication: Pregnant women

- Remarks: LI4 + LV3—four gates



LR3 Tai Chong 太冲

- Location:
 - On the dorsum of the foot
 - In the depression distal to the junction of the 1st and 2nd metatarsal bones





- Indications:

1. **Headache, eye problems** (swelling, pain, distension)
2. **Insomnia, depression, anxiety**
3. Uterine bleeding, irregular menstruation
4. Urine retention, enuresis
5. Hypertension, deviation of mouth

- Contraindications: None



HT7 Shen Men 神门

- Location

- At the ulnar end of the transverse crease of the wrist
- In the depression on the radial side of the tendon of m.flexor carpi ulnaris





- Indications:

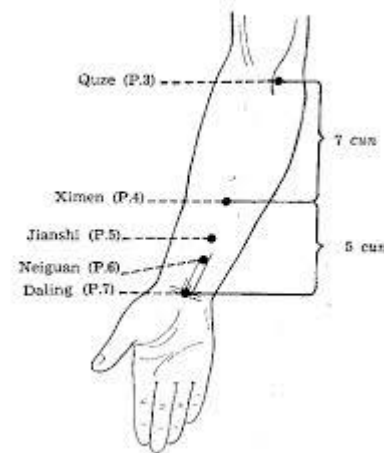
1. **Insomnia, irritability, hysteria**, mania, epilepsy
2. Cardiac pain, palpitation
3. Feverish sensation in the palm

- Contraindications: none



PC6 Nei Guan 内关

- Location:
 - 2 cun above the transverse crease of the wrist
 - Between the tendons of m. palmaris longus and m. flexor radialis





- Indications:

1. **Nausea, vomiting, stomachache**
2. Cardiac pain, stuffy chest, pain in the hypochondriac region, **palpitation**
3. **Mental disorders**, irritability, insomnia, epilepsy
4. Pain, paralysis of the upper limbs
5. Bad breath

- Contraindications: none

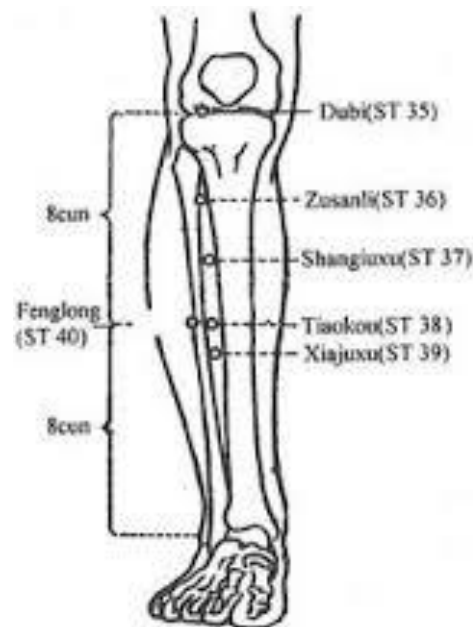
- Remarks:

- **Main point for nausea, vomiting, hiccups**
- PC6 + LI11, DU20, ST40 for hypertension



ST36, Zu San Li 足三里

- Location:
 - 3 cun below ST35
 - One finger-breadth from the anterior crest of the tibia
 - In m. tibialis anterior





- Indications:

1. GI problems: Stomachache, abdominal pain and distension, indigestion, nausea, vomiting, diarrhea, constipation, dysentery, borborygmus
2. Meridian problems: knee pain, leg pain and paralysis
3. General Qi tonification: health care point
4. Hypertension, insomnia, dizziness
5. Mastitis

- Contraindications: none

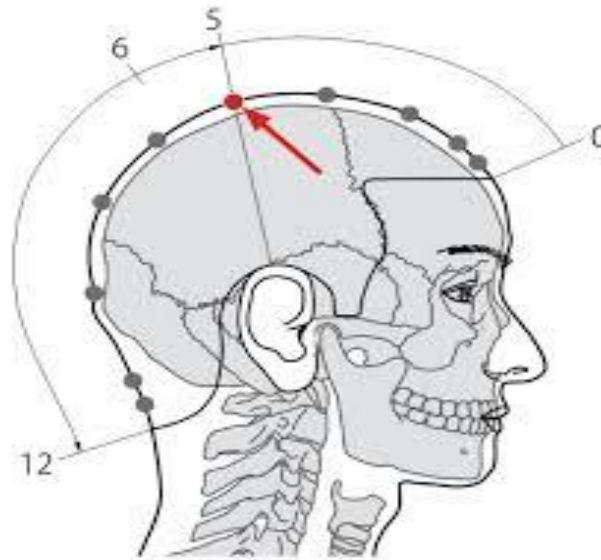
- Remarks:

- Main point for GI problems
- Health care point



DU20 Bai Hui 百合

- Location:
 - On the midline of the head
 - 7 cun directly above the posterior hairline
 - Approximately on the midpoint of the line connecting the apexes of the two ears.





- Indications:

1. Headache, poor memory, vertigo, tinnitus
2. Prolapse of the rectum and uterus
3. Post-apoplectic aphasia, nasal congestion, mental disorders, epilepsy, insomnia
4. Hypertension, vertex headache

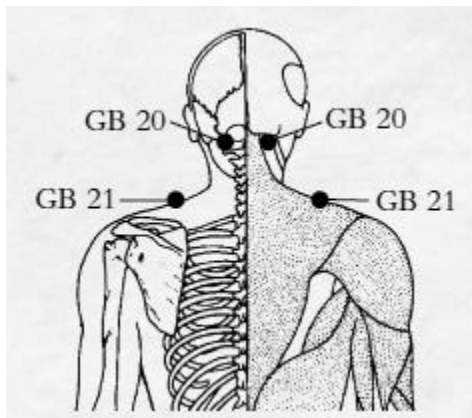
- Contraindications: none



GB20 Feng Chi 风池

- Location

- In the depression between the upper portion of m.sternocleido mastoideas and m. trapezius
- On the same level with DU16





- Indications:

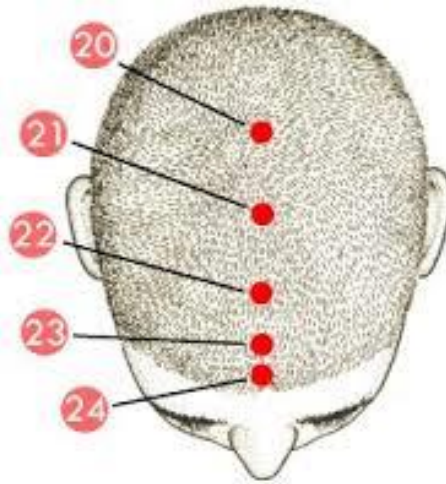
1. headache, stiff neck, neck pain, exterior syndrome
2. Eye problems(eye pain, blurred vision), tinnitus, glaucoma, deafness
3. Vertigo
4. Nasal congestion
5. Febrile diseases
6. Aphasia

- Contraindications: none



DU24, Shen Ting 神庭

- Location:
- 0.5 cun directly above the midpoint of the anterior hairline





- Indications:

1. **Headache**, pain in the frontal vertex
2. **Anxiety, insomnia, restlessness**, epilepsy, palpitation

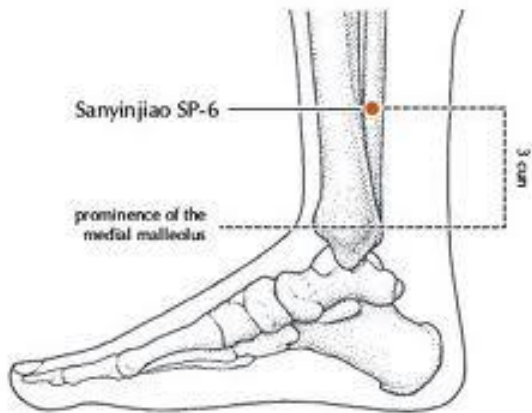
- Contraindications: none



SP6 San Yin Jiao 三阴交

- Location

- 3 cun directly above the tip of the medial malleolus
- On the posterior border of the medial aspect of the tibia





■ Indications:

1. GI problems: abdominal pain and distention, diarrhea, borborygmus
2. Female problems: irregular menstruation, dysmenorrhea, uterine bleeding, prolapse of the uterus, infertility
3. Muscular atrophy, motor impairment, paralysis, pain of the lower limbs
4. External genitalia pain, nocturnal emission, impotence, enuresis, dysuria, edema
5. **Insomnia**
6. Hypertension
7. Delayed labour



- 
- Contraindicaitons: pregnant women

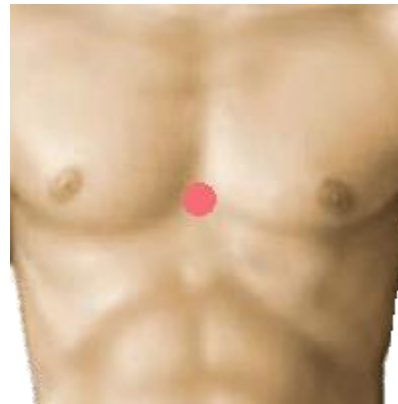
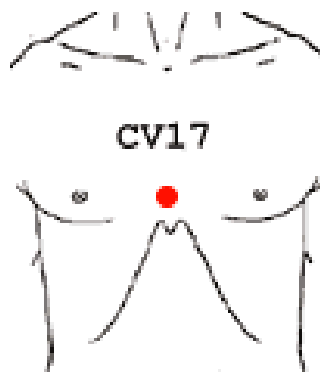
- Remarks:

1. Main point for GI diseases, often used with ST36
2. Main point for disease of urinary system
3. Main point for diseases of genital system
4. Important point for anesthesia on the lower part of the abdomen



CV (REN)17 Dan Zhong 膻中

- Location:
- On the anterior midline
- At the level with 4th intercostal space
- Midway between the nipples





Indications:

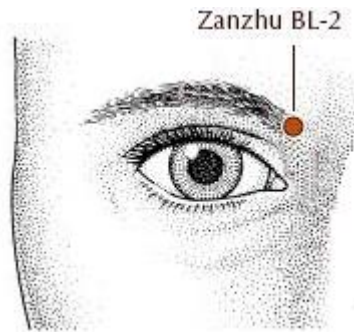
1. Chest pain, fullness of the chest, cough, asthma
2. Shortness of breath
3. Palpitation
4. Deficiency of lactation
5. Difficulty or inability to swallow

- Contraindications: none



UB2 Zan Zhu 攒竹

- Location
- On the medial extremity of the eyebrow
- On the supraorbital notch





- Indications:

1. **Eye problems: Redness, swelling and pain of the eye, lacrimation, twitching of eyelids**
2. Blurred vision
3. Glaucoma
4. **Headache, pain in the supraorbital region**, deviation of the mouths and eyes
5. Hiccup

Contraindications: none



Tai Yang 太阳

- Location:
- In the depression about 1 cun posterior to the midpoint between the lateral end of the eyebrow and the outer canthus





- Indications:

1. **Headache, migraine**, deviation of the eyes and mouth
2. Eye diseases

- Contraindications: none



Yin Tang 印堂

- Location: midway between the medial ends of the two eyebrows





- Indications:

1. Headache

2. Insomnia

3. Epistaxis, rhinorrhea-----nasal problems

- Contraindications: none



