

TREATMENT OF NEUROLOGICAL DISORDERS

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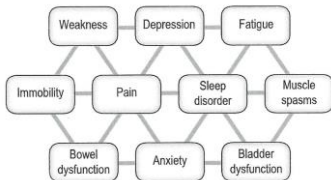
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RESEARCH

- Western Medical Tx of neurological disorders is fairly straight-forward.
- Combining TCM with western clinical reasoning is not always easy.
 1. Western Acupuncture research is not looking at these neurological conditions
 2. Chinese research is often not rigorous enough
 3. While TCM tests are useful, it's difficult to describe them as 'evidence based'

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COMPLEX SYMPTOM RELATIONSHIPS IN NEUROLOGICAL CONDITIONS



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NEUROLOGICAL DISORDERS
AND
THE ZANG FU ORGANS



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HEART
"THE EMPEROR"

- Governs all other organs
- Regulates flow of Qi & Blood.
- Strength is seen on the tongue.
- Deficiency = bright, white complexion
- Regulates Body Fluid through sweat.
- Houses the Mind / Shen, thus controlling emotions.
- Influences the 5 psychological functions
- Influences sleep patterns.
- Associated with joy
- Emotional liability effects, often seen in MS, mimic HT Shen imbalances
- HT function compares with cerebral cortex, influencing thought & memory.
- Disharmony between HT & KD creates confusing symptoms.

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HT/KD DISHARMONY IS
INFLUENCED BY DU MERIDIAN

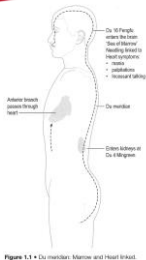


Figure 1.1 • Du meridian, Marrow and Heart Brain

- HT/LV disharmonies are considered in terms of Yin & Yang or Fire & Water.
- The Governing Vessel (DU meridian) anterior pathway passes through the HT & penetrates the brain posteriorly at GV 16.
- Since the DU meridian is also closely associated with the Kidneys at GV4 (Mingmen), both GV4 & GV16 can be used to influence Heart function

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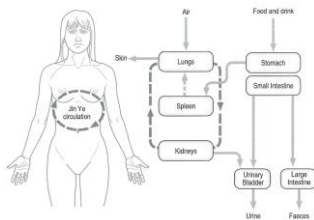
LUNGS "THE FOREIGN MINISTER"

- Most external of all the organs, having direct contact with the outer air.
- Governs relationship between inside/outside
- Controls air intake & converts to Clear (Da) Qi
- LU can be peripherally affected when CNS control is damaged in any neurological condition.
- Controls hair & pores.
- Produces & controls Wei Qi
- Links with KD to control water circulation
- Controls smell & loudness of voice
- Houses Corporeal Soul (Hun).
- Sensitive to grief & sadness
 - LU7 is a powerful point to release constrained emotions.

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JIN YE CYCLE

- Clean air (Qi) from Lung condenses into fluid & passes through Sanjiao to the Kidneys
- Kidney heats it, vaporizes it & sends back to Lung
- This forms an energy cycle (Jin Ye) which controls water circulation in the body.



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LIVER "THE GENERAL"

- Concerned with balance & energy.
- Controls circulation of Blood, moving it thru vessels & storing it.
- Moves Qi & body fluids smoothly in all directions.
- Helps in digestion, giving energy to transport GU Qi
- Stores & releases blood for menstruation.
- Controls normal muscle tone.
- Influences muscle tendons, seen in health of the nails
- Linked with the eye, thus LV points (LV2) treat eye problems.
- Tears are associated with LV.
- Requires calm internal environment, with an even disposition.
- LV Qi Stagnation in neurological disease (eg: MS) needs to be addressed to relieve insomnia

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SPLEEN
"THE MINISTER OF AGRICULTURE"

- Stores & manufactures blood
 - Control & regulates production & distribution of nourishment (T & T)
 - Overeating will damage the spleen
 - Influences muscle bulk. SP points are used for muscle wasting
 - Combo SP/ST pts used in Wei synd.
 - Controls Blood, keeping it in vessels
 - Holds organs in place in the body
- Opens to mouth/lips.
 - SP deficiency = pale, thin lips
 - Saliva is assoc body fluid
 - Houses thought, study, concentration
 - SP Qj deficiency S/S:
 - Disinclined to talk, low indistinct voice, pale complexion & general lassitude.
 - Loss of sense of smell or taste.
 - Chronic diarrhea
 - Edema in lower part of body

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KIDNEY
"THE MINISTER OF THE INTERIOR"

- Stores resources for growth, crisis, transition
 - KD Yin is fundamental to birth, growth, reproduction.
 - KD Yang is the force for all physiological processes
 - Although KDs belongs to Water, they are source of Fire in the body (Fire/Vitality Gate)
 - Flow in lower Jiao (all body fluids) is controlled by KD Yin & Yang.
- Affects LU function & promotes respiration.
 - If deficient, fluid will accumulate in Lungs
 - Opens to ear. KD points help with deafness & tinnitus
 - Fear is associated with KD (fight or flight)
 - Failure of KD energy to support the body healing process is seen in many neurological conditions.
 - KD points (esp KD3) stimulate both KD Yin & KD Yang energy

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PERICARDIUM
"THE HEART PROTECTOR"

- Closely related to Heart
- Shields Heart from External Pathogens
- Protects the Shen of the HT
- Used to treat emotional problems
- Has many internal connections & wide-ranging physiological effects.

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GALL BLADDER

- Assists the ST & SPL in digesting.
- Bile is discharged into SI under control of LV.
- If disrupted, it will cause loss of appetite, abdominal pain & distension, diarrhea.
- It is sometimes considered as the pancreas in TCM.
- Responsible for decision making, while LV covers smooth planning.
- Deficiency leads to timidity, indecision, procrastination.
- Gives courage, drive, vitality.
- Since LV/GB are so closely linked, it's difficult to separate their disharmonies.
- LV energy controls storage & release of bile, & poor digestion may result in jaundice, hepatitis or cholecystitis.

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STOMACH MACERATION CHAMBER

- Vital role in digestion
- Passes food to SI for further breakdown & absorption
- True origin of acquired (Gu) Qi.
- Weak muscles & fatigue indicate a lack of stomach Qi.
- Sends transformed food to SI.
 - If impaired, it causes fullness, distension, regurgitation, belching, hiccups, nausea, vomiting.
- Requires large quantities of fluid & prefers damp. Heat damages it.
- Can lead to mania, confusion, anxiety
- Health can be seen on tongue.
 - Thin, white = normal
 - Absence = impaired function
 - Yellow = heat
- ST & SP are always treated together to help w Qi production.
- Seen in wasting diseases w diminished muscle bulk.

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URINARY BLADDER

- Secretes & stores urine, using energy from KD.
- Circulates fluid around the body, receiving fluids separated by the SI and transforming them into urine.
- Energy in the Lower Jiao, esp. KD, ensures the maintenance of clear water passages.
- Susceptible to Pathogen Heat
- Incontinence is attributed to UB, but is caused by KD Qi deficiency.
- Controls the sphincters.
- Linked to negative emotions
 - jealousy, holding grudge, etc.

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SAN JIAO

- Explains the functions of distinct areas of trunk.
- Upper Jiao (*Chamber of Mist*) contains LU & HT.
- Middle Jiao (*Chamber of Maceration*) contains the SP & ST
 - Acts a junction between absorption & elimination
- Lower Jiao (*Drainage Ditch*) contains all the other organs.
 - Controls storage & excretion of water.
- The summary of physiology of Zang Fu.
- Its acupoints coordinate function (esp fluid circulation).
- Closely linked to KD Yin & KD Yang.

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NEUROLOGICAL SYNDROMES

Bi, Wei and Feng Syndromes



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BI SYNDROMES

- A group of symptoms vitally connected with the general health & circulation of the body fluids
- May be caused by external pathogens, (wind, cold, damp & heat)
- Each pathogenic factor produces characteristic symptoms.
- AKA *Painful Obstruction Syndrome*

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WIND INVASION BI -WANDERING BI

- Characterized by symptom mobility.
- Pain may be acute & moves randomly from one area of the body to another.
- Muscles & joints are sore, but pain quality changes quickly
- May have numbness, or a sharp pain.
- *Neurological: any type of tremor or uncoordinated muscle movement is associated with Wind.*
- Wind Bi suggested points
 - BL 12
 - GV 14
 - GB 21
 - BL 18
 - BL 17
- Addit Pts: SP10, GB20
- *All points clear wind except BL 17 & BL 18, which nourish blood in order to expel the Pathogen*

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COLD INVASION BI -PAINFUL BI

- Characterized by severe pain & limited ROM.
- Usually unilateral, and constant.
- Pain is deep and 'gnawing'.
- There is loss of joint movement, mainly d/t blood stagnation.
- *Neurological: seen where muscle atrophy has led to wasting and contractures.*
- Cold Bi suggested points
 - ST 36
 - CV 6
 - BL 10
 - GV 14
 - GV 3
 - BL 23
- Addit Pts: BL23, GV4
- Use Moxibustion as a source of heat.

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DAMP INVASION BI -FIXED BI

- Characterized by soreness & swelling in the muscles & joints with heaviness and numbness in the limbs.
- Worse in damp weather. Slow onset.
- Pain & swelling is very localized.
- Tends to sink to the lowest level in body, as liquid would.
- *Neurological: limb movement becomes difficult or impossible.*
- Damp Bi suggested points
 - SP 9
 - SP 6 (SP5 can also be used)
 - GB 34
 - ST 36
 - BL 20
- All points clear Damp and aid in the movement of Qi.

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HEAT INVASION BI -HOT BI

- Complex condition: can be an invasion of Heat, or from a prior invasion of other Pathogens.
- Characterized by red, swollen & painful joints & ROM loss
- Heat makes this worse
- Rarely found in neurological conditions
- Heat BI suggested points
 - LI 11
 - LI 4
 - GV 14
- Use meridian end points (Spring, Well & Stream)

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BONY BI

- End result of slowing & congealing of the body fluids, and subsequent Phlegm in the joint spaces.
- Joint deformity results as an accumulation of solidified Phlegm.
- There is often severe pain and a marked loss of ROM.
- Patient complains of heaviness & numbness in the affected limb.
- Bony BI suggested points
 - ST 40
 - BL 23
 - BL 11
 - GB 39
- These points are used to clear Phlegm and strengthen Kidney and bone.

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BI SYNDROMES - COMMON POINTS

- Shoulder Bi
 - Main Points: Jianqian, SJ14, LI15, SJ13, LI14, SI10
- Elbow Bi
 - Main Points: LU5, HT3, PC3, LI10, LI11, SI8, SJ10
- Wrist Bi
 - Main Points: SI4-6, LI5, SJ5, PC7-8, LU9, HT7
- Hand Bi
 - Main Points: SI3, LI4, PC8, HT8, Baxie
- Hip Bi
 - Main Points: GB30, GB29, GB39
- Knee Bi
 - Main Points: ST35, Xiyan, Heding, GB34, SP9
- Ankle Bi
 - Main Points: ST41, SP5, GB40, BL60, KD3
- Foot Bi
 - Main Points: SP4, BL65, Bafeng

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BI SYNDROMES ASSOCIATED WITH THE ZANG FU ORGANS

- Bi syndrome is a blockage of Qi and Blood capable of attacking any of the body systems.
- Seen as progression from involvement of a tissue to involvement of one or several of the major Zang Fu organs.
- They obey the laws of TCM Zang Fu theory.

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TENDON/LIVER BI

- Linked to pain and weakness in muscles & joints.
 - These joints tend to flexion contracture (e.g. Dupuytren's contracture), resisting passive extension.
- Previous physical trauma may contribute to this condition, (e.g. WAD)
- Local points will be most successful to warm & free the channels, and relax the tendons
- Distal points, particularly Shu Stream points, are also helpful.
- The Liver will need support from BL 18 or GB 34

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VASCULAR/HEART BI

- Identified by numbness and pins & needles with pain & soreness in the affected area (a neurological symptom).
- Pain is stabbing & fixed, often worse at night; typical of a blood stagnation dis.
- Linked to general circulation disturbances (skin changes, light rashes & a feeling of fullness in the body) giving rise to general unease & malaise.
- The following points may be used to relieve blood stasis:
 - LI 4, LI 10
 - TE 6
 - CV 12
 - SP 10
 - SP 6
 - ST 36, ST 40
- These points could also be added to the local points used for the painful joint.

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MUSCLE/SPLEEN BI

- Characterized by stiffness & coldness in the particular muscle group.
- Muscle bulk is affected more than its function, which may result in some muscle atrophy and loss of strength.
- Generalized weakness & easy fatigue with only small effort, with excessive sweating
- Selection of Jing River points will be important as they give rise to an overflow of Qi into the surrounding muscle tissue, (*the sinew channels*)
- As in the other categories, local & distal points to the affected joints are used

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SKIN/LUNG BI

- Characterized by a cold sensation and often numbness of the skin.
- Often seen in conditions such as MS
- Since the skin is governed by the Lungs, may mean that there is shortness of breath, manifested in rapid superficial panting.
- Points to support the Lungs and strengthen the Wei Qi could be useful
- Yintang (Ex HN3) is used to raise the spirits.

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BONE/KIDNEY BI

- Characterized by soreness & pain in the joints, usually accompanied by stiffness & lack of mobility.
- Patients occasionally complain of heaviness in the affected limb
- Points are used to clear Phlegm and strengthen Kidney and bone
 - ST 40
 - BL 23
 - BL 11
 - GB 39

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WEI SYNDROMES

- Neurological syndromes associated with atrophy
- Characterized by weakness of 4 limbs, eventually leading to paralysis
- Often seen after a long debilitating illness.
- TCM theory:
 - Thought to be an invasion of Pathogen Heat in the Lungs.
 - Qi deficiency of the Spleen & Stomach (exacerbated by irregular food intake) produces similar symptoms
- Treatment:
 - Tonify Yin and Jin Ye or fluid balance
 - Treat the Yang Ming meridians: LI in upper limbs, ST in lower limbs

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FENG SYNDROMES

- Involuntary tremors, quivering or unintentional movement due to stirring of Internal Wind.
- Assoc with neurological disorders
- Signs are clearly shown in the tongue.
 - Wind produces stiffness, deviation, movement or quivering (or a combo).
 - Fire - tongue red in color
 - Blood stasis - tongue is reddish purple
 - Phlegm - swollen tongue & sticky coating
- Points for Feng syndromes
 - LI4: Upper quadrant
 - LI11: Upper quadrant
 - LI20: Face
 - GB20: Neck & shoulder
 - GB21: Neck & shoulder
 - GB31: Lower limb
 - GB41: Lower limb
 - BL12: General
 - BL62: Link to CNS/extra meridians
 - GV20: Link to CNS/extra meridians

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IN SUMMARY

- Bi, Wei & Feng syndromes are all associated with neurological illness.
- Recommended points are frequently repeated.
- Patients exhibit a wide range of changes & deficits
- Common Neurological Symptoms
 - Decreased mobility
 - Fatigue
 - Respiratory problems
 - Muscle spasm
 - Contractures
 - Autonomic changes
 - Cognitive/mood changes
 - Communication issue
 - Bladder symptoms
 - Visual symptoms

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COMMON NEUROLOGICAL SYNDROMES

Let's Ease On In!



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HEADACHE & MIGRAINE

- Attributed to blockage of Qi in Yang channels of head
- Caused by internal disturbances of organ & channels, or by external influences
- Pain determines whether it is an excess or deficiency.
- Pain location is important in determining treatment

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MIGRAINE HEADACHE

- Main Points
 - Tai Yang**
 - LI4*
 - LV3*
 - GB34**
- Additional Points
 - GB20 – occipital HA
 - GB8 – bleed this
 - TW5 – clear heat
 - HT7 & LU7 – for emotional component
- Ah Shi Points
- Ear Points
 - Shenmen
 - Point 0
 - Sympathetic
 - Temples
 - Thalamus
 - Liver
 - Can add: Oscillation, Sensorial, Cerebral

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HEADACHE & MIGRAINE

- Pain along GB channel
 - Shao-Yang Headaches that affect GB & TW channel
 - Local Pts: DU20, GB14, GB20
 - Distal Pts: TW5, LI4, GB41
- Pain in temple area
 - Yang-Ming Headaches that affect ST channel
 - Local Pts: DU20, ST8, GB4
 - Distal Pts: LI4, LI11, ST36, ST44
- Pain between the eyebrows
 - Tai-Yang Headaches that affect BL channel
 - Local Pts: DU20, BL2, BL10
 - Distal Pts: SI3, LI4, BL60, BL67
- Pain in vertex of head
 - Affects LV channel
 - Local Pts: DU20, Sishencong,
 - Distal Pts: LI4, LV3, LV2, GB34

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TRIGEMINAL NEURALGIA

- Results from blockage of Qi from wind, cold or heat; combined with internal disturbances in liver & stomach
- May be excess state (heat s/s w acute burning pain) or deficiency state (dull, nagging pain)
- If pain moves, suspect wind disturbance

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TRIGEMINAL NEURALGIA

- Large # of points in face (10-12) are needled.
- Distal points, esp LI4, are stimulated by hand.
- Severe cases are treated daily w needles left for 30-60 min.
- *If severe acute pain, treat the contralateral side.*
- When treating painful side, start with a few needles and increase gradually.
- Stimulate slowly.

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TRIGEMINAL NEURALGIA

- Ophthalmic branch pain CN5 (V1)
 - Local Pts: DU20, GB14, Taiyang, BL2
 - Distal Pts: LI4, TW5, ST44, LV3, ST36
- Maxillary branch pain CN5 (V2)
 - Local Pts: DU20, ST2, ST3, SI18, DU26, ST7, LI20
 - Distal Pts: LI4, TW5, ST44, LV3, ST36
- Mandibular branch pain CN5 (V3)
 - Local Pts: DU20, ST4, ST5, ST6, ST7, Ren24, Jiachengjiang
 - Distal Pts: LI4, TW5, ST44, LV3, ST36

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TRIGEMINAL NEURALGIA

- Main Points
 - Upper: Yu Yao, GB14, BL2, Tai Yang
 - Middle: ST2 (bleed), LI20 (bleed), TW17
 - Lower: ST7, CV24, ST4, ST6
- Addit. Pts:
 - LI4, LI11, LV3, GB20
- Ear Pts:
 - Cheek, Trigeminal, Upper Jaw, Lower Jaw, Occiput
 - Shenmen, Point 0, Thalamus, Sensory, Liver, Stomach

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FACIAL PARESIS

- E-Stim with low frequencies (3-10 Hz) intensifies the needling
- Local Pts are treated on side of paresis, Distal Pts are needled bilaterally
 - Local Pts: DU20, Sishencong, GB14, Taiyang, ST2, ST3, ST4, ST5, ST7, SI18, Jiachengjiang.
 - Distal Pts: LI4, LI11, GB34, ST36, ST44

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HEMIPARESIS

- Early treatment is important
- Use 2-3 cycles of treatment, 10-12 sessions each.
- If no improvement, scalp acupuncture should be tried.
- PT should be utilized with treatment.
- 30% reduction of spasm in spastic paresis.

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HEMIPARESIS

- Hemiparesis of arms
 - DU20, Sishencong, LI15, LI11, LI10, LI4, Baxie, TW14, TW5, TW3, GB34
- Hemiparesis of legs
 - DU20, Sishencong, ST31, ST32, ST36, ST37, ST40, ST41, ST44, Bafeng, GB30, GB34, GB37 GB40
- Moxibustion Points
 - Ren6, Ren4, BL23, BL25, LI10, LI11, TW5, ST36, SP6, ST41

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EPILEPSY

- Treatment during attacks
 - DU26
- Treatment between attacks
 - Local Pts: DU20, Sishencong, Yintang, DU26
 - Distal Pts: HT7, PC6, KD1, BL62, GB34

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TINNITUS

Excess Condition

- Acupoints are used to reduce Liver Fire as well as to draw the Qi or energy down and away from the ear, such as LV2, GB20 and GB43.
- If there are signs of phlegm, acupoints to reduce phlegm and dampness will be included, such as ST40 and SP9.

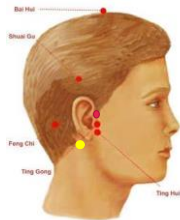
Deficiency Condition

- Acupoints are chosen will be focused on strengthening the kidneys (i.e. KD3, KD24, CV4).
- If there is insomnia, KD7 and SP6 may be added as well.

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TINNITUS

- Local & Distal Points
- GB2, SI19, TW21 & TW17 are points that are located at the ear and are used for many types of ear problems.
- GB20 & GV20 are also utilized
- TW5 and TW6 are examples of distal points that are used to benefit the ear.



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LIVER/GALL BLADDER RISING - EXCESS CONDITION

- S/S:
 - Sudden onset, can be loud, related to emotional stress
 - Signs of heat, thirst, red face, constipation, bitter taste
 - Possibly headache, dizziness, irritability
- TCM Diagnosis:
 - Tongue: red w/yellow coat, red sides
 - Pulse: wiry, fast

- Treatment Protocol:
 - Drain the LV Fire
 - Ease the ears
 - Calm the mind
 - Settle the ethereal soul
- Treatment Points:
 - LV2 Drain the LV Fire
 - GB20 LV Yang, ease ear, calm mind
 - GB8 LV Yang, ease the ear
 - TW3, TW5 LV Yang
 - GB43 Water Pt, reduce energy, ease ear

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PHLEGM FIRE RISING
EXCESS CONDITION

- S/S:
 - Signs of phlegm, chest oppression, fuzzy head, sputum in chest &/or postnasal drip, thirst
 - Sound that resembles crickets, possible hearing loss
- TCM Diagnosis:
 - Tongue: red. Swollen, greasy, yellow coat
 - Pulse: rapid, slippery
- Treatment Protocol:
 - Resolve phlegm
 - Drain Fire
 - Subdue LV yang
 - Regulate Qi ascension & descension
- Treatment Points:
 - ST40/CV12 Resolve phlegm
 - CV9/SP9 Resolve dampness
 - BL20* SP Mu, tonify ST/SP
 - TW3,TW5 clear ear area
 - LI4 Fuzzy or heavy head present
 - TW21/SI19/GB2 Benefit ear

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KIDNEY JING DEFICIENCY
- DEFICIENCY CONDITION

- S/S:
 - Common in elderly, combo of hearing loss w/ringing, gradual onset, low pitched sound (can be high pitched)
 - Dizziness, poor memory, head feels light/empty, possibly blurred vision
 - Sore back/knees, diminished sexual desire/performance
- TCM Diagnosis:
 - Tongue: pale (KD yang); red (KD yin)
 - Pulse: deep, weak (KD yang); floating, empty (KD yin)
- Treatment Protocol:
 - Tonify KD
- Treatment Points:
 - KD3 tonify KD & Jing
 - CV4 tonify KD & Jing
 - BL23 tonify KD & Jing, KD Shu
 - GB2 benefit ear
 - GV4 moxa to tonify yang
 - If insomnia, add: SP6, HT6, KD7
 - If LV Yang rising, add: LV3

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UPPER BURNER DEFICIENCY
DEFICIENCY CONDITION

- S/S:
 - LU &/or HT deficiencies, fatigue, SOB w/exertion, pale face, spontaneous sweating
 - Intermittent ringing, mild, gradual onset
- TCM Diagnosis:
 - Tongue: pale with teeth marks
 - Pulse: empty, especially LU position
- Treatment Protocol:
 - Tonify LU Qi
 - Promote rising of clear Qi to head
- Treatment Points:
 - CV17 tonify upper burner
 - LU9 tonify LU
 - BL13 tonify LU, LU Shu
 - CV6 tonify Qi
 - GV20 raise Qi to head
 - TW16 sudden deafness, tinnitus
 - SI19 benefit ear

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HEART BLOOD DEFICIENCY *DEFICIENCY CONDITION*

- S/S:
 - Intermittent ringing, gradual onset, low pitch/volume
 - Dull/pale face (Blood def.)
 - HT signs possible, palpitations, insomnia, poor memory, anxiety
- TCM Diagnosis:
 - Tongue: pale, likely thin w teeth marks
 - Pulse: weak or choppy, esp 1st position
- Treatment Protocol:
 - Tonify HT
 - Nourish Blood
- Treatment Points:
 - HT5 tonify HT
 - BL15 tonify HT, HT Shu
 - CV17 affects HT Qi & Blood
 - CV14 tonify HT, HT Mu
 - PC6 tonify HT blood
 - SP6 tonify HT blood
 - SI19 benefit ear

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NEUROLOGICAL SYNDROMES

The Tough Stuff!!!



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NEUROLOGICAL DISORDERS

- Patients present with wide variety of symptoms.
- Acupuncture will not restore function lost d/t disease or injury process.
- Acupuncture will modify activity in the systems that are still functioning.
- Presenting symptoms may be broadly categorized as:
 1. Sensory symptoms;
 2. Motor symptoms;
 3. Visceral symptoms
 4. Generalized symptoms, such as mood disturbance.

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BASIC MECHANISMS OF ACTION OF ACUPUNCTURE

- **Local Effects**
 - Causes Deqi by firing Aδ, C & group II/III fibers
 - Causes local effects of ↑ blood flow in skin & muscles
- **Segmental Effects**
 - Impulses are transmitted into the dorsal horn of the spinal cord via somatic nerves.
 - Needling modulates activity in the spinal cord (inhibiting nociceptive input through the dorsal horn)
- **ExtraSegmental & Central Regulatory Effects**
 - Needling provides more global effects on the body such as generalized pain relief, improving sleep quality or mood.
 - Major points (LI4, LV3, SP6 & ST36) are likely to support these responses in many patients
- **Myofascial Trigger Point Effects**
 - Needling MTrPts reduces pain and contributes to improved muscle function.

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NEUROLOGICAL SENSORY DISORDERS - PAIN & PARESTHESIA

- **Nociceptive pain**
 - Pain resulting from activation of nociceptors in the tissues, (d/t injury, inflammation, ischemia, degeneration)
 - Described as dull or aching and may affect the MSK system, or the viscera.
- **Neuropathic pain**
 - Pain which arises as a direct consequence of a lesion or disease affecting the somatosensory system.
 - Common in neurological conditions.
 - Pain may be spontaneous or evoked by various non-painful stimuli.
 - Described as burning, shooting, pricking or throbbing.
 - Neuropathic pain may affect the PNS or CNS pathways

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NEUROLOGICAL SENSORY DISORDERS - NEUROPATHIC PAIN

- **Peripheral Neuropathy**
 - ACU improves nerve conduction in Tibial & Sural nerves.
- Stroke, Traumatic Brain Injury (TBI), Spinal Cord injury, Multiple Sclerosis
- Parkinson's disease
- Paresthesia & Dysesthesia
 - For CTS, fMRI showed changes in cortical representation & reduced activation of the limbic system. Patients also report of improvement in pain.

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NEUROLOGICAL DISORDERS - MOTOR DYSFUNCTION

- Common in neurological conditions.
- These range from complete paralysis through to excessive muscle activity such as spasticity or dyskinesia.
- Let's consider each!

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MOTOR DYSFUNCTION

- Weakness & Paralysis
 - Damage within CNS or PNS pathways controlling movement may cause weakness or complete paralysis.
 - Weakness is very common in stroke, TBI, MS & Peripheral Neuropathies
- Spasticity
 - Seen in individuals with lesions of the upper motor neuron pathways, (EX: stroke, MS, SCI. It's a motor disorder with increased tonic stretch reflex.
 - Results in weakness, loss of dexterity & adaptive changes in soft tissues
 - Common in CP, MS, SCI. Less common in stroke.

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MOTOR DYSFUNCTION

- Parkinsonian Dyskinesia
 - Dyskinesias = abnormal involuntary movements which may appear as jerking, twisting or writhing of parts of the body.
 - It is very common in Parkinson's disease
 - It may result from the disease process itself, or as a side effect of L-Dopa medication used to treat symptoms.
 - Chorea, ballism, dystonia & myoclonus are most common dyskinesias in Parkinson's disease

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VISCERAL DYSFUNCTION

- **Bladder Dysfunction**
 - Usually presents as incontinence
 - Neural control involves ANS & somatic pathways linking the SC, brainstem & higher brain centers.
 - Control of bladder in SC is localized in thoracic & sacral regions.
 - ACU is an option for urinary dysfunction, esp. OAB. PANS & SNS outflow to the bladder & sphincter may be influenced by afferent stimulation, esp to Sacral nerves.
- **Bowel Dysfunction**
 - Colon & rectum are controlled by the enteric NS (SNS & PANS neurons) connected with local nerve networks.
 - Maintenance of fecal continence requires the coordinated action of these different neural pathways
 - ACU has a modulatory effect on the motility of the distal colon (EA @ ST36, 10 Hz). May be mediated through PANS outflow from the SC & brainstem nuclei

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GENERALIZED SYMPTOMS - INSOMNIA

- Insomnia = Difficulty in falling asleep, staying asleep, waking up too early or sleep that is of poor quality
- Thought to be a hyperarousal disorder hyperactivity of the hypothalamic pituitary axis (HPA)
- No current medical treatment shows long term effects.
- ACU results in improvements in sleep, increases in nighttime melatonin secretion & improvements in self rated fatigue and sleepiness.

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GENERALIZED SYMPTOMS - FATIGUE

- Fatigue = Feelings of tiredness, exhaustion & lack of physical or mental energy that is abnormal, excessive, chronic, persistent or problematic.
- It has peripheral and central components.
 - Peripheral fatigue relates to the PNS & MSK system, resulting in difficulty performing motor activities.
 - Central fatigue relates to dysfunction of the CNS and may cause difficulties in initiating and executing motor or cognitive tasks
- ACU studies have been ambivalent.

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FIBROMYALGIA

- Main Points
 - ST36, CV12, BL20 Spleen Qi
 - LI4, LV3 Liver Depression
 - SP9, LI11 Damp Heat (can add TW5)
 - SP6, BL17 Blood Vacuity (add BL18 & BL20)
 - KI6, LV8, CV4 Kidney Yin
 - BL17, SP10 Blood Stasis (BL18)
- Addit. Pts:
 - HT7 to help with sleep, BL15 for insomnia
 - ST40 to clear phlegm (arth. Nodules)
- Ear Pts:
 - Shenmen, Sympathetic, Local, Liver, Spleen, Thalamus, Endocrine

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GENERALIZED SYMPTOMS - MOOD DISTURBANCE

- Depression = a loss of interest in, and enjoyment of, ordinary things and experiences, as well as low mood, which is persistent and problematic.
- Generalized Anxiety Disorder (GAD): characterized by excessive anxiety and worry about various events or activities.
- Mood is regulated by neurons connecting anterior cingulate cortex, prefrontal cortex & amygdala.
 - Amygdala becomes overactive in major depression & anxiety
- ACU shows promising findings.

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GENERAL ANXIETY DISORDER

- Main Points
 - Yin Tang
 - GV20
 - PC6
 - HT7
 - CV17
 - SP6
- Scalp Pts (Zhu):
 - VPM
 - Head/Face (needle forward)
 - Middle Jiao (needle backward)

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ACQUIRED BRAIN INJURY: STROKE, CEREBRAL PALSY, TBI

- Goal of treatment: independence in self care w/in a year after stroke.
 - Same data suggests between 16 & 31% may be institutionalized by end of year.
- Recovery of rolling, sitting balance, transfers & walking among patients sent for rehab follows a predictable pattern over the first 8 weeks.
 - Majority of muscle recovery occurs within the first 3 months, then slows down.
- *TCM diagnosis is complicated, but type of acupuncture applied after stroke to combat the paralysis is not complex, and easy to perform.*

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ACQUIRED BRAIN INJURIES & ACUPUNCTURE



Early Intervention!!!

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ACQUIRED BRAIN INJURY: STROKE

- **Stroke:** a syndrome of rapidly developing clinical signs of focal (or global) disturbance of cerebral function, with symptoms lasting 24 hours or longer, or leading to death, with no apparent cause other than that of vascular origin.
- Damage to brain tissue is caused by thrombosis, embolus or hemorrhage. Leads to hemiplegia or some form of hemiparesis.
- Paralysis is usually on the side opposite to the brain lesion, *but may be bilateral.*

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EFFECTS OF ACUPUNCTURE: STROKE

- Changes in cerebral circulation
 - ACU maintains peripheral circulation to the cerebral hemispheres when the central supply is compromised
- Effects on muscle tissue
 - Creates a general increase in blood flow which benefits recovering muscle tissue, esp. when d/t long term disuse.
 - EA & exercises improves limb function in hemiplegia
- Effects of mood
 - Improves mood & energy d/t increase in serotonin and endorphin levels.
- Effects on energy levels
 - Studies on CA patients show significant decrease in fatigue following ACU.

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STROKE AND TCM ACUPUNCTURE

- TCM View: Qi deficiency leading to an internal stirring of Liver Wind. Related to Ying & Yang disorders involving HT & LV, SP & KD Zang Fu.
- Stimulating Yang meridians (to move stagnation of Qi & Blood) seems to be most successful. EA or SA may be added.
- Stimulating Spleen & Stomach points helps regulate digestion. Adding Kidney & Liver points helps prevent recurrence.

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WINDSTROKE: ACUPUNCTURE TREATMENT FORMULAS

- Upper-Limb Points
 - GB20
 - LI15
 - LI11
 - LI10
 - LI4
 - TW5
- Lower-Limb Points
 - GB31
 - ST31
 - ST36
 - SP10
 - GB39
 - GB43
 - LV3

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WINDSTROKE: ACUPUNCTURE TREATMENT RECOMMENDATIONS

- Some authorities recommend needling unaffected limb; others recommend bilateral.
- To stimulate NS, treat the affected side.
- Use EA (2 Hz) to produce a muscle twitch.
- Bilat Tx makes sense: stimulating both dorsal horns to maximize effect.

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STROKE ACU FORMULAS - USEFUL POINTS

- Paralysis-Upper Limb Extensors (Yang)
 - GB21, LI15, LI11, SJ5, Baxie, GB10
- Paralysis-Upper Limb Flexors (Yin)
 - LU10, PC8, HT8, Baxie
- Paralysis-Lower Limb (Yang)
 - GB30, ST31, GB34, BL36, Bafeng
- Paralysis-Lower Limb (Yin)
 - SP10, SP6, LV2, KD3, Bafeng
- Shoulder pain
 - Eyes of shoulder, SI11, LI11, SJ9, Baxie
- Facial Paralysis/Deviation of Mouth
 - Qianzheng, ST2, ST4, CV24, Chengjiang
- Deviation of Tongue & Aphasia
 - AA-Shenmen & Speech, CV24, GV15, HT5
- General Trunk Weakness & Asymmetry
 - GB20, Bailao, BL23, ST36
- Internal Problems (LOA, Constipation, Difficult Urination)
 - CV12, CV4, ST25, ST36
- Eliminate pathogenic Wind
 - GB20, SJ17, GB12

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CEREBRAL PALSY

- Caused by abnormalities in parts of the brain that control muscle movements.
- Difficulty with voluntary movement, lack of muscle coordination (ataxia or athetosis), spasticity & exaggerated reflexes causing stiff or tight muscles.
- Unusual walking patterns
- Speech problems & communication disorders may be noted
- Acupuncture emphasizes use of Yang meridians
- Body points: LI 4, LI11, GB34, GB39, SP6, SJ5 5 and PC6 to open the channels
- Scalp acupuncture for the upper and lower limb motor regions can also be used.

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TRAUMATIC BRAIN INJURY

- Results from sudden trauma to brain. Leads to bleeding, bruising and damage to nerve cells & fibers.
- S/S: motor difficulties, visual difficulties, sensory impairment, aphasia. Difficulties with attention, perception, memory, problem solving and judgement.
- Mood swings, irritability & aggression, disinhibited sexual behavior, poor initiation & apathy may be present.
- ACU: uses Yang meridians in upper & lower limbs. Trauma may cause local Qi or Blood Stagnation, and shock on the HT & KD, causing deficiency.
- TCM patterns for blood stasis, hyperactivity of LV Yang, Phlegm Obstruction, Qi & Blood Deficiency, KD Essence Deficiency.

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PARKINSON'S DISEASE

- One of a group of conditions which are thought to be primarily due to the gradual loss of dopamine producing brain cells, situated in the substantia nigra.
- Considered a chronic disorder of the motor system, primarily causing mobility problems.
- Postural problems associated with later stages of the disease.

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PARKINSON'S DISEASE - SYMPTOMS

- Tremor at rest; involuntary trembling in hands, arms, legs or jaw; rigidity or stiffness of the limbs & trunk; a general slowness of movement (bradykinesia); impaired balance & coordination, with postural instability.
- Depression & other emotional changes; difficulty in swallowing, chewing & speaking; urinary problems or constipation; skin problems; and sleep disruptions. There is noticeably decreased facial expression, apathy, fatigue & pain.
- 'Dropped head' syndrome is characterized by severe neck flexion but minor thoracic or lumbar curvature
- Cognitive changes can be suspected early in the disease, & mistaken for dementia
- Difficulty in walking or talking, and completing small motor tasks

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PARKINSON'S FORMULAS - USEFUL POINTS

- Postural Changes
 - GV22, BL6, GB10
- Stooping Posture
 - GV20, Moxa to GV4, KD3
- Bradykinesia
 - ST36, SP6, KD3, GB10
- Uncoordinated Movement
 - GV20, GV14. Can add Sishencong
- Depression
 - 4 Gates, HT7, Ear Shenmen, Sishencong, Yintang
- Cold/Painful Upper Limbs
 - SJ6
- Cold/Painful Lower Limbs
 - SP10, ST31
- Slow General Circulation
 - Moxa to BL17. Can add CV6
- Mask-Like Face
 - HT5, HT7
- Dull, Monotonous Speech
 - HT5

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PARKINSON'S ACU FORMULAS - USEFUL POINTS

- Involuntary Tremor
 - LV3, SJ3, GV16
- Palpitations
 - HT7
- Irregular Bowels
 - CV4, ST25, LI11, SJ5, SJ6
- Drooling
 - HT6, HT7
- Dry Mouth
 - CV24
- Incontinence/Urinary Retention
 - ST36, SP6, BL23, KD3
- Fatigue
 - Any stimulating points. Possible use of extra meridians
- Scalp Acupuncture is useful for sensory & motor dysfunction, tremors
 - EA between 100-200 Hz

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TCM APPROACH TO PARKINSON'S DISEASE

- Qi & Blood Deficiency
 - Tonify Qi, nourish Blood, energize Meridians, Dispel Wind
 - ST36, SP6, LV8, CV4, SP10
- Phlegm Heat agitating Wind
 - Calm Liver, Disperse Wind
 - LV2, LV3, GB20, BL18, LI4, GV20, KD3, KD7, BL23
- Liver & Kidney Deficiency
 - Nourish Yin, Dispel Wind, energize the Meridians
 - CV4, BL23, KD3, SP6, BL18, LV8, LV3

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MULTIPLE SCLEROSIS

- Demyelinating disease that occurs in the brain & spinal cord
- Patients with few attacks and longer intervals between them, with principally sensory damage, loss of vision & numbness, will tend to remain less disabled.
- Patients with tremors, poor coordination & difficulty walking, resolving only partially, within the first 5 years of Dx, will not do so well.
- Triggers that increase symptoms include fever, infection, high temperature & humidity, and emotional trauma.

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MULTIPLE SCLEROSIS - SYMPTOMS

- Fatigue
- Weakness & Cardiorespiratory Fitness
- Spasticity & Spasm
- Contractures Affecting Joints
- Ataxia & Tremor
- Sensory Losses, including Visual Problems
- Musculoskeletal Pain
- Neuropathic Pain
- Cognitive Loss
- Depression, Anxiety, Emotionalism
- Swallowing or Speech Difficulties
- Pressure Sores

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MULTIPLE SCLEROSIS - USEFUL POINTS

- Postural changes/Dropped-head Synd
 - GV22, BL6, GB17, GB10
- Cold, empty sense in back/Poor Posture
 - GV20, Moxa to GV4, KD3, BL13,20,23,24
- Trigeminal Neuralgia
 - SI18, SI3
- Uncoordinated Movement
 - GV20
- Fatigue/Paresis in Limbs
 - Upper: LI15, LI11, LI10, SJ5, LI4
 - Lower: ST31,32,36,40 SP10, GB34, GB39, LV3
- Muscle Spasm & Contractures
 - LV3, SI3, Distal pain pts.
 - Same as for spasm. Can add KD1
- Depression
 - 4 Gates, HT7, KD3, Ear Shenmen, Sishencong, Yintang
- Night Sweats
 - HT6, KD7
- Insomnia
 - Ear Shenmen, Insomnia Pts, Amnian

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MULTIPLE SCLEROSIS - USEFUL POINTS

- Cold/Painful Limbs
 - Upper: SJ6
 - Lower: SP10, ST31
- Slow General Circulation
 - Moxa to BL17
- Emotional Liability
 - PC6, HT7, ST36, SJ5
- Involuntary Tremor
 - LV3, SI3
- Palpitation
 - HT7, PC6, CV17
- Irregular Bowels
 - CV4, ST25, LI11, SJ5, SJ6
- Incontinence/Urinary Retention
 - ST36, SP6, SP9, BL23, BL28, KD3, BL40, CV3
- Fatigue
 - Any stimulating pts. Extra meridian pts
- Disconnection Feeling-Upper/Lower Body
 - GB41, SJ5

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MULTIPLE SCLEROSIS TCM 4 STAGES

- Stage 1: **Remission**
 - No active symptoms
 - Tx is preventative
 - Support for ST & SP
- S/S
 - Visual disturbances
 - Muscle weakness
- Treatment Points:
 - Local treatment

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MULTIPLE SCLEROSIS - TCM 4 STAGES

- Stage 2A: **External Channel problem**
 - Sensory & motor changes start
 - S/S: weakness, heaviness, tingling & numbness in extremities, cold limbs, & aching in the back or shoulders
 - May have vertigo, blurred or double vision
- Stage 2B: **Damp Heat Invades Channels**
 - Numbness in the lower limbs with weakness, joint slackness & gravitational edema.
 - S/S: whole body feels heavy and the legs may feel cold, although the feet may feel hot. The joints are often painful
 - May have chest tightness

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MULTIPLE SCLEROSIS
PHLEGM DAMP OBSTRUCTION – STAGE 2A

- S/S
 - Heaviness, weakness &/or numbness of limbs
 - Visual disturbances (blurred/double vision)
- Tongue:
 - Greasy, white coat
- Pulse:
 - Slippery/thin/empty
- Treatment Points:
 - SP6 tonify ST/SP
 - SP9 clear damp
 - ST36 tonify ST/SP
 - ST40 resolve phlegm
 - CV12 ST Mu
 - BL20 SP Shu
 - GV20 benefit brain
 - ST8 clear head/benefit eyes
 - Bafeng Pts

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MULTIPLE SCLEROSIS
DAMP HEAT OBSTRUCTION – STAGE 2B

- S/S
 - Heaviness, weakness &/or numbness of limbs
 - Limbs &/or feet feel hot
 - Painful joints
 - Prefer cooler weather
 - Frequent/urgent urination
 - Chest oppression
- Tongue:
 - Greasy, yellow
- Pulse:
 - Slippery/rapid
- Treatment Points:
 - GV14 clear heat
 - LI4 release exterior
 - LI11 clear heat
 - SP3/SP6 tonify ST/SP
 - SP9 clear damp
 - ST36 tonify ST/SP
 - BL20 SP Shu
 - GV20 benefit brain
 - Local & Jiaji points

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MULTIPLE SCLEROSIS
- TCM 4 STAGES

- Stage 3A: **Spleen Qi Xu**
 - Ss/S: tiredness, listlessness, flaccidity of muscles and a tendency to fatigue. The patient may have poor appetite, a pale sallow complexion & suffer from bowel problems, in particular loose stools.
- Stage 3B: **Liver Blood Xu**
 - S/S: blurred vision, always worse when tired, and a pale dull face. There may be muscle stiffness with cramps, spasticity and mild tremor

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**MULTIPLE SCLEROSIS
SPLEEN QI DEFICIENCY – STAGE 3A**

- S/S
 - Fatigue, muscle flaccidity
 - Pale complexion, poor appetite
 - Loose stools
- Tongue:
 - Swollen, teeth-marks
- Pulse:
 - Empty, thin, weak
- Treatment Points:
 - SP3/SP6 tonify ST/SP
 - SP9 clear damp
 - LV13 SP Mu
 - CV12 ST Mu
 - BL20 SP Shu
 - BL21 ST Shu
 - GV20 benefit brain
 - Local & Jiaji points

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**MULTIPLE SCLEROSIS
LIVER BLOOD DEFICIENCY – STAGE 3B**

- S/S
 - Fatigue, muscle stiffness/cramping
 - Dull, pale complexion
 - Tremors, visual disturbances
- Tongue:
 - Pale, dry
- Pulse:
 - Thin, choppy
- Treatment Points:
 - SP3/SP6 tonify ST/SP
 - ST36 tonify ST/SP
 - LV8 clear damp heat
 - CV4 tonify yin/blood
 - BL17 hui meeting of Blood
 - BL18 LV Shu
 - BL20 SP Shu
 - BL21 ST Shu
 - GV20 benefit brain
 - Local & Jiaji points

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**MULTIPLE SCLEROSIS
KIDNEY DEFICIENCY – STAGE 4**

- S/S
 - Severe weakness, chronic fatigue,
 - Pale complexion,
 - Muscle stiffness/atrophy/tremors, low back pain
 - Urinary disturbances/incontinence/retention
- Tongue:
 - Red w little coat, pale, wet
- Pulse:
 - Deep, thin, weak
- Treatment Points:
 - CV4 tonify yin/blood
 - KD3 tonify KD Yin
 - KD6 tonify KD
 - GV4 tonify KD Yang
 - GB39 hui meeting of Blood
 - BL32 urinary issues
 - BL23 KD Shu

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SPINAL CORD INJURY

- Central Cord Injury
- Brown-Sequard Syndrome
- Anterior Cord Injury
- Conus Medullaris & Cauda Equina Syndrome
- SCI also includes transverse myelitis & spinal stroke

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SPINAL CORD INJURY - TREATMENT

- Acupuncture has been considered for pain control, which makes sense.
 - Yang meridians are mainly used for NMSK symptoms.
- It is also used for bladder control.
- Massage & cupping techniques has been found to be helpful
- Scalp acupuncture has an effect on changing neuroplasticity.
- **TCM:** Considered a Qi and/or Blood deficiency and Liver & Kidney Yin deficiency. SCI is a direct injury to DU meridian.
 - SI3 & BL62 would be important pts, as would the Jiaji & DU points.

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SPINAL CORD INJURY - USEFUL POINTS

- Neurogenic Bladder
 - Ren3, Ren4, BL32
- Depression
 - 4 Gates, HT7, Ear Shenmen, Sishencong, Yintang
- Cold & Painful Limbs
 - Upper: SJ6
 - Lower: SP10, ST31
- Slow General Circulation
 - Moxa BL17
- Restless-legs syndrome
 - ST36, GB34, SP10
- Complex Regional Pain Syndrome
 - Local Pts-opposite side, after ear acu
- 'Constricting' Sensations in Trunk
 - SI3 & BL62 (Du Mai), or GB41 & SJ5 (Dai Mai) activation
- Fatigue
 - Any stimulating pts, Extra meridians

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PERIPHERAL NERVOUS SYSTEM DISORDERS

- Guillain-Barre Syndrome (GBS)
- Diabetic Neuropathy
- Bell's Palsy
- Restless-Legs Syndrome (RLS)
- Postherpetic Neuralgia
- Phantom Limb Pain

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GUILLAIN- BARRE SYNDROME

- Sensory Nerve damage
 - Generally, begins in the patient's feet, hands or face, spreads to the legs or arms, and increases in intensity as it moves towards the center of the body.
 - Usually bilateral & produces 'glove & stocking' pattern.
 - Pain in large muscles (thighs, back, shoulders) with stiffness & cramping
 - Hyperalgesia of skin. Symptoms remain peripheral & patient can't distinguish hot/cold.
- Motor Nerve damage
 - Reduced movement/coordination.
 - Muscles weakened or atrophy.
 - Paralysis of feet/hands/face may occur
 - CN damage can affect the face (palsy).
 - Speech muscles & vocal cords affected, causing unintelligible speech.
 - If swallowing and breathing are involved, disease is life threatening.

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DIABETIC NEUROPATHY

- Acupuncture analgesia has been compared with standard medication & proved as successful in alleviating the pain from diabetic neuropathy
- Acupuncture improves the local tissue condition and increases local circulation
- Studies have used EA at ST36 & LI4.
 - Other points include SP9, SP10, ST34, LI4 & LV3)

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NEUROPATHY

- Upper Extremity
 - PC6
 - LU9
 - LI11
 - ST12
 - CV17
 - Addit Pts: LI4, LI15, TW5, LU7
 - Extra Pts: Baxie
- Lower Extremities
 - LV4
 - SP6
 - GB34
 - KI6
 - KI11
 - Addit Pts: SP9, ST36, KD3, KD1, LV4
 - Extra Pts: Bafeng

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BELL'S PALSY

- Defined as weakness in one side of the face, causing the facial muscles on that side to droop. There may also be an accompanying feeling of numbness in the area.
- Can occur after a stroke or TIA, but true Bell's palsy is thought to be an inflammation of Facial Nv.
- Treatment: involves points on ST, SI & GB meridians.
- E-Stim with low frequencies (3-10 Hz) intensifies the needling

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BELL'S PALSY / FACIAL PARALYSIS - USEFUL POINTS

- Main Points (*8-10 Tx, & evaluate*)
 - ST2, ST4, ST6, ST7, ST8, SI18, GB14, YuYao, LI20, BL2
- Addit. Points:
 - YuYao (closed eye or exposed eyeball)
 - CV24 for mouth deviation
 - TW17 for ret auricular
 - GB12 for mastoid pain
 - GV26, GB20, LI4 (if nasal deviation) on healthy side
 - BL2 for inability to raise eyebrow,
 - CV23 for tongue numbness
- Ear Pts:
 - Shenmen, Point 0, Thalamus, Forehead, Face, Cheek
 - Can add: Trigeminal Nucleus, Occipital, Minor Occip., Cheek, Liver
- Scalp Pts:
 - Head/Face (fwd)

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RESTLESS LEG SYNDROME

- Common sensorimotor disorder of unknown etiology, ranging from an annoyance to actively affecting sleep and quality of life.
- Sensations described as burning, creeping, tugging, or like insects crawling inside the legs. They produce paresthesias or dysesthesias.
- Acupuncture has been shown to be helpful.
 - Useful points: ST36, GB34, SP10, BL57 and BL56,
 - Add: scalp acupuncture using motor treatment zones.

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RESTLESS LEG SYNDROME - USEFUL POINTS

- Main Points
 - GB12, 20, 34
 - BL10, 40, 57
 - KI3
 - SP6
 - ST36
- Ear Pts:
 - Shenmen, Point 0, Thalamus, Sympathetic chain, Sympathetic, Sympathetic Paraganglion, Autonomic master point

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POSTHERPETIC NEURALGIA

- Characterized by persistent pain that follows course of Intercostal Nv at the level of viral infection.
- Pain is shooting or burning, and can lead to allodynia.
- TCM considers the HZ virus to be an invasion of Damp Heat. It often occurs together with some form of Liver stagnation.
- Treatment:
 - Expel Heat in the Blood: LI4, LI11, & SP10. ST36 & PC6 can be added.
 - Circle the dragon is useful for pain
 - Jiaji points above & below the affected nerve roots.

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POSTHERPETIC NEURALGIA - USEFUL POINTS

- Main Points (*daily treatment*)
 - LI11, GV12, GB34, SP6
 - Dorsal root ganglion @ lesion level, LV14 (w e-stim).
 - GB43 & ST44 – to pull down heat
- Addit. Pts:
 - ST8, Taiyang, GB14 – for eye
 - ST2, GB1, ST7 – for cheek
 - ST4, ST5, ST6 – for jaw
 - LI4 – above umbilicus
 - ST36 – below umbilicus
- Scalp Pts
 - Thoracic or Lumbar, Head/Face
- Ear Pts
 - Shenmen, Point 0, Master skin & ectoderm
 - Can add: Endocrine, Subcortex, Affected Area, Spinal Cord

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PHANTOM LIMB PAIN

- Pain felt by the patient in a non-existent limb after amputation.
- Also occurs in conditions in which the brain is dissociated from the body (e.g. peripheral nerve injury, or after SCI when area loses sensation and usually movement)
- Points are selected on the existing limb to correspond to the sites of pain in the missing limb.
 - Mostly Yang meridians, emphasizing analgesic points LI4, SI3, ST44, & BL62.
 - Strong sensory stimulus to Baxie or Bafeng points is helpful
 - Scalp acupuncture can be helpful

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TIME FOR A BREAK!!!



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