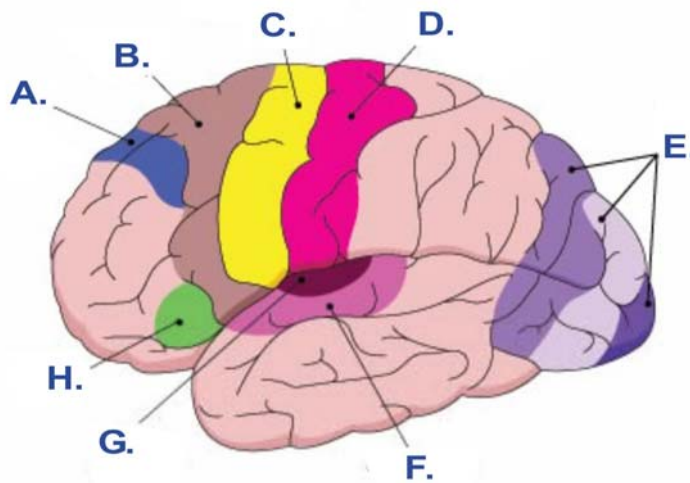


Introduction

What is scalp needling and what is it used for?

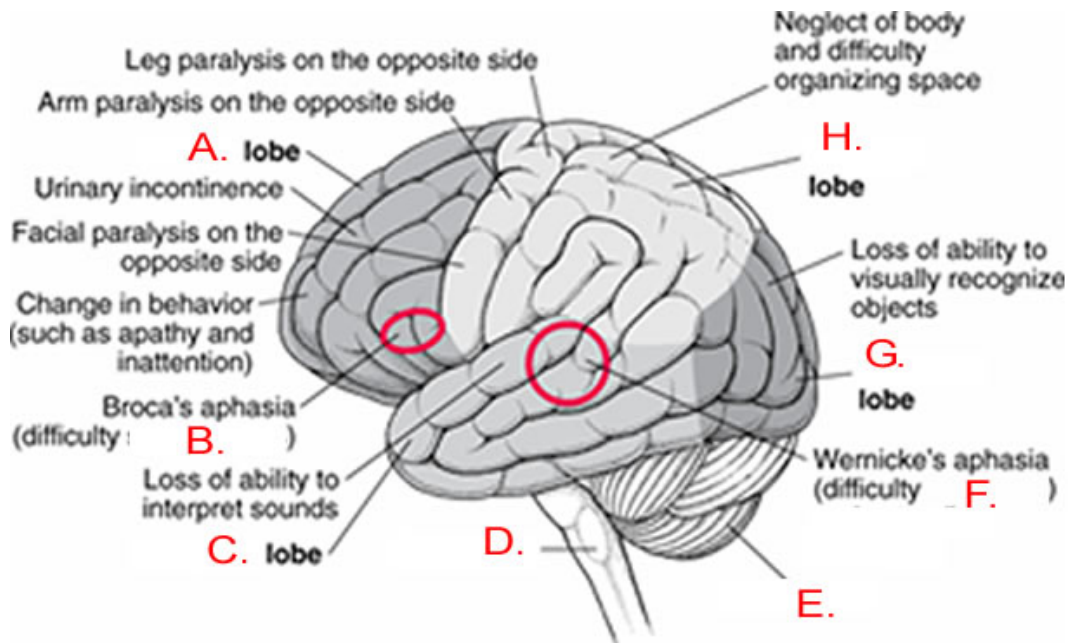
Scalp needling is a therapeutic needling method in which you needle specific areas and lines on the scalp. It is often used to treat cerebral diseases.

Identify the following areas of the brain.



A.	Frontal eye field area
B.	Premotor area
C.	Primary motor area
D.	Primary somesthetic area
E.	Visual I (most anterior) Visual II (middle) Visual III (most posterior)
F.	Wernicke's area
G.	Primary auditory area
H.	Broca's area

What are the following identifiables in the drawing below?



A.	Frontal lobe
B.	Saying words
C.	Temporal
D.	Brain stem
E.	Cerebellum
F.	Understanding language
G.	Occipital lobe
H.	Parietal lobe

What does the physiology of the primary motor cortex control?

Opposite side

Muscular contraction

Both sides

Extraocular muscles

Frontal muscles

Masticatory muscles

What are the anatomic structures of the motor areas called?

Precentral gyrus

Paracentral lobule

What does the sensory area (primary somatic sensory cortex) control?

Feeling the nerve pulses from correspondent areas of the opposite sides of the body.

What are the anatomic structures of the sensory area?

Postcentral gyrus, paracentral lobule (posterior aspect)

What are the 3 speech areas in the brain and what does each one do?

1. Wernicke's area
Sensory speech—understanding the words you hear
2. Broca's area
Motor speech – forming the words to speak
3. Angular gyrus
Anomic speech – ability to name objects. Translates visual interpretation into an auditory format.

What is aphasia?

Absent or defective speech or language comprehension

Which lobe in the brain is the visual one?

The occipital lobe.

Which surface is the primary visual cortex or the striate cortex?

The medial surface of the occipital lobe

What area of the brain is the primary visual input area?

Thalamus. This is the primary processor of visual info received from the retina

What do the other visual areas do in the brain?

Interpret visual stimulus.

What is the standard unit of measure for scalp acupuncture?

Centimeters, *not cun!*

How big is a centimeter (compared with a penny)?

About ½ the diameter of a penny. So penny is about 2 cm in width.

What are the standard lines used to measure for scalp acupuncture?

1. Anterior-Posterior Median line
Measure from the glabella (Yintang) to the external occipital protuberance
2. Eyebrow-Occipital line
Measure from the midpoint of the upper border of the eyebrow to the external occipital protuberance

What are the 4 anatomical landmarks on the head used for scalp acupuncture?

1. Ear apex
2. parietal tubercle
3. External occipital protuberance
4. Frontal hairline or frontal angle.

Dr. Jiao's/Fang's/Zhu's Scalp Acupuncture

Motor Line – Dr. Jiao/Fang/Zhu

How do you find the motor line for scalp acupuncture?

1. Find the midpoint of the anterior-posterior median line and measure ½ cm posteriorly
This is the upper point of the Motor area
2. Find the point at which the eyebrow-occipital line intersects with the hairline at the temple.
This is the lower point of the Motor area.
3. Draw a 'line' between the upper and lower points of the Motor area and this is the Motor line.

What would you be treating if you were needling the upper 1/5 of the motor line?

Paralysis on the lower limbs and trunk (opposite/contralateral side of the body)

The middle 2/5 of the motor line treats....?

Paralysis of the upper limbs on the opposite/contralateral side of the body from that which you are needling.

What are the indications for the lower 2/5 of the motor line?

Motor problems and paralysis of...

- Facial area – Bell's Palsy for example
- Speaking area 1
- Central facial paralysis (contralateral)
- Motor aphasia
- Salivation
- Dysphonia (impairment of voice/diff speaking)

Sensory Area/Line – Dr. Jiao/Fang/Zhu

Where is the sensory line/area located on the head?

Behind the motor line 1½ cm and parallel to it.

What are the indications for the upper 1/5 of the sensory line?

Sensory problems in lower limbs, trunk, and posterior head/neck.

- Contralateral lumbar and leg pain, numbness and paralysis
- Occipital headache
- Pain in the nape area
- Tinnitus

What are the indications for the middle 2/5 of the sensory line?

Sensory problems in the upper limbs

- Contralateral upper limb pain
- Numbness
- Paralysis

- Abnormal sensations

What are the indications for the lower 2/5 of the sensory line?

Sensory problems of the facial area

- Contralateral facial numbness
- Migraine headache
- TMJ
- Trigeminal neuralgia
- Toothache

Chorea-Trembling Control Area – Dr. Jiao/Fang/Zhu

Where is the Chorea-Tremble Control Area located on the scalp?

1.5 cm anterior and parallel to the motor area.

(Bonus question: What the heck is chorea?

Rapid, jerky dancelike movement of the body which are totally involuntary and irregular. Comes from the Greek word “chorus”. About 5% of the people who have cerebral palsy display this. Patients with Huntington disease show this as well.)

For what is the Chorea-Trembling Control area indicated in scalp acupuncture?

Chorea, Parkinson’s, trembling palsy.

If problems related to this area display on only one side, where do you needle?

Needle contralaterally – left side controls right and vice versa.

If problems are bilateral, where do you needle?

Needle bilaterally

Vascular Constriction and Dilation Area – Dr. Jiao/Fang/Zhu

Where is this line located on the scalp?

1.5 cm anterior and parallel to the chorea-trembling line; 3 cm anterior/parallel to the motor line.

For what is the area indicated?

- Essential hypertension (also called primary hypertension – high b.p. for which there is no underlying cause)
- Cortical edema

Vertigo-Auditory Area – Dr. Jiao/Fang/Zhu

How do you locate the vertigo-auditory area on the scalp?

1. Measure 1.5 cm above the apex of the ear.

2. Draw a horizontal line 4 cm long with the center of this line at the level of the apex of the ear.

What are the indications for the vertigo-auditory area?

- Tinnitus
- Hearing loss
- Dizziness
- Auditory vertigo

Speaking Area 3 – Dr. Jiao/Fang/Zhu

How do you locate Speech Area 3?

1. Measure 1.5 cm above the apex of the ear
 2. Draw a horizontal line posteriorly by 4 cm
- And yes, this overlaps the posterior half of the Vertigo-Auditory area.

For what is the Speech Area 3 indicated?

Sensory aphasia

(fluent but meaningless speech and/or the inability to understand spoken or written words)

What area of the brain would be affected in this case?

Wernicke's Area

Speech Area 2 – Dr. Jiao/Fang/Zhu

How do you locate Speech Area 2?

1. Locate the the parietal tubercle and go posterior/inferior by 2 cm.
2. Draw a 3cm long line from this point and parallel with the anterior-posterior midline

Also located above the angular gyrus

For what is this line indicated?

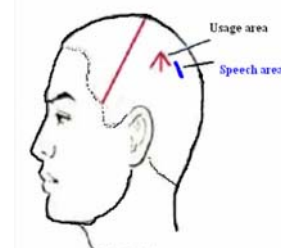
Nominal aphasia (inability to name objects and/or inability to recognize written/spoken names of objects)

Usage Area – Dr. Jiao/Fang/Zhu

How do you locate the Usage Area?

Damn good question. It's anterior and slightly superior to the Speech Area 2 line. The angled lines are 40 degrees from the vertical line. Each line is 3cm long.

For what is this area indicated?



Apraxia – normal muscle function (no paralysis), but cannot accomplish voluntary motor movement.

Foot Motor Sensory Area – Dr. Jiao/Fang/Zhu

How do you locate the foot motor sensory area?

1. Locate the center point of the anterior-posterior midline
2. Go lateral to this point by 1 cm
3. Draw a 3 cm line parallel to the anterior-posterior midline in a posterior direction from the center point of the anterior-posterior midline.

What are the indications for the foot motor sensory line?

- Contralateral lower limb pain, paralysis, and/or numbness
- Acute lumbar sprain
- Urinary problems:
 - Enuresis
 - Cerebro-cortical polyuria
 - Nocturia
- Prolapse of uterus

Optic Area – Dr. Jiao/Fang/Zhu

How do you locate the optic area lines?

1. Locate the external occipital protuberance and draw a horizontal line through it.
2. Draw 4 cm lines vertical to this horizontal line and 1 cm lateral to the anterior-posterior midline.

For what is the optic area indicated?

Cerebro-cortical visual disorders

Balance Area – Dr. Jiao/Fang/Zhu

How do you locate the balance area?

1. Locate the external occipital protuberance and draw a horizontal line through it.
2. Measure lateral to the protuberance by 3.5 cm and draw 4 cm lines on either side of it extending downward from the horizontal line located in step 1.

What would you use this line for?

Equilibrium disturbance caused by cerebellum disease. Could include lack of coordination, dystaxia, ataxia, inability to balance, dizziness, headache.

Stomach Area – Dr. Jiao/Fang/Zhu

Where is the stomach area in scalp acupuncture?

Directly above the pupils when patient is looking straight ahead (or the midpoint between the inner and outer canthus if they cannot look straight ahead), and extending 2 cm from the hairline in a posterior direction. These lines are located on both sides of the head and should be parallel with the anterior-posterior midline.

What would you use these lines for?

Stomach pain such as gastritis and stomach ulcer, and epigastric discomfort.

Thoracic Area – Dr. Jiao/Fang/Zhu

How do you find the thoracic area lines on the scalp?

1. Find the midpoint between the anterior-posterior midline and the stomach lines.
2. Draw a line extending 2 cm both upwards and downwards from the hairline at this location. These lines are parallel to the anterior-posterior midline.

Indications for the thoracic area:

1. Chest pain and stuffiness
2. Palpitations and coronary artery insufficiency
3. Asthma

Reproductive Area – Dr. Jiao/Fang/Zhu

How do you locate the reproductive lines of the scalp?

1. Locate ST 8
2. Draw a line 2 cm upward from this point and parallel with the anterior-posterior midline on both sides of the head.

For what is the reproductive line of the scalp indicated?

1. Dysfunctional uterine bleeding
2. Pelvic inflammation
3. Leukorrhagia
4. Prolapse of the uterus (combine with foot motor sensory line)

Principles for Scalp Acupuncture

General Info

Name 4 principles for selecting scalp acupuncture points

1. Select the area to be needled according to different diseases
2. Needle contralateral area for unilateral limb diseases and bilateral areas for bilateral limb diseases
3. Needle bilaterally for internal-zang, whole body diseases, and diseases in which you cannot distinguish a position (?).
4. Accompany scalp needling with other related stimulation areas.

In what positions do you place your patient before performing scalp acupuncture?

Sitting or lying are appropriate.

When you are inserting the needle into the scalp, what should the angle of the needle be?

30° to the scalp with a swift insertion.

Into what layer of the scalp do you needle?

Into the 4th layer, the aponeurosis.

How long should needles be for scalp acupuncture and what gauges are appropriate?

1 – 2 cun, Gauge numbers 28 – 32.

What types of needling manipulation are appropriate for scalp needling?

Twirling only, *no thrusting!* Keep the needle at the same depth and rotate at about 200 times per minute for 1-2 minutes. Retain the needles 5-10 minutes, repeating the stimulation and retention cycle 2-3 times.

Can you use e-stim with scalp acupuncture?

Yes. Frequency is set to 200-300 times per minute.

What is the proper method for removing scalp needles?

Withdraw slowly while twirling the needle. If there is no heavy sensation, you can pull it out swiftly. After removal, press with a clean, dry cottonball for a bit to stop any bleeding.

How frequently can you scalp needle a patient?

Once per day at the most. In china 1ce/day or 1ce every 2 days is common, while in America 2ce/week is common.

How long does a “course of treatment” last for scalp acupuncture?

10 treatments is considered to be a course.

List the 5 precautions for scalp acupuncture treatment.

1. To prevent fainting, place patient in a sitting or lying position and match stimulation intensity to the patient's tolerance.
2. Use strict CNT to prevent infection.

3. Withdraw a little and change the direction of your needle if you feel resistance or if the patient feels pain.
4. Do *not* needle if there is high fever, acute inflammation or heart failure!
5. For cerebral hemorrhage patients, wait until bleeding stops and patient is stable before needling.

For cerebral thrombosis patients, needle as soon as possible.

Cerebrovascular Nervous System Diseases

What factors affect the success of scalp acupuncture for a cerebral thrombosis?

Time (the shorter the case history, the better), location of the thrombosis, and severity of the paralysis of the limb(s).

Name 2 types of cerebral hemorrhage. What factors affect success of treatment?

1. hemorrhage of internal capsule (basal ganglia)
2. hemorrhage of cortical branches of the cerebral artery.

The earlier the patient is treated after they are stable, the better the prognosis. Location of bleeding is also a factor in prognosis.

Peripheral Nervous System Diseases

What 2 areas of the scalp would apply to Herpes zoster (shingles)?

1. Sensory area, 2. Foot Motor Sensory area.

What 2 areas would you use for sciatic pain (neuralgia sciatica)?

1. upper 2/5 of the sensory area.
2. foot motor sensory area

Where on the scalp would you needle for a vertex headache?

Upper 2/5 of the sensory area.

For a frontal and/or temporal headache?

Lower 2/5 of the sensory area

Where do you needle for hypertension?

Upper 1/2 of the Vascular Dilation and Constriction Area on both sides of the scalp.

International Standard Scalp Acupuncture

Frontal Head Area

For all points, needle downward subcutaneously and use swift manipulation techniques.

MS#	Name	Location	Indication
MS 1	Middle line of the forehead	1 cun long line needled from Du 24 downward toward root of nose along the midline.	Headache, dizziness, red swollen painful eyes, epilepsy, mental disorder
MS 2	Lateral line 1 of forehead	1 cun long line needled from BL 3 directed downward along meridian.	Corresponds to Thoracic Area in Dr. Jiao's system Lung system disorders: Allergic asthma, bronchitis Heart system disorders Angina pectoris, heart diseases, palpitations, flustered feeling
MS 3	Lateral line 2 of forehead	1 cun long line needled from GB 15 directed downward along meridian	Corresponds to Stomach and Liver/Gallbladder Areas in Dr. Jiao's system Digestive disorders: Acute and chronic gastritis, gastroduodenal ulcer, diarrhea or constipation, dysentery Liver/Gallbladder disorders: Hepatitis, cholecystitis
MS 4	Lateral line 3 of forehead	1 cun long line directed downward starting $\frac{3}{4}$ of a cun medial to ST 8. (Located between the ST and GB channels)	Reproductive system disorders <u>Male</u> : impotence, spermatorrhea, seminal emission, premature ejaculation. <u>Female</u> : Dysfunctional uterine bleeding, prolapse of uterus, dysmenorrhea, amenorrhea, irregular menstruation. Urinary system disorders Acute cystitis (including urinary frequency and urgency), polyuria

Vertex Area

MS#	Name	Location	Indication
MS 5	(?)	From Du 20 – Du 21 along midline of head. <i>Start at Du 20, thread to Du 21.</i>	Local indications Headache, dizziness, hypertension Mental disorders Fainting, syncope, asphyxia, epilepsy, aphasia from apoplexy, insomnia Lumbar and leg Pain, numbness, paralysis Two lower orifice disorders Cerebro-cortical polyuria, nocturia (infant), prolapse of the anus
MS 6	Anterior oblique line of vertex temporal	From qian shenchong (1 cun anterior to Du 20) obliquely to GB 6. Divide into 5 parts.	Corresponds to the Motor Area in Dr. Jiao's system Upper 1/5: Lower limbs and trunk: for paralysis on opposite side Middle 2/5: Upper limbs: for paralysis on opposite side Lower 2/5: Motor problems and paralysis of... <ul style="list-style-type: none"> • Facial area – Bell's Palsy for example • Speaking area 1 • Central facial paralysis (contralateral) • Motor aphasia • Salivation • Dysphonia (impairment of voice/diff speaking)

MS#	Name	Location	Indication
MS 7	Posterior oblique line of vertex temporal	From Du 20 to GB 7. Divide into 5 parts.	Corresponds to the Sensory Area in Dr. Jiao's system Upper 1/5: Sensory problems in lower limbs, trunk, and posterior head/neck. <ul style="list-style-type: none"> • Contralateral lumbar and leg pain, numbness and paralysis • Occipital headache • Pain in the nape area • Tinnitus Middle 2/5: Sensory problems in the upper limbs <ul style="list-style-type: none"> • Contralateral upper limb pain • Numbness • Paralysis • Abnormal sensations Lower 2/5: Sensory problems of the facial area <ul style="list-style-type: none"> • Contralateral facial numbness • Migraine headache • TMJ • Trigeminal neuralgia • Toothache
MS 8	Lateral line 1 of vertex	1.5 cun long line from BL 7 needled posteriorly along meridian.	Close to but not on Foot Motor Sensory Area in Dr. Jiao's system Local: Headache, dizziness, tinnitus, blurred vision Lumbar and leg: Paralysis, numbness, pain
MS 9	Lateral line 2 of vertex	1.5 cun long line starting from GB 17 directed posteriorly along the meridian (GB is 2.25 cun lat to mid)	Local: Headache, dizziness, migraine Shoulder, arm, hand: Paralysis, numbness, pain

Temporal Area

MS#	Name	Location	Indication
MS 10	Anterior temporal line	From GB 4 inserted toward and ending at GB 6	Head and facial disorders Migraine, pain at the outer canthus, tinnitus, epilepsy, motor aphonia, peripheral facial paralysis Oral cavity disorders Gingivitis, tonsillitis Throat disorders
MS 11	Posterior temporal line	From GB 8 inserted toward and ending at GB 7	Head and facial disorders Migraine, tinnitus, deafness

Occipital Area

MS#	Name	Location	Indication
MS 12	(?)	From Du 18 inserted toward and ending at Du 17	Local: Occipital headache, dizziness, blurred vision, stiff neck Mental: Epilepsy, manic-depression Eye: Keratitis, conjunctivitis Foot: Tinea pedis (aka: athlete's foot, hongkong foot)
MS 13	Upper lateral line of occiput	<ol style="list-style-type: none"> 1. Locate the prominence of the external occipital protuberance. 2. Measure lateral to this landmark by ½ cun and downward by 4 cun. 3. Needle upward from this point, ending at the level of the prominence of the external occipital protuberance. 	Corresponds to the Visual Area of Dr. Jiao's system Eye disorders: Cerebro-cortical visual disturbance, glaucoma, cataract. Nearsightedness/myopia, farsightedness/hyperopia

MS#	Name	Location	Indication
MS 14	Lower lateral line of occiput	2 cun long line needled from BL 9 downward along the meridian.	<p>Corresponds to the Balance Area of Dr. Jiao's system</p> <p>Equilibrium and balance disorders caused by disease in the cerebellum: Lack of coordination, dystaxia, ataxia</p> <p>Brainstem dysfunction: Numbness and paralysis of limbs, head and nape pain, dizziness.</p>