

7th Nerve--Facial. Would move both motion and sensory most frequently, involves all cranial nerves.

1. Does patient have one side appearance of face?
2. Does patient talk from one side of mouth?
3. Is one side of face smooth and freer of wrinkles?
4. Does lid fail to close or lag on that side?
5. Does normal reaction appear under emotion?
6. One good diagnostic sign is whistler, look at teeth, if lower division of 7 is at fault above will be true.
7. Ask him to raise eye brow.
8. The nasal labial fold is
9. Hyper acuteness or hearing usually for 4 or 5 days before paresis begins.

9th Nerve--Glosso-Pharyngeal--both motor and sensory.

1. Loss of taste back of tongue.
2. Astheses of tongue, tonsils.
3. Difficulty in swallowing. (test for gag-reflex).
4. Irritation may cause tic douloureux aux.

10th Nerve--Vagus--both motor and sensory. Activating nerve of all viscera except heart and adrenals.

1. Unilateral paralysis cause paralysis of one side of soft palate and larynx on same side.
A. Hoarse and rattly voice.
2. Regurgitation of foods and liquids--back through nose.
A. Open mouth widely and say "AH". If vagus is affected it will draw toward good side.
3. Brain tumor irritating left root of vagus gives slow pulse.
A. Vomiting of brain tumor may result from irritation from vagus.
4. If paralysis, left vagus gives very rapid pulse.

11th Nerve--Spinal accessory--motor nerve.

1. Distributed to muscles of neck and shoulder.
2. Sternomastoid.
3. Trapezius muscle.
4. Involvement will affect one of these muscles.
5. Check these in all cases--High, Eso, Exo, and Hyper phoria for sore spots. If so put on prism to relieve, only no orthoptics.
6. theoretically it should be .
7. All combinations of cause the effect merely modified or lessened by the combining filter.
8. all combinations of have effects. Is made more or less irritating by the combining filter.
9. all combinations give effects except . It is definitely effect.

10. May be a stimulant or depressant depending on the state of patient. (Push it test low use). Both L and N/L.

No motor response without a prior stimulant.

The sensory stimuli may come from

1. 5 senses.
2. May be from proprioceptor.
3. Mental.
4. Emotional.

Emotional stresses tend to produce both adduction and accommodation

Sty syntonization--when active symptom has been relieved, attack the symptoms in the order they appear.

Chemical causes of shift of dominancy. Food causes.

When mucus membrane in lining of nose and cheek, you have sympathetic origin. Using too many fruits that are not ripened in sun.

When mucus membrane of nose and cheek are paler than usual or normal, the para sympathetic is dominant. Then using too many

1
Sinus involvement.

1. Morning headaches, disappear at 10 or 11 o'clock.
2. Pain in eye and orbit after use of eyes. May be referred or cause nausea.

SINUS

3. Erotic phoria finding.

Chronic until free drainage, (7 or 8 days), then shift to until clears up.

Acute until free drainage, then followed by to clear out sinus
P.R. Phoria may vary from 6 exo to 6 eso and patient may be normal. 2000
Near point from 6 eso to 14 exo and still be comfortable. 2095.

Endocran.

Pituitary gland -- 2 glands -- glandular (Post.) and tissue (Ant.)

Extract from anterior lobe is not very toxic.

Extract from posterior is very toxic.

Posterior lobe.

Oxy-toxin -- causes contraction of all plain muscles in body except blood vessel walls. Pseudo Myopia.

Pitressin -- causes contraction of blood wall.

De-secretion of urine and blood sugar.

Anterior lobe.

General growth.

Activates the gonads.

Activates the thyroids.

Controls fat metabolism. -- Leaves excessive fat is under control.

Prolactin.

Secretion of milk.

Under function male female.

Ant. Pit.

Store bromide in system and slow down all reflex responses.

Anterior lobe somewhat antagonizes the Post. Pit. by lessening tonus of plain muscle.

Gonads. Two secretions.

Female.

1. Progestin -- during pregnancy.

2. Folliculin -- controls growth and development of generative organs and breasts. Connects with Pituitary (inter lock).

Male.

1. Early destruction, fat hips and large masses of fat on breasts.
2. Loss or destruction at about puberty, no secondary characteristic scanty facial, high pitch voice.
3. After maturity facial yellow pasty color and wrinkle. Vertical on side of face.

Adrenals.

Secretion of medulla -- inactive when above 7.6. Adrenalin with 7.6
Get blood P.H.

Acids and calcium activate adrenal.

Alcoholoid and potassium depress adrenal.

Contract the blood vessels, plain muscles and uterus.

Dilate the coronary of the heart, bronchial and intestinal vessels.

Use corn oil as salad dressing.

Adrenal cortex, necessary to life, controls oxygen used by the tissues also aid in maintaining the volume of blood, controls strength and weakens muscles and raises fat.

Interin of the portion that controls fat and blood sugar and blood volume and to some extent activates the thyroid.

Cholin -- power vaso dilator -- cold feet. Stop smoking and start drinking.

Sulphur in fatigue.

It has some effect of vitamin C in the body. And to some extent controls the faulty use of sulphur. Also controls the growth of sex organs. (Ant. Pit.)

Thyroid.

Thyroxin--contains iodine in excess. H.B.M.R.
 Decidodthyroctic--when abundant it antagonizes thyroxin.
 Strictly vegetable diet. It lessens size and iodine content.
 Complete loss of thyroid reduces body fat to 0.
 Because they retain water and chlorides.

Increase of thyroid.

- A. Increases use of oxygen.
- B. Increases blood sugar.
- C. Mobilizes the water and chlorides.
- D. Increases heart rate.
- E. Increases elimination of calcium and phosphorus.
- F. Increases tonus in both kinds of muscle.
- G. Increases activity of left hand column.
- H. Increases nervous irritability.

Thymus.

Early removal increases length of long bones.
 Extract of thymus or feeding glands, increases size of sex organs.
 to decrease thymus in child up to 14.
 to increase.

Lack of thymus grow fast and tall before 9 or 10 years of age.
 Excessive sex.

Para Thyroid.

Lack of calcium in blood tends to cause tetany of stripe muscles,
 general growth of teeth, nails, loss of body hair, and cataract.
 Excessive of calcium in blood. to help.

Endocrine indications.

Distribution of fat.

- Trunk.
- Abdomen.
- Hips.
- Face.
- Extremities.
- Trochanic.
- Shoulder pad.

Facial hair--female.

Upper lip. Ant. Pit.
 Jaw line. Adrenal cortex usually.
 Dermography. Writing on skin. Adrenal Medulla under function.

Eyes.

pupil adrenal.
 Rate of reaction to light and rate of accommodation. Adrenal.
 Exothalmus. Thyroid.
 Ptosis. Any gland on right hand column or paralysis on left hand.
 Nystagmus. Develops late in life. Para thyroid.
 Strabismus may be Para Thyroid or Ant. Pit.

Bodily signs.

Early Hypo Thyroid.

Massive body from pubic up. (Cretion Idiot).
 Have delayed dentation, are sensitive and sore when picked up.

Pituitary.

Early Hypo Pit. Borain type dwarf.
 Grotesque. Short extremities.
 Early Hyper. Massive giants. Grow normally until 6 or 8 years old.
 Hyper Thyroid, location of fat in.
 Large upper back pad.
 Large buttox, fat breeches.
 Large breasts.
 Puffy listless face.
 Large ankles and legs, only from knee down.
 Dry hair and skin.
 Lack of perspiration.

Hypo Pituitary.

- A. Fat Girdle.
- B. Pendulous of abdomen.
- C. Double chin.
- D. Facial roundness.
- E. Feminine breasts in men and boys. (Lots of fat).
- F. Thin ankles and wrists.

Hypo Gonadal. (Fat).

- A. Upper thigh.
- B. Trochanic pads. (Side of hip---saddle bags.)
- C. Slender fingers and wrists.

Hypo Adrenal.

- A. Full puffy face. (Alert expression.)
- B. Full trunk.
- C. Full large thigh.
- D. Full upper arm.
- E. Small forearm and legs.
- F. Thick hands and feet. (Up and down).

Central grey. ---Similar to hypo Pit. but has a fat breech similar to the hypo thyroid.

Autonomic pressure directly or indirectly on faulty structure or faulty metabolism.

Increased activity of sympathetic may be caused by

- Hyper Thyroid.
- Hyper Adrenal--Medulla.
- Hyper Post. Pit.

Increased Para. Symp. may be caused by

- Hyper Para. Thyroid.
- Hyper Gonads. .
- Pancreas.

Anterior Pit. seems to be Sympathetically controlled.

Adrenal Cortex is Para. sym. (Only proof is negative.)

Four Types of Research.

- Literary--what has been done in past.
- Imperic--probability.
- Negative .
- Positive.

Opposite effects of these glands will give you the opposite effects.

Metabolic affect on the eyes due to Endocrine Disfunction.

1935 College of Syntonics of Optometry.

A. Erratic muscle finding of any kind may be endocrine.

B. Lid affects.

1. Lid lag. (Von Grephy Sign.)
2. Stare. (Gifford Sign).
3. slow winking. (Stillwag)
4. Lack of fixation and convergence.
5. sympathetic may cause all the foregoing.
6. Paresis Ptosis or Nystagmus look to the possibility of Pituitary involvement. (Pressure).

C. Corneal and Conjunctival.

1. Degenerative changes of cornea. (May have Hyper Thyroid or too dry cornea.)
2. Keratoconus usually failure of dystrophy. (Ant. Pit.)
3. Keratitis may be caused by diabetes. Hypo Thyroid.
4. Phlyctenulosis--usually Hypo Gonadal.

D. Conjunctival redness on purple type is usually Hypo Gonadal.

Male Female.

E. Cataract --Para Thyroid is due to faulty calcium elimination.

1. Is either para neuclear.

2. Diabetic type (Glucose black spots) start in or near punctate

gradually grow into gray sheen.

Sinile type--Cortical--Hyper Thyroid or Hypo Thyroid.

Eye Grounds.

1. Simple atrophy in Pit. on 52% of cases.
2. Choke disc to Pit. in only 10% of cases.
3. Optic neuro retinitis to Pit. in only 20% of cases.

Nerve Head.

1. Blind spot enlarged may be due to faulty drainage.
Some increased intracranial pressure.
2. Pytemporal--Hemianopsia--trouble in Chiasm Pit.
3. Unilateral --Hemianopsia is usually in Optic Nerve involvement between Ball and Chain.

Homonymous--same side of retina involved--tract or radiation condition

Color Field Charges.

Pregnancy and Menopaus may show any of the changes in any of the E.N.F. above.

Intra Ocular tension is Glaucoma. .

1. Contributing causes.
 - A. Shallow anterior chamber.
 - B. Hyperopia.
 - C. Congenitally large lens.
 - D. Hypo Thyroid.
 - E. A dished iris to front.
2. Any one of these five preceding causes may produce.
 - A. Emotional.
 - B. Fatigue.
 - C. Cold.
 - D. Hyper thyroid.
 - E. Climacteric--change of life. .
 - F. Increased sympathetic stimulation.
 1. Dilate pupil--atropine.
 2. Systemic Hyper Tension.

Ira Diagnosis.

Climatic change tends to change color of iris. Color indicates race and climate.

Sky blue with a smooth even sheen or color. Dense --the less the density the lower the vitality of the individual. This density is varied, when the fibers run out bunchy.

Black spots usually indicate loss of tissue during consciousness.

The finer the fiber, and straighter and closer, the tougher the person.

Density--smooth even sheen, solid color with no clumping of fibers.

Density is concentrated. Massing of fibers.

Sometimes a nerve ring or two concentric clumpy indicates active condition in that part of body according to location of eye map. Same sheen more wide lines with some ovoids toward periphery.

Any of the densities should return to No.1 if properly treated. If improperly, will go into No.4. If healed has white line in ovoid, loss of tissue. Ovoid still open, the process is still going on. Therefore the totality of changes,--acute, chronic and hereditary changes, determine the reserve vitality of the individual in his or her recuperative power.

Color and density indicate life expectancy.

Darkened rim around iris, skin firm, is caused by suppression or defective skin elimination--may appear in parts only.

Causes--anything that doesn't let skin eliminate.

Hot baths.

Steam baths.

Dense clothing that keeps air away.

Lack of skin friction.

Indicates trouble.

Skin in elimination again.

Eliminates more water and more salts than kidneys.

Controls heat radiation--has certain respiratory function (interchange of gas). Stop skin function 20 minutes and you die. Skin test, press fingers on skin for 3 seconds. Skin should return from 1 1/2 to 3 sec.

5 to 20 seconds means an impaired skin function in proportion to the time.

Skirf rim in lower half only means cold extremities.

Sluggish circulation in the abdomen and swollen leg veins, susceptible to cold in head and throat conditions and bronchial involvement.

Best handling--air bath, sea bathing, skin friction baths, cold mitten, salt glow. (Get gallon jar, bar salt, just enough water to make mush and rub on and wash off).

Improvement--the skirf rim will gradually disappear.

Psora Spots--are brown spots, little redder than milk chocolate.

Sharp defined borders and even colors throughout (suppressed itch never found in infants. An infant may be born from blue-eyed parents).

Itch is located according to location in iris. Method of handling is same as Skirf rim. When itch comes out send to Homopath.

Psora, sycosis, syphilis.

Iris Mat.

Cerebrum from 35 to 350.

Cerebellum from 325 to 350.

Eye from 40 to 45.

Pit. from 340 and inset.

Thyroid 75.

Testies and ovaries (gonads) 160.

Prostate 145.

Adrenal Sympathetic Nerve ring jagged white line about 1-3 way out.

Right

Left

Space inside of the color, Sym. Nerve Ring,

Space immediately surrounding pupil is stomach signs.

White clouds or clumping of fibers, indicates acute active condition.

White line with sharp crosses indicates repair.

Dark spots or streaks mean loss of tissues from diseases.

Black spots mean loss of tissue during consciousness.

Drugs slow.

Iodine--Red brown spot with darker center that blends into iris.

Mercury--shows as silver gray sheen over upper half of iris.

Iron--Rust brown immediately around pupil and intestinal tract.

Quinine--Yellowish discoloration in upper half and in blue iris it is greenish.

Lead--Gray to bluish tint. Edge of gum bluish. (Wrist drop).

Bromide--Yellowish of entire iris.

Basis of symptoms.

Nervous system makes body work.
Circulation helps body work.

Pink dilation.
White constriction.

Dorsal 4th dorsal 2 blood vessels.

1 to 4 Sym. Eyes in blood.

Control blood supply to head.

9 Dorsal.

5 Lumbar.

Sacral Vasomotion
Control of Circulation.

Vaso Dilation.

Pink test--finger pressure down spine leaves pink lines.

Low pressure--sleepy in low or high altitude.

Low tension--less 120--8- Class one symptom.

Class 1--Less 120---80.

Class 2--Vaso constriction in one region and dilation in another.

Mixed.

Class 3--Two white lines full length of spine.

Constriction of Sympathetic. Stimulation greater than 120-80.

P.P. greater than 40.

Class 4--Due to visceral constriction. Hollow organs are extended by
Not here long. gas or some such order. High Dystolic. P.P. less than 40.

Process of elimination.

Determine if blood is going to be in head.

Early stages of anemia--cut down supply is increased irritability.

Later stage stop function (may account for hay-wire finding).

(Alternate wso to exo).

Brain has two separate blood supplies--one by way of cortex to
corotta and other central gray.

Hyper phoria--exo, eso.

Breast Bone

Muscle

Neuritis etc
may be caused
from phoria.

10
Compensatory region.

Vaso constriction in abdomen and head compensate.

Pain, quantitative anemia and any sensory train may result.

Excessive inability due to anemia.

A. May give erratic muscular responses.

B. May give spastic muscular responses.

C. May cause congestion with dull ache and pain.

D. May cause over-activity of conditioned responses. (Striped muscle).

E. Causes unconsciousness if cerebral. Increased Pulse Rate.

Consciousness, the appreciation of the afferent impulses that press up to the cerebrum may be possible.

Dilation in belly causes faint (syncope). When patient sweats and gets pale, liable to faint.

How to prevent faint.

1. Lower the head.

2. Compress the abdomen.

3. Don't throw water in face.

Emotion inhibit in going stimulation.

Hysteric paralysis of 6th nerve.

If eye will follow when head turns, it is our case. (If not, if eye stops, send out to our enemy).

Emotional stress instantly destroys conditioned responses.

Blurred vision, diplopia, may cause unconsciousness.

Blind eye always diverges. Poor seeing eye in Hyperopia converges and in Myopia usually diverges.

Case Record.

Complains of presenting symptom.

If pain, anatomy is first job.

Kinds of pain.

A. Dull aches--usually congestion. (Venus).

B. Periodic pains.

Early morning pains in head--sinus or glaucoma.

When eyes are open, usually inflammatory Irititic Cyclitis.

When eyes are closed, surface Conjunctive Keratitis.

After meals, faulty digestion.

Before meals, ulcers of stomach and duodenal. (Excessive acid).

C. Sharp excruciating, pressure, puss pockets.

D. Stabbing shooting pain, Nerve origin, stop its path.

Location of pain or where is it?

1. In eyes.

Tension stretching of structure. Accommodation, convergence etc. digestion.

2. In head.

Eso. Pit, swelling and menses. Inquire nausea.

3. Neck and shoulders, back or side of head.

Exophoria, High Eso. If back of head and neck, may be toxic.

4. Pain in arm and shoulder on motion and sometimes as low as small of back.

Exo or Hyperphoria, wear prisms.

Referred pains should wear prisms.

Patient attributes his condition too. Write his explanation.

DANGER. Always record history in patient's own words. He is legally responsible for what he tells or what he doesn't tell.

Age at onset, not age now. (When did you discover you had a pair of eyes?)

1. Teeth signs.

2. Enable you to determine progressive condition.

3.

4. Post climatic.
5. Run of mine between 15 and 45.
6. Happen after 60.

Cornea.

1. Obliquely illuminate. (for roughness).
2. Scores. Drop of Fluorescein 1--1000 per loup and stand patient to window, see green spot. Gauge depth back to anterior chamber.

Pupil.

- Small pupil, para sympathetic dominance, check pulse rate.
- Large pupil, cocaine, opium derivatives, aspirin.
- Hemorrhage under the pons.
- Large pupil, sym. dominant, check pulse rate.
- Atropine, lulladonna (sub-normal accom.), check on medicine.
- pupil.
- Look out for low reserves.
- Unequal pupil, check upon it.
- Aortic aneurism.
- Irregular pupil. --- Old Iritis --- sometimes helps.
- Gray pupil. May be roughness off anterior of cornea and may be glaucoma.

Sclera. Basic Notes.

Acquis.

Lens.

Pick up first with Retinoscope, then Ophthalmoscope and then obliquely illuminate.

Look at anterior capsule. If rough very poor chance to help. Check in all opacities. The dishing of iris, you may have glaucoma.

Vitritis.

Fundus.

- Redness of veins and arteries, should be very little difference, great is toxicity.
- Palor, may mean migraine, check exo duction.
- Quinine poisoning.

Choroid.

If you see yellow, exudate. If disappears in 10 days o.k.
If not refer.

Teeth, draw on square back side of teeth.

Color Field Chart.

- Tobacco contract both red and green and control scotoma.
- Concentric contraction. (motor).
- Nasal field contracts, look out for glaucoma.

Central section.

Nystagmus is sometimes wax in ears.

Naked vision and V.A.

Always suspect low ad. when vision is less O.U. than either eye single.

Trick to check subject, put on O.U., if V.A. better than 20--70 you are wrong.

Pin hole vision O.U. O.D. O.S.

Tendency improve vision in cortical cataract and worse in nuclear cataract.

P.D. 60 exo 6x3 18-6 12
70 7 exo 3 21-6 15

Ductions.

- Erratic, check blood pressure.
- Snappy recovery after break is adrenal function.
- Amplitude of accommodation.

The psychological age of patient and not what the calendar says.

Take 8 point type until you can't read it any more.

Lay hand flat on table, take hold of flesh and pick up,
watch it go back.

Bio-Type--bony structure.

Complexion--Brunettes suffer from low adrenal.(Louis).

Iris color.

Upper lip--Adrenal activity.

Lower lip--Ant.Pit. and Gonad.

Expression--Thyroid activity.

General Characteristics--Key word to modifying sign of face.

I am interested in relieving.

Sign name and address.

1.Eyes.

Ears.Semi circular canals.

3.Joints and muscles of body.

Ocular Virtago.

- 1.Any sudden disturbance of vision especially if it be one eye or
- 2.By placing or cylinder before eye because it distorts and
changes in place.
- 3.Sudden paralysis of accom. worse if there is astigmatism.
- 4.By placing before one eye in sufficient to cause diplopia. is
associated with latent rhythmic nystagmus with apex of prism.
Past pointing is also present. He has lost orientation.
- 5.Following a teotomy, following a section of muscle or nerve.
(Past pointing).
- 6.May be produce mechanically by pressure on eye ball.(Past
pointing).
- 7.Another form of Virtago found with nystagmus which is termed
rotation caused by visional rotational nystagmus.
Gazing at moving objects,--water fall, trains and flowing water.