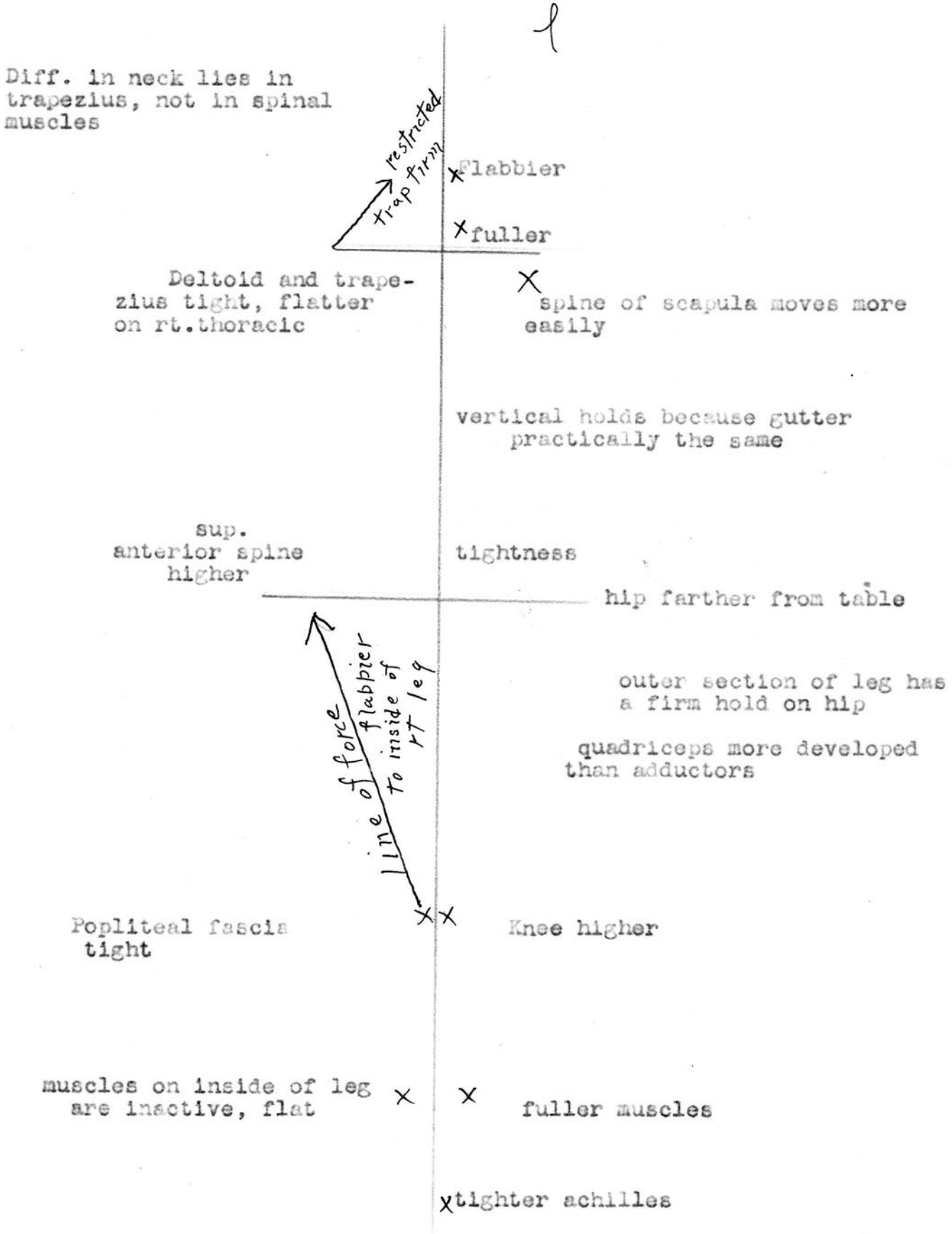
Posture- Normal Class Oct. 17,'29

Columbia U Nat.

Miss Bertine on the table:



R. L.

Miss Swiegard's pupil

Head turned sl. to R.

Tension rt. upper Thoracic

Elbows to L.

Ribs pushed out

Tension on L. lower thoracic and lumbar .

Weights pulled to R.
Hip up toward head

Lumbar curve begins too high in middle of thoracic
Too loose anteriorly

Knee way r.

Manipulation- Heel of hand against r. ischia- fingers on coccyx Heel of opposite hand over r. trancversalis. Released lumbar muscles and transversalis lumbar spine let down.

Diagnosis Nov. 7, '29

Miss Mulford

Symptoms: Pain from 8th dorsal to Occiput.

Latissimus pulling up
Both gluteus medius too tight
Two inches too wide at heads of femurs.
Pectineus shld be tighter, this wld release the antagonistic groups.
Quadruceps extensor too tight
Controlls with knees pulling straight on 7th thoracic.
Hangs legs on the back of her neck.

Correction:

Alligator picture, tail over R. shlder. Alligator is going to swallow rt leg, 2 inches on side of pubis (socket) Swallow up into lumbar region. Breathe down in pelvis between ischia. Spread ischia like spreading nostril in a deep breath. Let rt leg travel up. Suction right into muscles of lumbar spine. Let there be more action in the throat of the alligator. Make it harder to swallow. Actually swallow yourself to get the feel of swallowing something hard and dry. Psoas has fewer striations therefore response is slower. The better the picture of swallowing the more the conscious controll Many muscles become more voluntary with practice.

Repeat alligator on left side. Can feel wi hand when psoas took hold, latissimus let go.

The moment the natural rhythm of smooth muscle becomes disturbed it calls attention to itself as pain. This is not so in voluntary muscle/ Travel with type of rythym natural to muscle.

To get relief when standing rest on the wall, don't feel as though you were standing on your feet.

Try to get even pressure on femurs , fifty lbs. of even pressure wld not break an egg shell.

To, improve sway back you must weld spine. It is too loose so it sags forward on standing, backward on the table. It must be held firm in relation to where the wgt is going. Must make supporting guy ropes tauter. Must shorten psoas. Must bring up pelvis without letting spine give. Front ties (psoas) must be strengthened. The beginning of the lumbar spine belongs in the middle of the body. Do not throw any part away from axis. Pull axis into middle.

In lifting a patient coordinate own center with center of patient and imagine you are lifting the table between both hands with the upper thighs of pubis. Do not get shoulders in where line of focus crosses periphery before it crosses center.

R. L.

Points head over rt. ear

Elbows to L.

Fullerfrom 7th rib down

Sl. curve to L.

Abdominal muscles are offsetting pull of ribs

Stretched in r. lumbar

Obliques, rectus and transverse
is well developed. esp. R. Holds in L. Lumbar muscles
Sartorius tight R.

Line of force in R. thigh
to outside of hip

R. Knee high

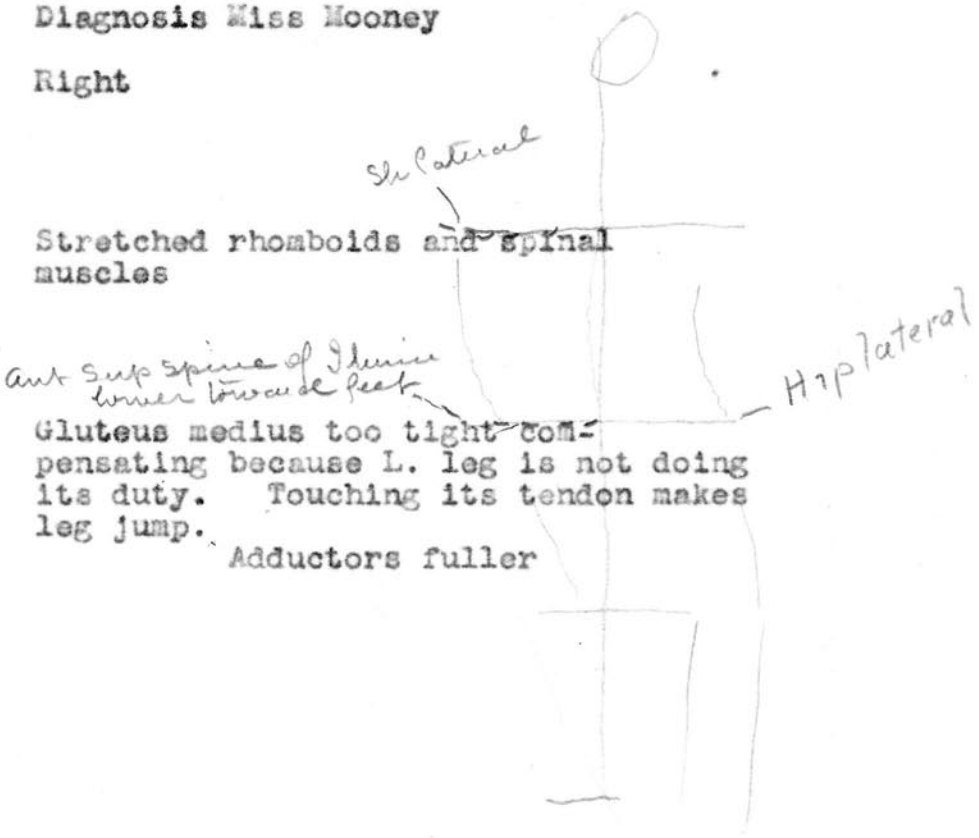
R. foot sl. forward

When legs are moved body changes at abdomen, mounds abdomen on R. side as she moves

Lecture 8 -- Miss Todd Dec. 4, '29

Diagnosis Miss Mooney

Right



Stretched rhomboids and spinal muscles

Internus oblique is too tight

Gluteus medius too tight com- pensating because L. leg is not doing its duty. Touching its tendon makes leg jump.

Line of force comes more outside body

Adductors fuller

Adductors much tighter

Last time on table the dorsal angle of the ribs was further over to the right side wi focus of lines of force way off to R. and flattened on L. The angle of the ribs is not set as formerly, it can now be moved. All muscles in gutter of dorsal angle are acting on each rib and on the spinus process. The lines of force are now more nearly going as they should.

Agitation in the legs is gone.

She is getting into the center of the spine at the Atlas. The Atlas is not crowding up into the occipital gutter.

Pressure on the nerve at the reactionary point on the right side just above the sacrum, between the 4th and 5th vertabra approximately, caused agitation of the R. leg. Sometimes pressure on very tight fascia gives nerve reaction without pressing directly on the nerve trunk. This case is a central nervous disorder.

Think in terms of stresses and lines of force. See if pressure brings nervous disturbance.

Treatment: Deep pressure upward in groin to make tense muscles let go, especially in the internus oblique. All the muscles try to take hold when the internus oblique is pinched; they try to hold weight from slipping off.

Rotate thigh muscles inward -- Snug hips together.

Widen ischia --Fork the mermaid's tail.

When you find an obvious defect, go to its mechanical reaction. Points where you find tension give weight sensitiveness. Work toward center midway between it and ribs.

The pubis and front of pelvis shld move upward. Keep up motion till back muscles give way. The internus oblique was stretched.

If you can make iliacus, psoas, adductors on the L. side draw the bone back to receive the weight which is coming down from the ribs, they will take up the task now being done by the internus oblique.

Now the inside muscles are in line wi the drag so they cannot help.

Going on as she is now, the drag will come on the psoas iliacus when the obliques give. Then she will have sacro-iliac strain on the R. ? side.

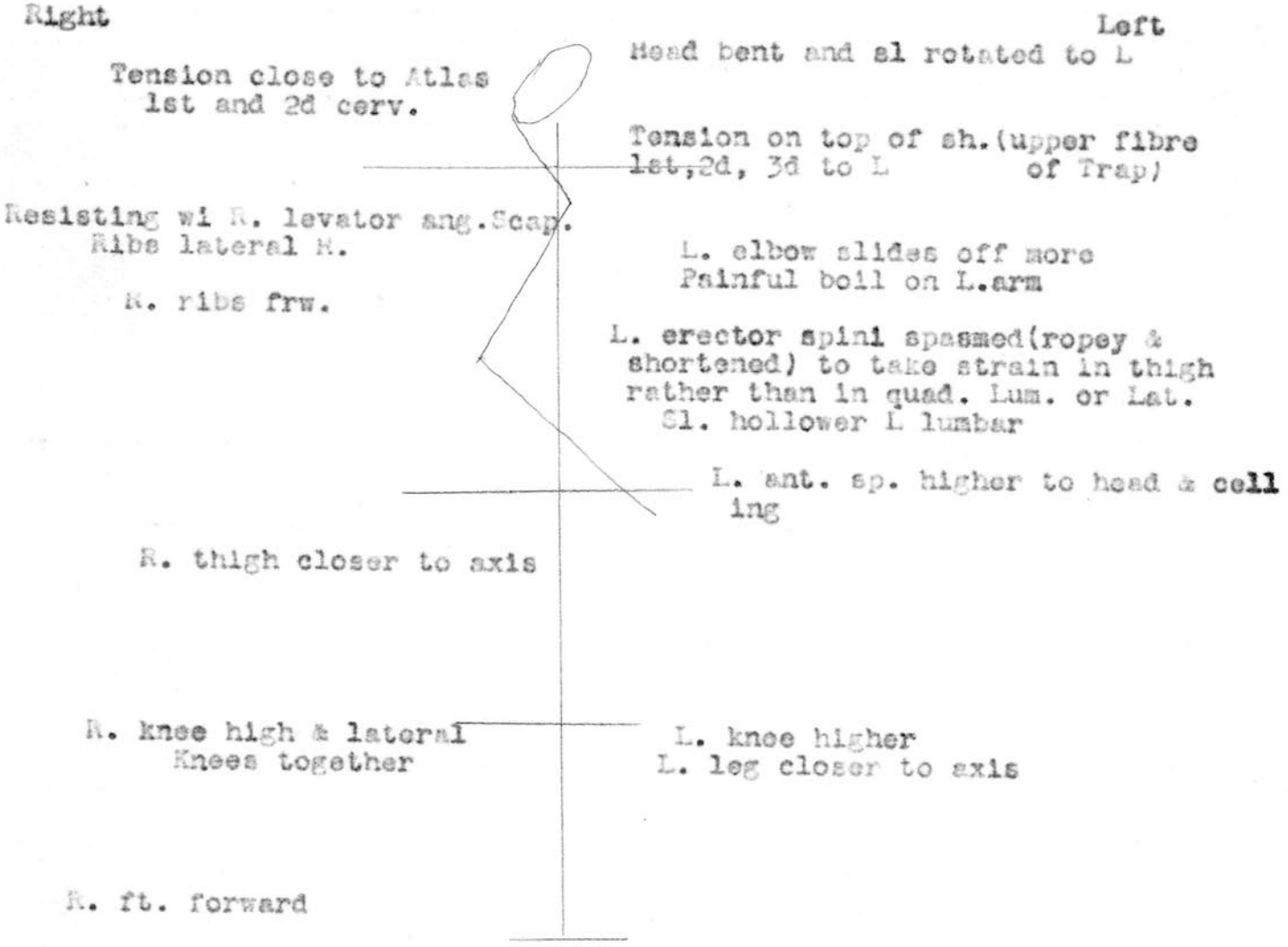
The weight shifts from the right ribs to the left side in back of the lst sacral vertabra. This forces the pubis down till it hangs on the internus oblique (tensile stress.) The back muscles are pulling back to try to hold the lead.

Think in terms of --force first- next bones- then lines of force-then areas. Weight is a force. Is it doing its full job? If not, get under it. All stresses are marginal to weight force.

At the end of the treatment, the soft structure between the lst vertebra and the occiput were opened up and with that the tissues have been made more flexible between the sacrum and the coccyx

Edgerton
Miss ~~Eugene~~ on table
Class Diagnosing

Jan. 8, 1930



In a well ctrd body the lines of force wld come closer to center making an acuter angle wi the axis.

There is static contraction in R. lumbar. She is supporting herself in R. ribs. Offered more resistance in L. hip and R. ribs.

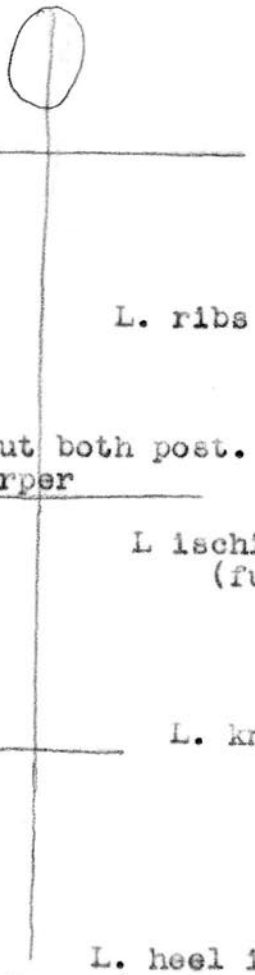
Levator ang. Scap. & trap. tight on R. to protect L. arm. She isn't giving as completely to lat. strains as untrained person. Is taking some of the strains in her axis by adjusting musclesand ligaments and fascia. Probably walking more quietly on L. foot. She is keeping her axis as straight as possible and then adjusting thru other joints instead of breaking up her axis and giving in all directions.

Miss Noyes on table
Class diagnosing

Jan 8,1930

Right

Left



Head of humerus higher

3-5 Dorsal vert. to R.
Elbows slide to R.

L. ribs more lateral

R. lum. hollower
R. greater Troch. lateral
R. post. spine higher off table but both post. spines off table
R. ant. spine higher to head, sharper

R. thigh further frw.
(better centered)

L ischia closer to heels
(further fro head)

R. knee higher

L. knee way in toward axis

R. heel lat. to ischia
Foot in straighter alignment than L.
R. ankle pronated- n
Not so close to ischia as L.

L. heel in line wi ischia
(stronger alignment wi ischia)
L. toe cuts axis

If the superior and inferior angles of the scapula are in a vert. line, then the acromion will be straight out, clavicle horizontal and perpendicular to the sternum.

It takes fatigued fibres longer to relax. Sharpen a bone & don't move muscle. Dig in at acrom ion in effort to let bone come out to a point. Reciprocal muscle action will take place, fibre pulls on the bone will be equalized.

An axis pulled by tense stress in the rhomboids to one side, wld be freed because all muscles which had patterened themselves on the axis wld change.

Miss Eldred on table
Class diagnosing

Jan 16, 1930

Right

Left

3d and 4th cerv. to R.
Chin to R.

Ribs to L (middle of thorax)

Line of force falls 2 in below crest of ilium & behind median plane

This strain a little further forward and strain at top of knee

R. leg straighter, cebtered

R. knee sl. higher

Tension intermuscular, septum and whole fascia in static grip in effort to protect.

Leg sl forward

Foot sl forward

Feel lines of force by placing one hand at each apex. Don't rotate head. Get in back. Press toward axis and opposite hand. As she changes, her axis lengthens, the line of force hits lower and higher. As you decrease the lat. pulls on the spine, the axis of the spine increases its length.

The acromions are even. Apparently there are no strains on trapezius. It is a postural thing rather than surface pulls. Vocational pulls start from above generally. Therefore did not expect to see line of force in upper dorsal but looked in mid dorsal.

If one part of a flexible structure is held fixed it will change the line of force all the way down. There are fixed habits of dynamic response but this is different from being statically fixed.

The upper cerv. pulls are caused by xgt thrust from below, less muscular involvement above.

If spine is lifted up, 3 or 4 vertabrae lift together showing firm welding even tho each vert. moves slightly on each other.

Miss Muhlford on Table
Class diagnosing

Jan. 16,1930

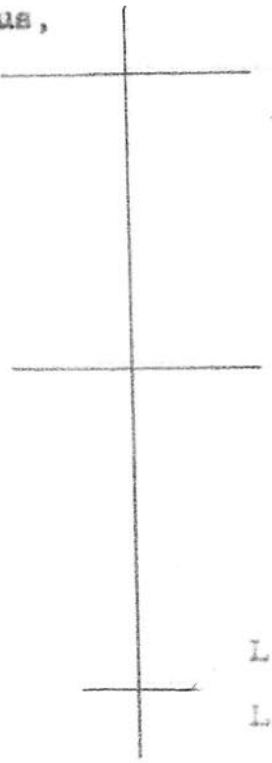
Right

Left

Head to R.

Chin to L.

Cervicle Vert. to R.
Throat fuller R. trap., Scalenus, & throat muscles involved
Vertical pulls more by throat muscles less wi spinal muscles



Rt. thigh better ctrd than L down to knee, not so well ctrd below knee

R. knee higher

L. leg forward

R. heel in line wi ischia

L. ankle lateral

Miss M. has taken the strain in the spine more than Miss Eldred because her spine is weaker. Vert. pulls are struggling to hold her. Muscle pull is bringing whole spine over to R.

Thoracic and lumbar curves are not firmly held. She can form any kind of pattern. The lines of force do not project wgt par to the surface. Li nes of force are keeping within narrow radius. All the muscles have to struggle to hold. A slight lateral thoracic does not harm as much as too straight a spine.

Her spine is negative to pulls. The muscles are stronger but spine does not give a normal resistance.

She can form far more patterns both vert. and lat. There is too much movement between each vert., too full of variants.

Definition.

To flare the ischia means to lengthen the ischia. The obturators hold it up and back. The thrust then comes too far back on the acetabulum & too far back on the 5th lumbar. This unseats the 5th lum. If the floor of the pelvis is too tight- coccygeal and anus muscles may say widen ischia, but it is actually impossible to widen the ischia.

Miss ? Class Diagnosing Jan. 22,'30
Miss Todd supervising

Right Chin to R. Top of head to L. Left

4-5 cerv. vert. held
Tight spot overto R.
Glands more enlarged on R. Tense place stretched

7th-8th dorsal vert. to L. other end of line of force from cerv.

(Lum. spine too post-)
(in standing too ant.)

Obliques tight on R.
Lower end of line of force from dor. at median plane of crest of ilium
R. ant. soup. sp. of il. ~~higher~~
to head and to ceiling

Gluteus medius & tenso fascia lata very tight on R
Holding on R.
R. leg better ctrd
Force applied to knee stays in body to head

Drag on L. side
Fascia lat. tight on both sides
Force applied to knee leaves body at waist line

R. knee higher

L. knee inward cutting axis

Heel in line wi ischia
L. foot forward

R. heel inside of iscia, toe outside
Ankle pronated

Strength in knees, weak in upper thigh in front, Strength in upper chest, weak below. Is controlling from ischia and knees

Stretched fem. triangle. Diaphragm loses force by working on ribs instead of coming down spine so losing its effect on abdominal circulation. Dragging mesentery. Intestinal stasis. Lowered stomach. Circulation bad in lymphatics and veins. Colon lower on L. side

Deaf on R. side. Sinus and catarrh of throat. Throat condition probably not postural but systemic, probably absorbing poison from intest

Mrs. Bates giving lesson.

Release diaphragm to release bulge round last 4 or 5 ribs so she cld get 12th in.

Released tensor fascia femoris & gluteus medius by using ferry wheel moving backward while lifting legs. Shrunk ribs

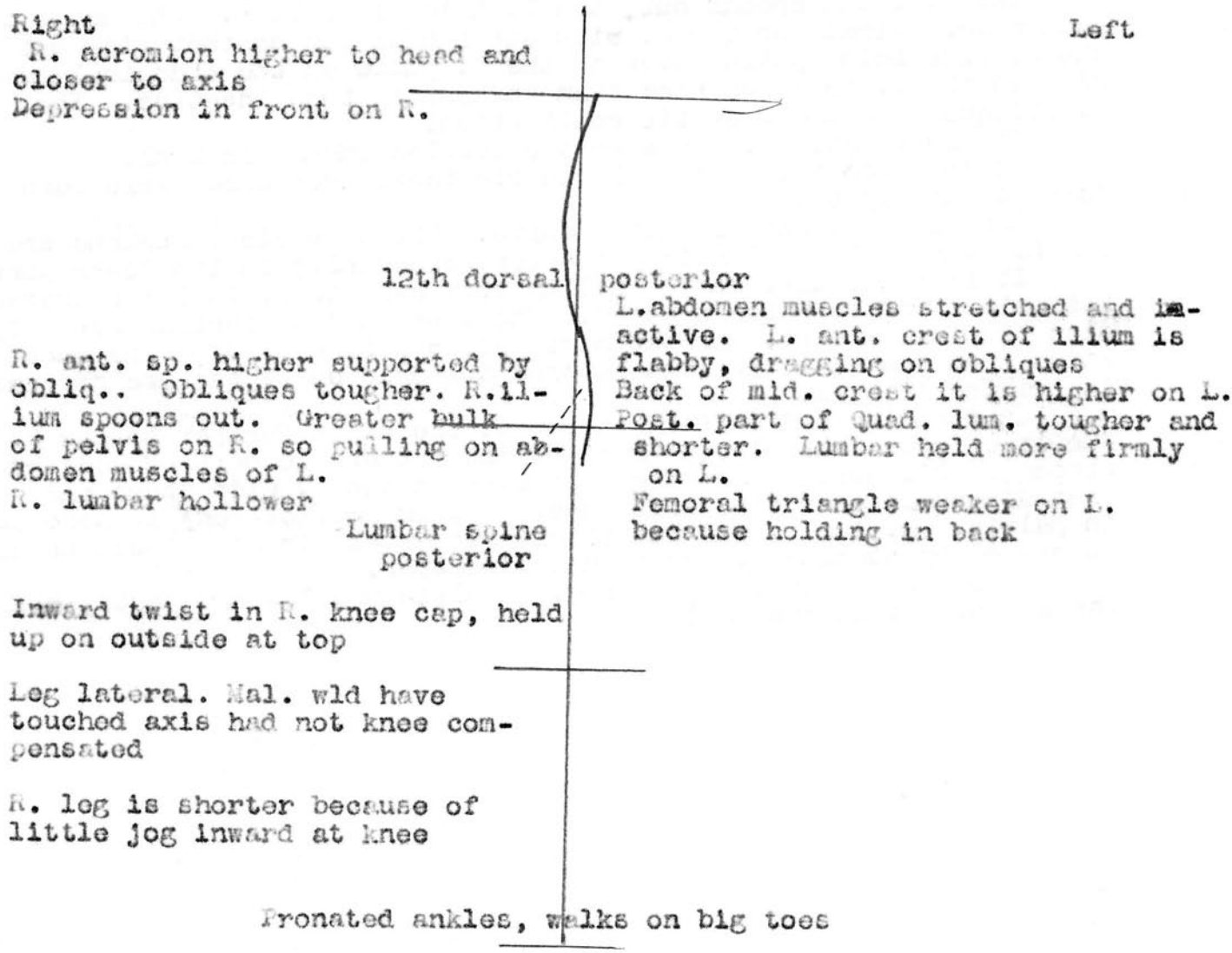
Grasping round waist across abdomen toward ctr, fingers touching erector spini, other hand under to op. ribs, draw waist over and downward to release obliques.

Fingers of one hand on side of spine toward you, other hand over diaphragm. Push into gutter of spine towards spinus process to inhibit nerves and let diaph. down, work slowly.

Finger of one hand along vert. edge of scapula, raise arm and shake it down.

Put her on all fours. All action must take place in 1st four inches of thigh & body as she touches head to floor. Use the upper thigh and not the knee muscles or there will be a weakening at 5th lum. and bending at 12th

Miss Nelson on table- brot by Miss Muhlford Jan 30 1930



To get axis connect upper center of sternum up to occipital condyles and down center of body.

Because of large surface in knee joint, there is much chance for adapting to shift in wgt bearing. Never-the-less angles of wgt force are changed within the spine.

Adhesions on R. side might have made her save R. leg, or pushing on scooter with R. leg in childhood push it out. At any rate there must have been lack of freedom in one thigh joint.

In knock knees there is a tightening of fascia on the inside, in bow legs on the outside

You cannot determine the curve of the spine from movements of periphery

There is a greater bulk of pelvis on the R.

If protuberance of ~~sheany~~ bone pushes further thru it will stretch the fascia and the muscles will readjust to the bony structure.
A hard surface tends to bring bones into center, fascial tightness and muscles readjust to that.

The back of mid crest of ilium is higher on L. but R. ant. sp. is higher to ceiling supported by obliques; medius tighter.

L. ant. sp. muscles are flabby, there is a drag in the obliquo but the post. portion of the L. crest has a tougher, shorter quad. lum/ holding post.ilium closer to axis and ribs.

The R. ilium spoons out, the L. holds in better. She holds the lumbar more firmly on the L. with straighter leg on that side but the R. side being pulled over to the R. pulls on the abdominal muscles on the L. so stretching them and making them inactive. The R. obliques are under static contraction.

The left ant. sp. drags so the muscles engage in back.

Ankles pronate. She walks on big toes. Her shoes were worn down at the big toe.

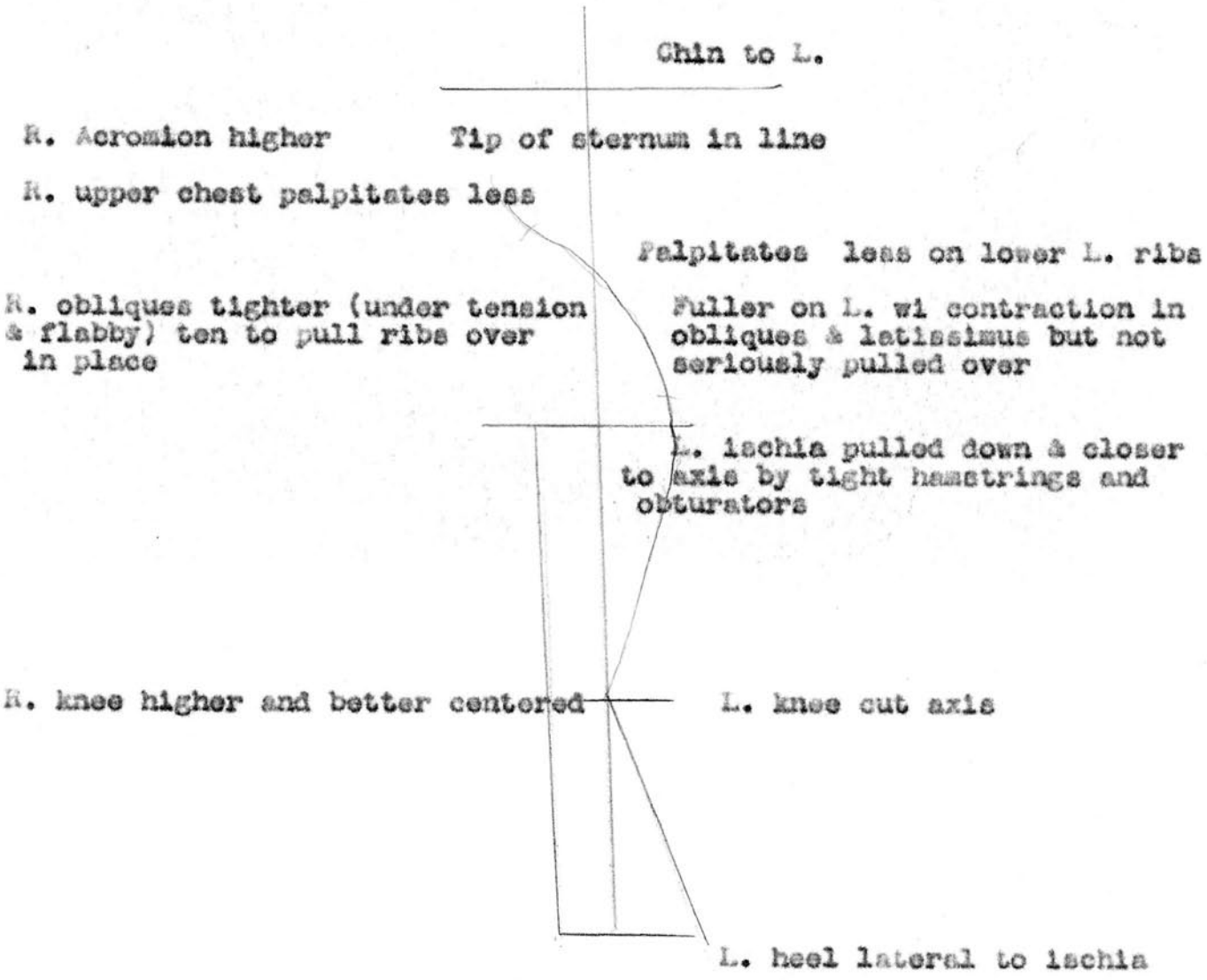
There is a R. dorsal lumbar curve. The cervicle vertebrae are to the L. The lumbar spine is posterior, especially in the lower part.

It is a muscular curve pulling vert over to R. in lower thoracic. Latissimus and serratus engaged. The 13th shld be further forward, as also the lumbar vert. Psoas must become more active. She must strengthen the adductors and femoral triangle on L. because now she is holding in back.

In standing and shifting her wgt. she sways further to the L. She is carrying herself in front of lower thoracic part of body by stronger obliques. The weight is over on the R. side there and then diagonals down thru left knee. Lower half of body is more over in pelvis. R. leg is aid but takes greater strain in R. such as might be caused by pushing R. leg in using scooter.

Almost reversed lumbar curve. Pelvic muscles are pretty well set in but set in crooked.

Miss Noyes on Table --Miss Todd Diagnosing - Feb. 5, 1930



Since the R. leg is better ctrd she probably treads out wi L. and then brings R. leg under axis without dragging L. leg. Probably L. leg travels further. She carries wgt on left. R. obliques drag and keep L. ribs in toward axis more than wld be expected. It takes a certain amt of energy to counteract swing of a certain no, of lbs over to the L.

The radius of gyration is the swing which a body may have within the middle third of the base. To widen the radius of gyration in body the base wld have to be widened by spreading the legs.

Palpitating (pushing downward & toward ctr.) in L. lower ribs moves whole body only slightly. It controls the axis. Palpitating on R. lower ribs moves the whole body much more. The axis gives. The reverse is true in the upper thorax.

The whole body reacts mechanically to displacement in the drunkard or non-thinker. The displacement is therefore less dangerous. If Miss N. was drunk she wld swing way off at hip, off at R. shldr and head wld be go way to L. New pattern is same but narrower so the whole margin of gyration is narrowed, not by bringing hip into line but merely by nerve tension. Tight hamstring pulled ischia down and obturators and pyriformis held ischia to axis so making her hold L. obliques to oppose them. L. tensor is also tight.

She swings L. leg on ham strings. There will not be so much development in back on L. because obliques are doing the work. A hard rib case

on lower L. prevents her swinging her L. hip so far out.

Correction:

Must work to get wgts as low on axis and as near axis as possible. Work from all angles of the periphery.

Don't get lost in functioning of muscles because they act differently in different situations and combinations. Define your pattern and then see how particular muscles could aid in that pattern. Think in areas.

Go back over area of disturbance and effort outside of pure mechanical reaction. Work far away from major fault first, so may begin with feet.

Bring feet as close to body as possible and separate knees.

She spills over in ankles just at hip so pull in big toe and draw it up in leg. Bring upper part of thighs parallel with axis. (Adductors are hollow)

Weight rest on lower part of spine. Measure three inches up on sacrum and gradually let wgt of legs and pelvis sag backward like a meal bag. Don't rotate pelvis. Shorten big toe on L. foot. Let legs go with sag. Release big toe. Draw string up between tibia and fibula. (Tightening toe brings upward pressure in knees which is not noticeable when done right.) If you pull the toe itself you use tibialis anticus and outer muscles. Pulling on posticus releases under, holds the tibia and fibula together so releasing ham strings and connective tissue.

Broad base across the occiput. There is the same amount of space in back of the ears as at the base of the sacrum. That is the middle third of the base. Skull at occiput does not change its width even at birth. Releasing multifideus erects spine and so releases the posterior universal lig. Settle right into the pocket.

There is not enough thought given in placing baby's head on pillow to the relation between the occiput and Atlas, or to turning the child regularly every half hour, being sure the head is placed in line wi axis, its chest and pelvis in line.

Diagonal L. ribs to lower anterior part of sacro-iliac joint- against lines of force. There is a pull on R. leg but a drag on L. leg. Keep the knees apart, the leg is more natural then, the knees cannot be gripped in the same way. She is now holding wi the muscles we want to get hold of. These will later be released by changing relation of pelvis to table, raising the wgt. Feel for peak of curve about the line of the breast. Muscles are tight in the R. trap. and R. levater ang. scap. She is balancing L. hip with R. shoulder.

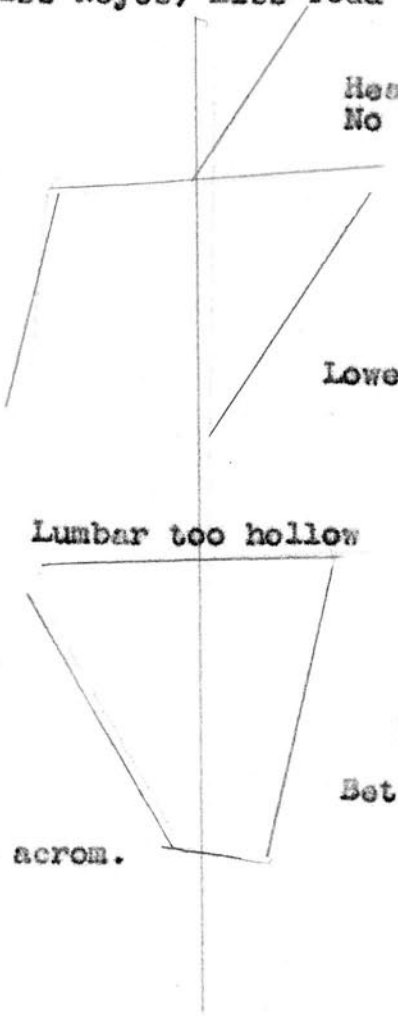
Put a pin cushion in the L. sacro iliac. Jab pins from apex of curve to pincushion.

Sharpen acromion on L. side toward ear. Prick humerus right thru to ear while ribs go right down into pin cushion. Think vertebral border of L. scap. Stealthily steal it up to occiput and ribs down to R. hip.

Now pull thighs away to aprallel borders of inner legs. Lift both borders of scap. and slide ribs down into pelvis.

Normal Class Feb. 27,'30

Miss Willis(friend of Miss Noyes) Miss Todd diagnosing



She is holding wi knees. There is nothing in upper third of thigh Tension in popliteal notch. Legs are dragging on pelvis. There is much pressure on the end of the spine. Her legs probably at all times run away wi her pelvis.

Correction: Let legs drag back toward pelvis, let wgt drop back 5 or 6 inches higher on sacrum Place hand under sacrum to help her. Break up the old coordinations by knowledge and analysis of facts and by using the imagination.

Let the ant. and sup. spine of ilium drop back into a little pocket at the top of the sacrum. R. leg compensates for spinal swing to R. There is a functional curve without any twist.

Bring chin and center of elbows in line. Measure 4 inches back from pressure of spine on table. Put a rod from the actabulum to the spot where the sacrum is to touch the table. So bal. leg in socket- knee then let go. Wgt of leg cannot bal in acetabulum when sacrum is tilted. Leg is controlled in front. This centered R. leg and lowered L. ribs.

Cross R. hand over body and prick fingers thru. Lift R. leg and put same rod thru. Lift R. shlder to front of ear and toward ceiling, shlder sl forward and prick fingers thru. Prick lower ribs back to table. Lift head and keep pricking fingers thru. Measure again 4 in. up on sacrum and bal leg. Prick ribsdown hard on R. side. Flaring ribs reduced

Carry back where she is forward and diagonalize at the same time.

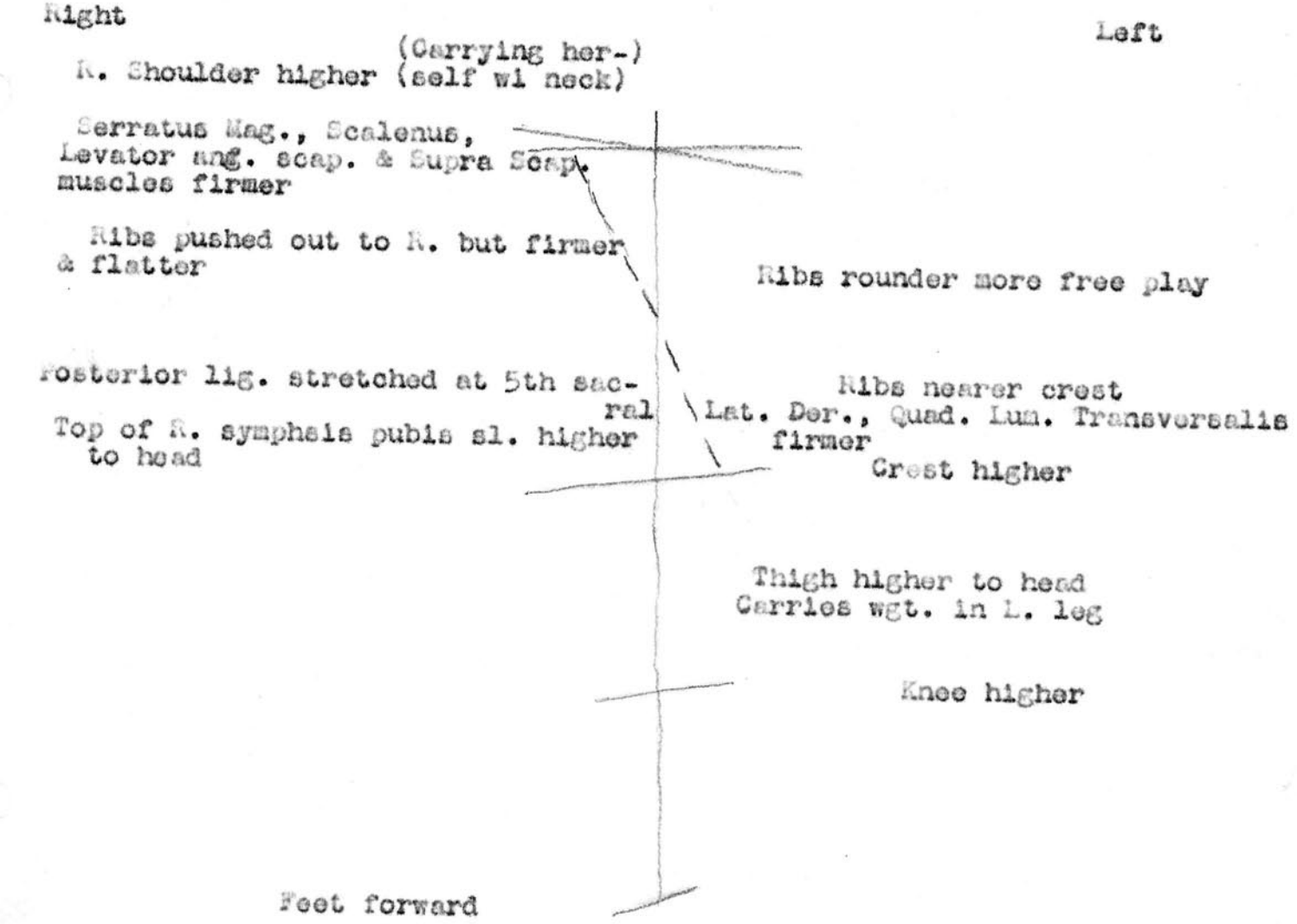
Her ribs are hitched up on R. dorsal which causes twist. Thru the ant. post. curves come the cross lines of force. She must find out how to Hold

axis straighter along curves of normal spine and then diagonal.
If both legs were lifted, obliques and knees wld hold.
Break up the familiar patterns .
By balancing parts in ant. post. line you weaken transverse pulls.
Give something to hold mind to pattern of exercise(as balancing leg in socket.)
It would have been just as good to touch L. ankle wi R. hand only it was too complicated.
Pricking lower two ribs down to table while raising acromian to ceiling which holds trapezius and serratus muscles prevents upper ribs from bulging.
Hitting the ceiling with the acrom. brings trapezius into alignment like a shawl; the deltoid controls the trapezius. If the ribs bulge the fingers will be pulled back. Without extending the fingers trapezius may pull unevenly. Extending the fingers makes trapezius pull more evenly.

J.H.C.

Normal Class
Marie Foulkes on table- Miss Todd diagnosing

Feb. 27,830



If it were possible to keep upper thorax 3 inches closer to axis the lower cld be also. She is making an effort to protect the R. leg. If pain were in axis she wld not oppose it but pain is just to one side of axis. Ribs are rounder, more free play under L. shlder, but pushed out and held firmer and flatter on R.

When you get 12th in line wi center of sacrum, the top of sacrum begins to brace.

On the rt side only the dorsal angle of the ribs and the pos. processes of the 7th and 8th vert. are drawn too closely together.(Spasm was caused by touching there.)

Correction: Forget R. leg. Get finger action between ribs on rt side There is wider difference between ribs on rt side. Occassionally bal. legs, first one, then the other.

Diagonal ribs thru 5th lum. Bring acrom. off ribs. Put ice in axilla. Get ribs moving down spine.

The lumbar spine stretches because hitched up on rt. side.

Breathe down in bones in back. Slide down spine like a deep well. Placing one hand under dorsal region, grasp wrist; while she is breathing squeeze ribs together. Lift head.

Central ribs at both ends. Get sternal and vert. movement

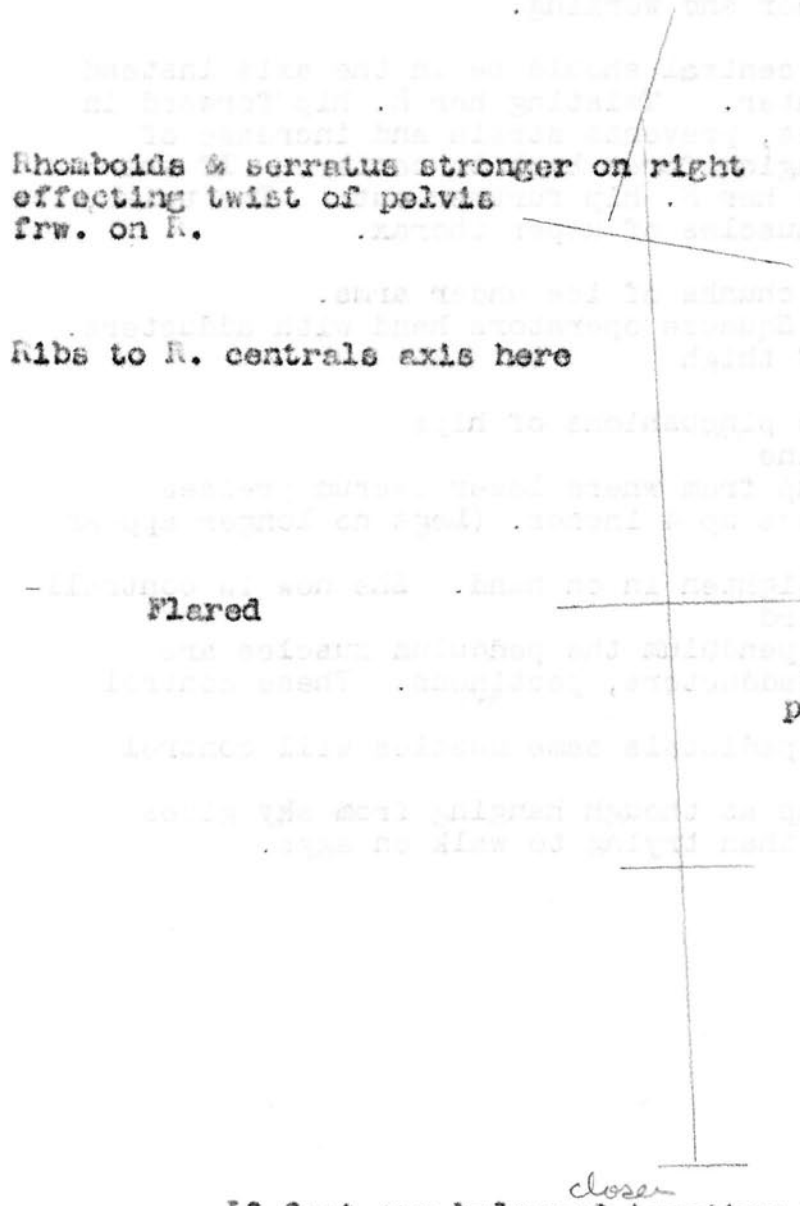
Miss Todd demonstrated movement of ribs forward on upper L. side of stern then on r. as she breathed first into one lung then the other. The bulge came back and forward not sideward.

Normal Class - Miss Todd diagnosing
Miss Muhlfrid's sister on table

March 6,'30

Right

Left



closer

If feet are balanced together differences are shown up more. The smallest radius of diversion is at the top of the sternum. Quad. lum. is stronger on R.and illium closer to ribs. There is a twist of the pelvis. She focuses pelvis too far over to R. at periphery, and R. leg too far over to R. She crosses R. leg over L.which wld flare lt left ischia and hold on right. This widens splits transversalis and flares pelvis on R., tightening transversalis and quadratus on L.

She would grip the horse in riding with her knees so could not use adductors. She is then using the hamstrings, tehser fascia lata and vastus ext. triaax will be tensed. The pull on the ischia will throw her on to the coccyx. If she tries to sit further forward without releasing at the knees, the relation between the ischia and knee will remain the same and adjustment will be made at the spine, pelvis and thigh both tilting forward downward. Sitting too far forward on pelvis means bracing the ribs; bracing the ribs means tight shoulders and sawing on the reins. She should sit on ischia with hamstrings free and free arms. The top of sternum, lumbar and front of pelvis must be in alignment.

Her body moves in segments. The chest is over to the R. The change is in relation to the 5th lumbar not so much to the pelvis.

All the muscles around the ischia are tight and closer on the L

side muscles on L. spine firmer and working.

Crossing legs the centrel should be in the axis instead as it is from greater trochanter. Twisting her R. hip forward in crossing her knees as she does, prevents strain and increase of defect at 5th lumbar, by bringing force back to center. If she did not twist she would throw her R. hip further out. The twist, however, causes stresses on muscles of upper thorax.

Correction: Put chunks of ice under arms.
Hold knees away. Squeeze operator's hand with adducters.
Use upper third of thigh
Tuck legs back
Jab ribs down into pincushions of hips
Fold ribs down spine
Measure 4 inches up from where lower sacrum presses
Transfer wgt of legs up 4 inches. (Legs no longer appear so bow-legged)
Flare ischia and tighten in on hand. She now is controlling in upper third
When the leg is a pendulum the peddulum muscles are psoas- iliacus, adducters, pectineus. These control the pendulum.
When the legs are pedistals same muscles will control weight.
Hanging the axis up as though hanging from sky gives greater freedom than trying to walk on eggs.

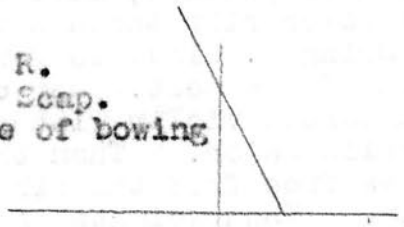
Normal Class Miss Todd diagnosing
Patient or Mrs. Bates -Violinist- on table

March 6,'30

Right

Left

Neck muscles fuller on R.
Scalenus and lev. Ang. Scap.
developed on R. because of bowing



Harder

Trochanter close to pelvis

Knee closer to axis and higher

Feet way lateral

She shows vocational strain. In playing she holds violin on left shoulder, bracing wi L. ribs, shortening and bracing toward axis. The twist on the L. arm is tiring. It brings central and tightening with serratus and lattimus. Instead the support of the violin shld be the movable shoulder girdle and chin.

Correction: Toe in, no wgt in front of ankle. Come forward as though being spanked. Push back against operator's hand in lumbar region. Sit deep, bring shlders forward a little. Lift shlder blades a little. Let ribs hang, drag spine down. Control wgt. on inside and slightly in back of ankle. Push lower ribs back and touch operator's hip, operator's hands assisting movement.

It is hard to keep from going forward which tends to tip the pelvis up in back so losing part of the spinal muscles which give long control of bow. When she was better centered rythms were longer, not broken into smaller rythms. Touch centralizes and softens when sets of wgt. are in alignment. Must begin from the feet up. Table work gives consciousness of control of legs close up into body.

She has a poor habit of holding the violin. She lets the clavicles back till it rests on the ribs, that fixes ribs and spine. If there is stiffness of spinal muscles, the muscles guiding the bow only partly give.

Drag spine, dinasaur picture, lift clavicle off sternum ribs and let ribs hang. Prick lower ribs through till there is no pressure on hand on dorsal ribs. Bring L. clavicle forward to meet violin. Widen pelvis as tho reaching for a seat. Her old posture gave hard and surface tones. She has supported violin with pectoralis miner. Some support it with the pectoralis major. Then the L. shlder is very high. The violin shld be as free from the rib structure as though she did not hold the violin. When weights are pulled out to surface, the muscles which shld be free for singing and violin playing are lost. The violin shld be held from head.

It is not necessary to stand on both feet if the axis is not changed. It is all right to change feet. Now arms and legs begin to function from lumbar.

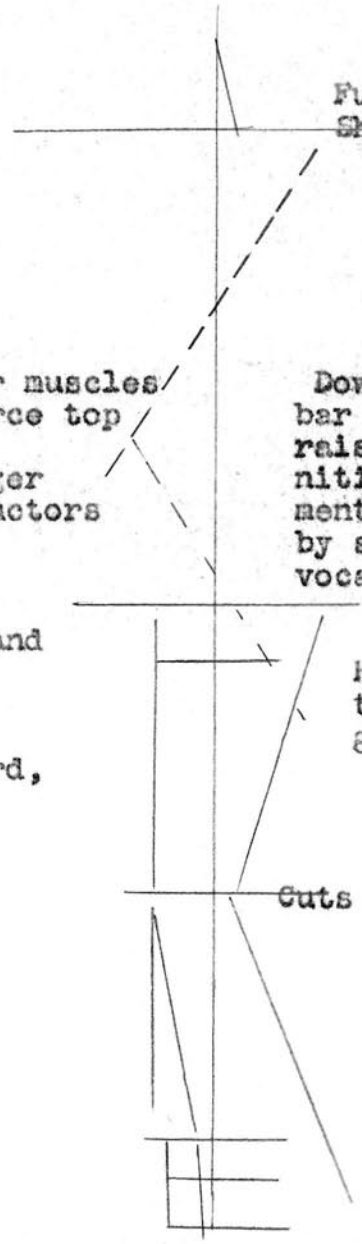
Let ribs slide down greased pole of spine. Let end of spine hang heavily to floor. Don't stiffen knees. Feel almost as though sitting on operator's knees. Ribs must be low to be able to prick them out.

Walk letting legs get there first, as tho being spanked.

Normal Class March 13,'30

Miss McCortney on table--Miss Todd diagnosing

Right Left



Shorter

Fuller (nearer clavicle)
Sh. sl. high lst 3 ribs high and line of force from back of sh. above sp. of scap.

On standing R. lumbar muscles wld hold.--Line of force top Quad. lumborum
R. Quad. lum. stronger
Psoas, pectineus, adductors better

Down drag gives pull to L. in lumbar causing muscle to be fibrous, raised frm the bone wi marked definition of shape. Pulled back by movement (pedaling at organ) rather than by static contraction, is dynamic and vocational.

Maintains wgt. in R.
Tighter ham strings and glutei

Hole, lack of firmness in fem-triang. Line of force back of greater trochanter

R. thigh better centrd, straighter, higher

Tight Sartorius

Cuts axis

Heel lateral

Cuts axis

The lateral pulls are in back so give a twist in left. Playing the pipe organ and reaching wi L. leg gives similar result to using a scooter and pushing wi L. leg.

Correction: Reduce Soften scalenus muscles L. Sharpen elbow bring into play pect. minor, subclavius on . Hit ceiling wi acromion.

Wi L. shlder high one wld look to see the wgt thrown more precipitously on R. or the support of wgt. on R.

To feel for high shlder, place one hand on trapezius and wi th other hand poke finger up under clavicle. The high side will be tight

The more the angles of the lines of force are reduced toward the axis the more flexible the spine remains, when the fall further fr the spine the lding is done at the periphery.

There are 3 ways in which strains and stresses are imposed o the body: 1- Thru ignorant body movements & gen'l lack of coordinatio 2- False notions which produce blocks when dynamic equilibrium is est 3- Nerve tensions which produce a blockade.

You can't tense bones by giving them a moral responsibility. Consciousness lies largely in neuro-muscular mechanism & "ought" re there.

Miss Sweigard on table March 20,1930

When Miss Todd began to work on Miss S. she said she felt she couldn't breath, felt pain at pit of stomach, darting pains thru whole abdomen. Miss T's fingers hurt so she forgot everything else.

The hour glass picture made her feel nauseated. Such spells had lasted often two hours before this, this time only a few minutes.

Spasmed muscles, no solidity in lumbar, all cramped, no freedom in ribs, were fixed and set. In doing hour glass pictures she used ribs but stomach was set so there was a pull on the vagus nerve which gave a sympathetic reaction. Miss T. inhibited nerves at back and over pit of stomach. Pressure was at 6th and 7th vertebrae and was very hard. Occasionally she helped ribs at sides as spasm let go, working body wall. Worked to get blodd back into mesentery. †

Spread ischia to connect body wall muscles with breathing. Spreading floor of pelvis gets transversalis and levatorand into rythm of breathing. The obturators and pyriformis release, hamstrings let go and psoas and front muscles ~~hold~~ take hold.

Change the lines of force thru the bones.

Correct nausea by direct attempt to free neumo-gastric nerve. Raise head on one hand, reaching down spine with pressure with other. With head raised, bring pressure under and in back of mastoid. Place many pillows under head. Sway bent up thighs.

Shorten big toe and bring back to center so power goes down middle.

When sacral and cranial nerves are in operation the sympathetic nerves are inhibited. No one knows the connection between the autonomis and the cerebro-spinal systems. Thev agus nerve affects and distumbs the diaphragm and the hepatic nervous system and the solar plexus. As the spine lengthened the sacral and reduced the cranial so loosening up the upper structure, freeing the neumo gastric, lift the legs and stimulate legs at the sacrum, probably the sympathetic nervous system.

This was a reflex situation. When sympathetic is negative and cranial and sacral nerves stimulated there is balance and a sense of well being. When the sympathetic is stimulated the others are inhibited. This causes tension.

In spasm of stomach there are tense stomach nerves, psoas and diaphragm cease to work in rhythm. When stomach doesn't work properly there is increased work for the intestines, kidneys, etc. Finally no more compensation is possible, the nerves are tired, the stomach is inert. Soon the whole thing is spasm.

† lifted legs gripping and squeezing hard to get blood back into mesentery.

Normal Class --Miss Simons on table March 20,1930
Miss Todd diagnosing

Last time Miss Simons was on the table lying prone, she cd couldn't raise arms, legs or head without a jerky reflex. Slapping spine or jarring whole spine would have hurt, catching nerves by tension caused by adhesions.

This time it is possible to get fingers into nerves, therefore ithhurt. She can raise each leg separately, both together and both arms Miss Todd put fingers way into gutter on the nerves which were hurting. Told her to go down to 12th.

Theory: Nerve fatigue, strain shows in sensitive nerve fibres cld one get into them. There is an unbalanced activity between motor and sensory nerves. Pressure on them feels like irritability.

When you feel a spine where you cannot get your fingers into the gutter of the spine which is shallow, the multifidous, erector spini posterior universal ligament are all tight. Both the ant. and post. ligaments are stretched beyond firm tonisity and therefore cannot adequately hold lumbar spine which is unsupported by ribs. The lig. which should be thickened to hold body in normal pattern, when stretched have less power and more work is thrown on the muscles. Then the big muscles try to help. This gives irritability of nerves.

The gutter is shallow from side pulls because more muscles pull diagonally than vertically. Then the central tissues are all drawn taught and that brings pressure on the stomach nerves round the 6th and 7th dorsal. This pressure gives either organic disturbance stomach or intestinal disturbance, irritability, weeping, etc. If you can deepen the gutter so you can get your fingers in the nerves will be sensitive.

Just then Miss S. tightened up and there was a reflex in the arms but no pain. She softened and the nerves hurt on pressure.

Correction: Still prone, fasten post. part of puvis to the anterior side of the 12th. Sharpen the ischia. Now it was possible to get fingers in furhher with less pain. The tissues are softer underneath. Repeat, sharpen highest point of acromomion (R) toward eyebrows. Sharpen ischia, flare ischia. Fold in the elephants ears round rod from pubis to 12th. Sharpen acromion. Thrust ribs into hips, first on one side then on other, like sabres, till they become part of the ischia.

Some adhesions over the L. kidney caught when she raised both legs and head at once.

Inner body wall was lined up, pulls in hips reduced, ribs narrowed. Lifting l egs backward pulls on psoas and so on 12th. Never do this till inner body wall is built up. This ex. wld be all right if there were no diagonal pulls to prevent the spine from giving all along the line. You must know your surfaces. With no disorganizing peripheral pulls on the spinal muscles and with a unity of the spine you can throw pulls on any part of the spine.

The ribs and crest of the ilia shld be about the same width, the trochanter and acromion about in line. The hr glass picture gives a flaring of the ischia, a feeling of support at the 12th, a centering. Sand falling down the inside of the ribs gives action on inside of ribs Ischia just as wide as axilla. Snug costal muscles, reduced outer rhomboids.

Lengthening spine thins out rhomboids.

Picture, chest full of chiffon. Pull down thru spool at 12th, fasten round bobbin in pelvis. Chiffon goes all round thoracic mus.

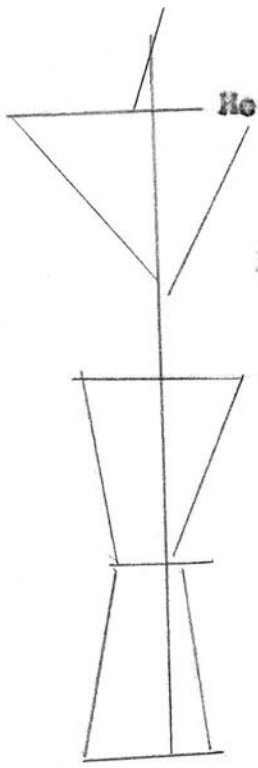
Spine must touch line of gravity at head (which is about in line with anterior point of cervicle spine) and probably at 12th.

The moment you shorten the axis wgts are thrown further to the periphery so round hollow back throws wgts off in shlder, tightens pectoris and widens ribs.

In the old ladies hump the spine crowds up above while the lower back drags, giving decreased lumbar.

Normal Class March 27,1930
Miss Welsh on table- Voice Lesson- Mrs. Bate's pupil

R. L.



Head to L.

Elbows to L.

R. quadruceps more developed
R. better centered
R. knee high

Hamstrings and adductors more active

L. knee cuts axis

Heel outside ischia

Heel in line with ischia
Ankle pronated
Foot forward

The R. leg was around left when she was born. R. leg was heavier than L. on lifting. She carries wgt on R. side and controls body wi knees, not wi upper thighs; carries wgt on quadriceps on R.side. The hamstrings and adductors more active on L.

In standing L. ankle bone shld be in line. Suck up big toe and remove bumps from the boney articulations on inside of foot.

Bring shlders straight forward, come up in front. Lift shldrs to carsp. Prick ribs out behind, feet parallel. Pull in big toe, let ribs hang. Let spine hang, Long in back

In singing at first she stood on balls of feet with very hollow back. Then there was a glottis stroke which disappeared as she bal. herself.

Let shlders hang like ear rings, end of spine to floor. Pubis up, pull back big toe, ankle bones in

Now no definite attack in tone when back into spine. It depends on how much back into spine you are so that neck and upper spinal muscles are not supporting wgt of shlders and ribs. Then more back resonators are used. There was a more brilliant quality in first tone because she was pressing in anterior resonators which hits you instead of giving floating tone. Amplification of volume comes not from forcing but from using all the resonators. Start low down by getting structures balanced.

To avoid glottis stroke lift shlders to get full maxm value of cavity in back at level of 1st rib, which is an important resonator lost in the glottis stroke. Use ribs like spread fingers, R.& L. like fan tail dove. Lift shlders off spread fingers.

As she sang she pulled up on scalenus and the veins stood out on neck. When taking a short step she walked better than she stood, but on a long step she cld not shift her wgt evenly because of the tightness of the quadriceps on the R. and the ham strings on L. In shifting wgt from R. to L. she swayed way to L.

March 27,1930

Normal Class Miss Sweigard's Pupil on table

L

Diagnosis brought to class. Appendectomy and gall stones removed. Blood pressure below normal. Neuritis on rt side. Xray show adhesions, dizziness, nausea and fainting spells follow lying on R. side. She is afraid to lie down without very high pillows. Never had mastoid or ear abcesses.

Lifting head so high injures back, helping to cause neuritis/ Use instead a hospital bed or knee rest, so allowing spine to to slant gradually and preventing the pushing of the sternum into the stomach and pushing back in dorsal and cervicle as tho there were a peg in the dorsal region wi a stretching of the spine below so pulling on the adhesions. There shld be no drag in the spine. See then what is left for organic difficulty Put pillow under knees, eliminate one strain after another from the spine. See then what is left for organic difficulty.

Get legs better balanced. Take the strains off the lumbar, thoracic and cervicle spine. Bring ribs into spine.

Breathe, blowing out thru the teeth, while operator draws arm across body decreasing rib case. Still breathing down into pelvis, place one hand under dorsal region and shake ribs, causing jerky exhalations. Same wi both knees bent up and held first on one side and then other. Same wi both arms way over chest.

Lift head, fingers under skull. Let shldrs down while holding head up. Remove pillows. Breathe, pressing on sternum on exhale in rhythmically. Keep breating as head is lowered for a few seconds. She cld relax but she released in back so head cld be lowered. Fingers manipulate in back of mastoid. She was afraid to roll head to left, slightly dizzy.

Worked under lumbar spine. The first rib and clavicle on the side were so tight cld not be palpated. Much interference wi circulation and lymphatics.

Many complications in structure. Her hands show circulatory disturbance. Her legs also show it. There is a backing up in the lymphatic. Nerves are being poisoned. There is a circulatory and organic as well as a mechanical difficulty.

With the circulatory disturbance, adhesions, possible aneurism, and a bad psychosis.

Shoulder movements

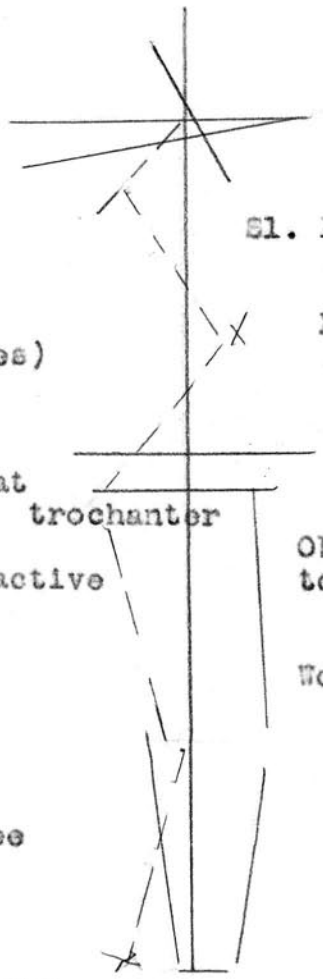
Movements in 3 distinct lines of direction, independent of rib structure. With vertebral border of scapulae parallel to spine. Draw line up to ear, (not with arm) now straight down ribs parallel to spine. There is only a passive pull on scalenus, no active work. Use the scapula muscles. Get an idea of the length of line. Let the scapula travel slowly that distance.

Now bisect that line and drive the shlder into the ceiling. Don't use more muscles than necessary. Continue to shrink ribs into spine., Keep shoulder superimposed. This shld be done in singing to free jaw and shoulders from throat,-to give an open throat.

Normal Class
R. Albert Griffeth on table Miss Todd diagnosing
Age 13

Apr. 10,1930

L



Head to R.

Upper trap. tight

Pect. Major tight
" Minor tight
Scap. muscles tight

Sl. L. functional curve

Lower ribs

R. abdomen firmer (obliques)
R. ilium high to ceiling

above great trochanter

Obturaters tight without sartorius development

Psoas and sartorius more active
R. better centered

Wobbled when pressure was applied

R. knee higher

Inner knee

above outer ankle

Marked kyphosis with a broken curve, dowager's hump above and posterior 12th. This broken curve in the middle of the thorax gives a posterior 4th and 5th lumbar when lying on the table. The short distances balance each other so in standing the ilia are better up than might be expected. Correction: ~~———~~ Standing: Think of inside of ankles, brace them in. Settle back of ankle. Lift shlders to ears, loosely. Drag a long spinal tail. Narrow ribs about the 10th. Again bring shlders up to eyes. This springs dorsal back. Suck ankle bones toward knees. Stretch both fingers forward. Hang the center of the head from a hook. Drag the tail, breathe way down.

Correction on table: Drop down to table.

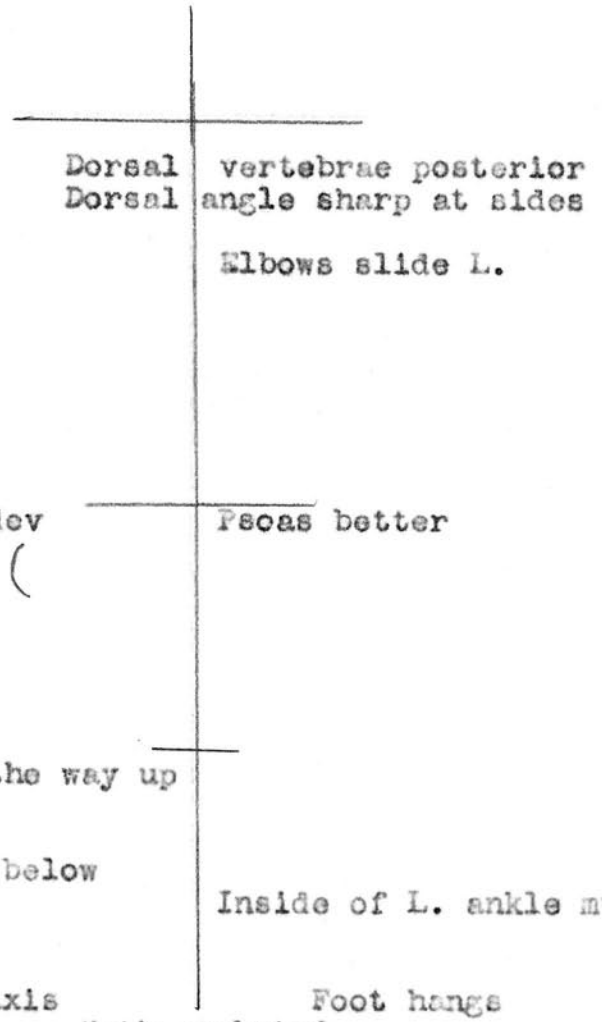
Raise rt leg and balance it in acetabylum. Make the 12th come forward to belt buckle without increasing pressure at sacrum. Pull rt.leg up to belt buckle. Stretch rt. fingers diagonally across body. Lift Rt shlder up to eye, widen the ischia, tap floor 3 times wi left foot.

Lifting R. shlder off allows L. upper trapezius to slack off and helps pull cervicle into line. Pricking fingers thru releases arm muscles. Bending rt knee up connecting it with 12th crosses obliques releasing them and making psoas, transversalis, iliacus and linea alba shorter.

Repeat , Balance T. leg, pull 12th to belt buckle
Bring upper thigh into belt buckle and buckle to 12th
Stretch R. fingers but not shlder. Lift shlder to eyebrow
Lift 12th out of my hand
Widen ischia
No knee work.

Normal Class April 10,1930
Miss Spillins on Table, Miss Todd diagnosing

R. L



In standing she wld have sway back. She never gives forward in upper lumbar but gives at 5th. As she gives at 5th she wld give under skull. She braces wi ribs thru latissimus dorsi, holding ribs low and wide. She probably crosses rt leg over l. Sartorius is offset by pyriformis and obturators which wld be more developed. This helps to balance leg and prevents pushing out of hip keeping trochantor more even. Latissimus is saving the situation. Twisted pelvis, lumbar prominent in back wld have resulted if braced ribs had not held spine straight. If ribs were not low there wld be disturbance and ~~pulls~~ pain in lower back, with no solidifying of inner side of lumbar curve.

The legs balance in socket thru outside pulls and pelvis has tipped.

The simplest way to strengthen pelvis and to centralize, swing of legs from spine is to work on face. Place pillow under abdomen and also under neck so head rests on side of forhead but neck is supported.

Draw ribs together narrowing back. Now curves are reversed. The ligs. have not given way in lower dor & upper lum. Connect front of pubis to front of 12th, draw 13th far into body till in plane wi pubis and sternum. Shorten legs from knee to pelvic rim. Give depth of vertebra. Narrow rim of pelvis and widen ischia.

Normal Class Technique
Miss Noyes on table

April 17,1930

Work for centralization. Relate parts to axis and free extremities. In examining for axis get shlder structure out of the way.
To get hand under without rolling patient below her elbows, push down on the upper elbow. This loosens scapula from ribs. Now push hand under, dragging down elbow in line with muscles. In working, not a shlder muscle shld pull. The shlders ~~muscles~~ shld be entirely off. Use iliacus, have no pressure on abdomen, close in on lumbar. (During these directions Miss Todd had her hands on ribs in region of 12th to see if they were being carried out.) Follow tibialis posticus. When you throw the weight into the knee you lose iliacus. Keep 12th forward and 5th back.
Miss Eldred in examining pushed back on R. scapula. This gave wrong lines of force from arm to back of hip, to knee, to ball of foot. Correction: Let scapula slide up spine. Keep sitting in pelvis as in a swing board hung between rotary joints hip joints. Keep 12th forward, pubis up. Don't grip at joints. Have no special pull on trapezius or back of deltoid.

Miss Swiegard lifts with knees almost straight, elbows out (uses elbows) tensor fascia lata tight, also anterior tibialis. Force focuses just above scapula and in lumbar.
Correction: Think ribs away from shlder structure into spine.
Get sense of freedom back of knees.
Increase costal arch. 3d and 4th lumbar more forward
Shorter sides of lumbar. Take wgt off abdomen
Let pelvic rim flare ischia. Acromions shld be wider than elbows
Don't bring elbows outside of shlders.
Relate hands, acromions, top of pubic arch.
She begins to return to her former pattern, to come out in lumbar, to go in between scapula and use elbow. Gather lumbar spine and inner side of pelvis. She is narrow in muscles between legs in back and too wide in front.

Spine shld be long in back to allow all the fibres of trapezius to pull evenly. Widen arm pits. She pulls in on obliques and rectus abdominus, rather than transversalis. Keep arc thru shlder girdle.
Keep rotation free at the heads of the femur. Think a circular motion at heads of femurs with more action and less holding of adductors. The pelvis was supported by abdominal muscles rather than spinal muscles so the spine was stretched. Widen between legs as though sitting on a horse. Now widen shlders and loosen. Then reduce pull between scapulae. Now she focuses lower down.
If holding with abdominal muscles widen at crotch from the back. Narrow anterior spines of ilia. Don't make costal arch wider than you narrow spine.

Miss Simons was directed to toe in, narrow between arm pits, lengthen spine, narrow pelvis in front, close in on anterior portion of lumbar spine, make small everywhere, flare ischia. Shorten big toes, lift shlders and narrow ribs, very long in back and narrow in front.
The lumbar and sacral region was very tight so she was unable to reduce pulls there.

Miss Noyes was not pulling in big toe from underneath. She focused to knees and front of foot because she cld not get inside muscles of pelvis working. The muscles on the outside of the ilia are more active than those on the inside. Using abdominal muscles so rotating pelvis upward nearly closes costal arch.
Corection: You must reduce the abdominal muscles if you are to keep the costal arch open. A narrow beam is necessary to direct the wgt thrust back to the lumbar spine. There must be something from inside to

to direct the thrust backward. The abdominal muscles wont. The abdominal muscles are like a plaster over a poltice. The spine is only about two inches in back of a hand placed on upper abdomen on about a level wi the 12th vertebra.

It is important to keep vertebral muscles free and release horizontal pulls. Give the subcostals a chance to offset the pull of the pectorals. Integrate the center. Sit in a saddle, wider in back and narrower in front.

You must know all seats of weight so all can come back to center, not one back and the other forward.

All inner muscles of the body (when there is no local effort) are muscles of inspiration. Then you drink in air, not suck it in.

Levator anguli scapulae and soft shlder structures are controlled by length of acromion. Acromion shld be more energized than elbow. Elbow may swing outward but shld not be energized. Pricking acromion outward releases teres major.

In winged scapulae the vertebral border swings inward at the inferior angle. To correct, prick acromion straight outward, lenghten a acromion.

Miss Swiegard energized at elbow. To correct prick out acromin. Elbow shld feel like empty sleeve. Feel under clavicle to see if ribs are high. The serratus muscles were very tight. Keep costal angle loose. Loosen knees and coccyx.

Normal Class April 24, 1930

Observations and Conclusions after swinging both legs wi knees straight and dropping them on table.

Miss Simons on table

R. heel was higher. R. external maleolus was higher
L. leg longer and ankle lower
R. rotated outward more
L. foot sprang back toward center more on being dropped to table

As the R. foot relaxed the heels became evener, not so the ankles. A fatigued static condition makes condition last. There is a maladjustment in the R. hip.

When the tension was so bad in the back that there were muscle spasms on pressure, there was a drag on the L. leg. Now she has control over the head of the femur, relieving the static condition. The R. leg was hung up to spine in back making L. leg drag. The dragged leg is improving, not so the the tight one. As the legs were swung the R. leg contracted more and more to protect against the movement.

While Miss Todd held down on R. elbow , she was directed to raise her head while narrowing her ribs.

Miss Muhlfeld on table

R. leg and ankle was shorter. In swinging legs feet remained vertical and when dropped, heels hit table hard showing t ght glutaals. Then her heels evened. Move her legs in all directions so no muscles are more self conscious than others.

Miss Eldred on table.

When her legs were swung she felt pain in the R. sacro-iliac joint. There was too much movement at the 5th lumbar

She was directed to put lemon squeezer on ribs, especially the top 5. Each vert. is a lemon, the ribs the handles of the lemon squeezer. Prick each acromion through. Sharpen elbows until there is more force upward at the acromions than at the elbows. When there was more control on inside there was less movement at 5th and more at the heads of the femora.

Without free movements at femoral joints there will be too much movement transversely of segments above.

There is a twist of the pelvis shown by the hang of the legs. Let her ankles rest on your hands. Pull on ankles downward. The R. seemed to resist both the pull toward the feet and table showing that the tensor fascia lata and gluteal pulled harder on the R. and were free on the L. The greater trochantor was held out on R. R. side of thigh showed rounder and fuller than L. The pull was on the outside.

Psoas, iliacus, adductors were almost equal on both sides.

To loosen fascia lata (not contraction but drag) increase circulation and equalize pulls of muscles under the fascia . Diagonal L.ribs to R. ilium. Equalize muscle pulls on front and back of ilium. R.oblique is probably in static contraction with drag of L. oblique. Strengthen the beam so releasing pulls on outside of bone. Get the adductors into picture of movement of leg.

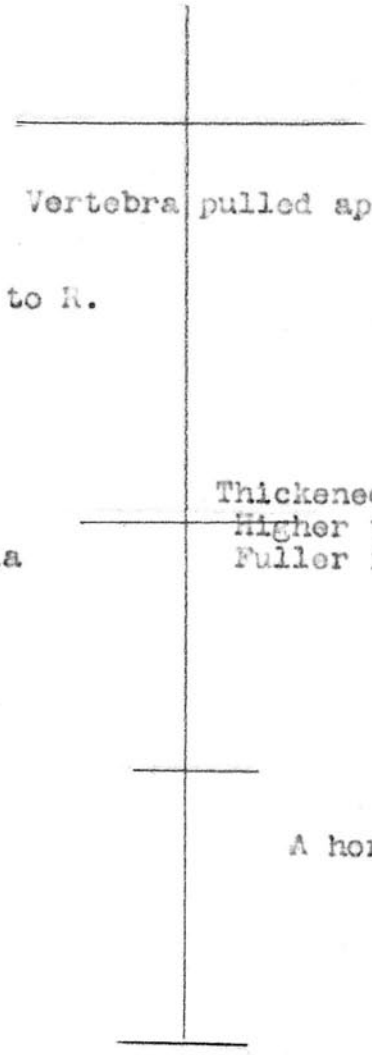
Swing the legs from side to side to find out where the center of the different parts is in relation to the axis. Get at fatigue elements. Any lack of centralization of units passing down axis throws strain on control of units of weight as they tumble in movement. Protection of foot may direct the upward thrust so as to force wgts, which otherwise wld be in alignment, off center.

Normal Class
Miss Dalton on table

April 24,1930

R

L



Bulge over dorsal may come from tight coccygeal, levator ani and tense sacral muscles. Often good to turn on face and breathe down in sacrum.

When there is a contracted muscle showing fullness (as in sterno-clydo mastoid muscle where neck appears enlarged, go with muscle as far as possible. Change the pattern of motion then go in opposite direction.