

General induction allows you to release tissue; once a specific tissue is released, your hands will be attracted by other tissues, until all the abnormally tense tissues of the body have spoken to your hands.

The body of the patient will turn around your fingers, which are used to detect and release the restrictions. As the technique progresses, you will feel a melding between your hands and the patient's body so that they feel like a single entity. The motion will initially become more and more rapid and will gradually slow down as the tissues are freed.

Do not "let go" of the patient too much, as is common in the somato-emotional techniques John Upledger is so fond of. In these techniques, the goal is to physically manifest an emotion by releasing psychological tensions. My only aim is to release visceral restrictions.

In American osteopathy, a similar type of general induction, applied to the cranio-sacral system, is called "unwinding." This is an appropriate term in that the process is similar to the unwinding of a bobbin or tangled telephone cord, during which the primary restriction is revealed.

Relationship between Organs and Emotions

In my earlier book (*Visceral Manipulation*), I did not discuss this vital aspect of our work in any detail. This will be done in this book.

Each organ is associated with a set of specific emotions, which may be evoked and stimulated by visceral manipulation. Mobilizing an organ already connects this organ to the limbic system. However, there is a technique that is specifically designed to make these emotions burst forth and be released. This technique consists of emotional listening followed by induction.

I did not determine these emotional relationship patterns based on some information sources that I derived from other people. Instead, I started out by observing the behavior and reactions of different patients with specific disorders. In this way I was able to establish some general ideas by studying hundreds of people with such problems as ulcers, hepatitis, colitis, and pyelonephritis. Patients with problems of the spleen and pancreas were rarer and I had to be content with only seeing several dozens of these patients.

In the emotional world of humans, nothing is 100% certain. That may be a simplistic attitude, but it is also realistic.

EMOTIONAL LISTENING

With this technique, your hand rests on the body, but the pressure applied is so gentle as to be almost non-existent (where you are close to losing physical contact with the body). The sensation you feel is very different from the normal listening. You may often have the impression that your hand is slightly lifted off the body. During the local physical listening test, your hand is most often attracted deeper and slides inward. During emotional listening, your hand slides superficially, but it always remains in contact with the body, even though the contact may be very slight.

General emotional listening

For general emotional listening, have the patient stand, just like in the general physical listening test. The most difficult part is to always apply a very slight pressure with the hand, and to avoid letting the hand be drawn into closer, more physical, contact.

The following are more general findings of an emotional listening test. You will note

that the body will often undergo a rather fast sidebending-rotation movement.

- *If the patient moves backward*, and sometimes even loses his balance, this means that in their life the past is stronger than the present or the future. These people are so marked by past events that they tend to dwell on them. The reaction is egocentrism and introversion.
- *If the patient moves forward*, the future is very important for them. These people find their balance in a mad headlong rush, often without having tried to resolve past problems. This is a reaction of extroversion.
- *If the patient moves sideways*, they have a strong need for protection. The movement often goes in the direction of the organ which is connected with the patient's problems and emotional reactions. For example, sidebending to the right can show a participation of the liver.

Generally, the organ is not only the emotional reservoir, but also becomes one of the causes of the emotional imbalance, through a loop connection with the limbic system.

Local emotional listening

Local emotional listening helps you to determine if an organ is connected with the emotional imbalance that you have detected. For example, your physical local listening test leads you to the duodenum, and you want to know if the duodenum also contributes to any emotional imbalance. Release the contact with the body so you can go into emotional listening mode. If the hand stays motionless, it almost certainly rules out the duodenum as a major emotional reservoir. Of course, there is always a small emotional connection with each organ, but it is of greater importance when you can detect it with the emotional listening test.

EMOTIONAL INDUCTION

This technique works according to the same principle as physical induction. You exaggerate the emotional listening test by moving with it in the same direction and prolonging it slightly. This test is not done in the standing position because the patient may lose their balance. Have the patient lie down, and put your dominant hand on the skull or on the part of the body which reacted during emotional listening. This induction produces a slight emotional release which helps the patient to better adapt to the problem at hand. You can also work with both hands. Place one hand facing the affected organ and the other on the skull and let the two hands work with each other in concert.

Right before the release, there is often an acceleration of the listening and then it suddenly stops. When the emotional induction ceases, stop the maneuver.

CRANIO-VISCERAL RELATIONSHIPS

There are two types of cranio-visceral relationships: they either correspond to areas of skeletal, sutural, or membranous restrictions, or to the cranium itself, either structurally or functionally.

It is not my intent to define strict types with perfectly fitting pieces, because the body never falls into any pure and logical structure. However, it is possible to come up with a few general observations:

- *Ipsilateral relationships*: skeletal, sutural, and membranous restrictions often occur on the side of the restricted organ.
- *Inferior cranial relationships*: the more inferior the visceral restriction, the higher the chances of an inferior cranial restriction. For example, a hepatic problem often shows up close to the right coronal suture or the right squamous

suture. Gynecological problems most often show up close to the lambdoid suture and the occiput.

Try this experiment. First, carry out a local listening test on the skull of the patient and keep in mind how it feels. Then manipulate an organ and immediately test the skull again. If the local listening causes your hand to be attracted differently and deeper, this area is very likely to correspond to the central cerebral projection of the organ you manipulated. It is fascinating that you can work simultaneously on the organ and its cerebral connection in order to optimize the results.

However, if the second cranial listening stays superficial, the relationship is membranous (fascia, dura mater, muscle, etc.). Only if the palm of the hand is attracted deeper into the cranium is there a cerebral relationship.

TECHNIQUES FOR VISCERAL VISCOELASTICITY

Remember that viscoelasticity is the delayed elasticity of a structure. In the realm of elasticity, a structure normally returns to its initial shape immediately. This return is more gradual in viscoelasticity (*Illustration 1-11*).

To work with this viscoelasticity of an organ means to compress the organ between both hands or against another structure, to prevent it from immediately restoring its initial shape. You control the return to its original shape by letting go gradually. It is as if the organ slowly but surely pushes back your hands. This technique is more effective in restoring the function of an organ than techniques for perivisceral treatment of connective tissue, even though we should not neglect those techniques either. It seems to have an effect on the vitality of the organ.

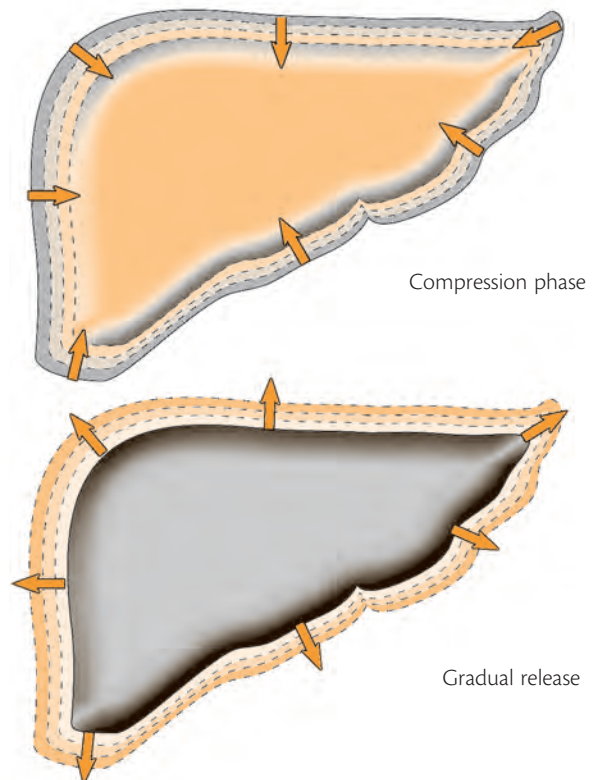


ILLUSTRATION 1-11

Viscoelastic Manipulation of an Organ

Treatment Strategy

In osteopathy, it is sometimes difficult to find the restriction that is the key to the patient's problem. Should one first manipulate the skull, vertebral column, viscera, or limbs? Personally, I do not believe in the inevitable discovery of the primary restriction. There are so many possible causes that we can only hope to discover the "least secondary" of these, even if we refer to it as the "primary" restriction. Nonetheless, the order of treatment is important, and I would make the following suggestions:

Do not begin treatment by an adjustment of the vertebral column, but rather by cranial and visceral techniques. Vertebral manipulation should be performed only after you have tried to free all the other zones, better enabling yourself to find the primary vertebral restriction.

Always look for restrictions of the feet and the sacrococcygeal articulation. These are particularly pathogenic for the visceral system. The importance of the sacrococcygeal joint was discussed in Chapter 11 of *Visceral Manipulation*. I often find foot restrictions in patients with visceral problems. I can think of two reasons for this. One is the neurological connection: many abdominal and pelvic organs are innervated by nerves that also go to the lower extremities, and disorders in one area can therefore have a reflex effect on the other. There are also mechanical connections: visceral restrictions upset the balance of soft tissues which affect the stance and, therefore, the feet. Conversely, problems of the feet may have a cascade effect that upsets the mechanics of the viscera.

When there are several restrictions (particularly in the upper abdomen) or a large restriction (e.g., in the aftermath of peritonitis), general induction is usually preferable. For single restrictions it is better to

work locally. For example, if there is only a restriction of the sphincter of Oddi, you will obtain the best results by working on that area; however, if in addition the gallbladder and right triangular ligament are involved, you should use general induction and move your fingers slightly to work on all the affected areas.

With osteopathy, one begins with local treatment and ends with general manipulation in order to harmonize the reaction of the body. When you start locally, you can be relatively discrete and gentle (thus stimulating the patient's energy), and gradually involve more and more of the body. If a practitioner (particularly a beginner) starts right in with general manipulation, there is a tendency to work too suddenly and quickly; such treatment will exhaust part of the patient's energy without stimulating the self-healing mechanisms. In other words, if you start on a general or systemic level and make a mistake, you will dissipate the energy of the patient without obtaining results and therefore waste that treatment session. However, if you start locally you can gently correct any reaction of the body which you feel is unhealthy while the patient still retains enough energy to allow continuation of the treatment.

The general state of the patient's energy is a very important determinant of the success of the treatment. Of all the visceral manipulative techniques, motility is the one that interacts most with the patient's energy. For this reason, I end treatment sessions by working on motility. Of course, this does not imply that motility is more important than mobility, nor does it allow you to skip treatments for mobility. Without the ability to move freely and smoothly through its anatomical environment, an organ cannot attain good motility.

Osteopathic treatment should not be overly prolonged. Never ask a patient to

confirmed this many times. More importantly, the stomach regains its mobility and no longer opposes diaphragmatic movement. Through release of the diaphragmatic attachments, the muscle and nerve fibers supplying the stomach are stretched less. A prolapsed stomach means that the whole mass of digestive organs is prolapsed. This phenomenon triggers vasoconstrictive reflexes. The disturbed local circulation (particularly bad venous circulation) causes abdominal pain and digestive problems. Results from visceral manipulation are usually very good in such cases.

Recoil

Recoil can be used when the stomach is unusually sensitive and prolonged pressure is painful. When utilizing recoil, you must treat all parts of the stomach that require work. It may be necessary to shift the focus of your pressure so that you can work on both the left and right parts of the stomach.

Mobility

I would like you to review the different techniques discussed previously (*Visceral Manipulation*, pages 95-100). Here, I will describe several direct techniques specifically directed to the superior attachments of the stomach, which are very reflexogenic. These techniques consist of mobilizing the attachments on frontal, sagittal, and transverse planes.

INDUCTION

Manipulation of the stomach mainly works with the following two areas:

- *Gastrophrenic attachments:* For this manipulation, have the patient assume the seated position. Apply pressure to a fairly large area of the superior part of the stomach to pull it toward the dia-

phragm. Then gently relax the pressure below the diaphragm. This technique comprises an induction of the stomach first and of the thoracoabdominal region second.

- *Lesser curvature of the stomach:* Place the palm of the hand on the area attracted by listening; stretch this area several times to stimulate its mechanoreceptors and then perform an induction. This is the most efficient technique for treating scar tissue from stomach ulcers. Generally, the palm slides toward the left.

When performing an induction of the duodenum, treating its descending portion brings about the best results, especially with respect to the sphincter of Oddi's projection.

Have the patient assume the supine position and stand on the patient's left side. First, push the duodenum several times toward the midline, which may cause some tenderness. Then perform an induction.

This should be a standard technique for treating:

- stomach ulcers and duodenal ulcers
- gastric and pancreatic reflux
- problems with the exocrine functioning of the pancreas.

DIRECT FRONTAL TECHNIQUES

Have the patient assume the right lateral decubitus position, and stand behind her. Place both hands on the left hemithorax, with the palms below R5 and the fingers over the anterior costal margin. Mobilize the ribs in the direction of the umbilicus, gather as much of the stomach as possible and put it under the ribs, then stretch it obliquely in a superolateral and posterior direction by bringing your hands back toward you (*Illustrations 4-4 and 4-5*). Repeat this rhythmically, each time trying to gather more of the



ILLUSTRATION 4-4

*Direct Frontal Technique
(Lateral Decubitus Position)*



ILLUSTRATION 4-5

*Direct Frontal Technique with
Double Lateral Pressure*

stomach, until you feel a release. You then continue the technique by moving your hands farther down the ribs and repeating the movement.

Recoil can be performed when you have carried the ribs as far as possible toward the umbilicus. This is very effective because it enables you to free all the soft tissues on the left which surround the diaphragm, the ribs, and the pleura. I often do this two or three times when I begin treating stomach mobility. Alternatively, with the patient in the seated position, sit on her right side and surround her left hemithorax with both hands (*Illustration 4-6*). Strongly press the

ribs inferomedially while supporting the patient against you, and relax suddenly.

A sagittal technique with the patient in the right lateral decubitus position is also possible. Place your right thumb and hand on the posteroinferior part of the left hemithorax. The left hand is in front of the thorax pressing on the 7th through 9th costochondral cartilages. The posterior hand pushes the hemithorax forward while the anterior hand brings it backward, and then vice versa (*Illustration 4-7*). The gastrophrenic ligaments are thereby engaged. Recoil consists of waiting until both hands have moved as far as possible, and then re-



ILLUSTRATION 4-6
Direct Frontal Technique (Seated Position)

leasing them simultaneously. This is an efficient and aesthetically pleasing technique as your hands are working separately. When

they are synchronized well, there is a perceptible beneficial effect on the body.

The direct transverse technique is also performed with the patient in the right lateral decubitus position. Place both hands on the anterolateral aspect of the left hemithorax, fingers toward the midline, thumbs toward the back. Both thumbs at the back mobilize the lower ribs, not toward the umbilicus, but toward the xiphoid process (*Illustration 4-8*). This technique has the advantage of mobilizing the posterior gastrophrenic attachments and the sternocostal articulations. Recoil occurs when the hemithorax is at maximal rotation.

PYLORUS

Direct technique

One direct technique for the pylorus is performed with the patient supine. When the patient has eaten recently, or is tense, the pylorus is found slightly to the right of the midline (*Illustration 4-9*), four or five fingers' width above the umbilicus. It will generally go into spasm as a result of any type of ulcer, or inflammation of the antrum or duodenum. Pyloric spasm stops gastric mobility and motility, and also brings about

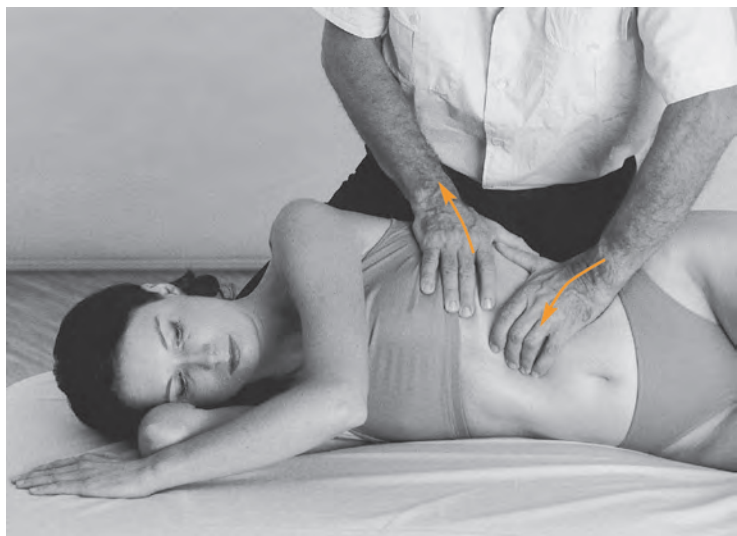


ILLUSTRATION 4-7
Direct Sagittal Technique (Lateral Decubitus Position)



ILLUSTRATION 4-8

*Direct Transverse Technique
(Lateral Decubitus Position)*

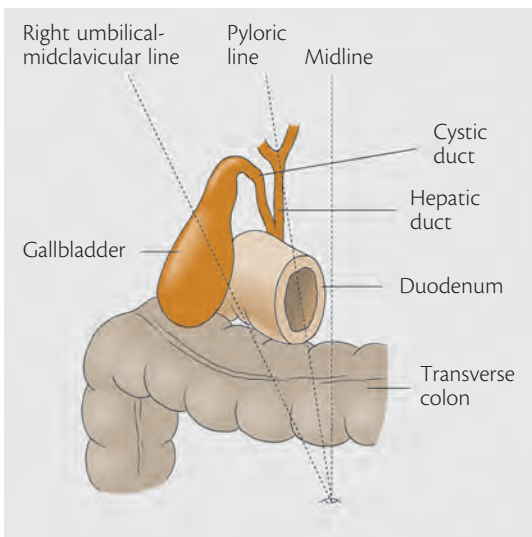


ILLUSTRATION 4-9

Pylorus: Reference Marks

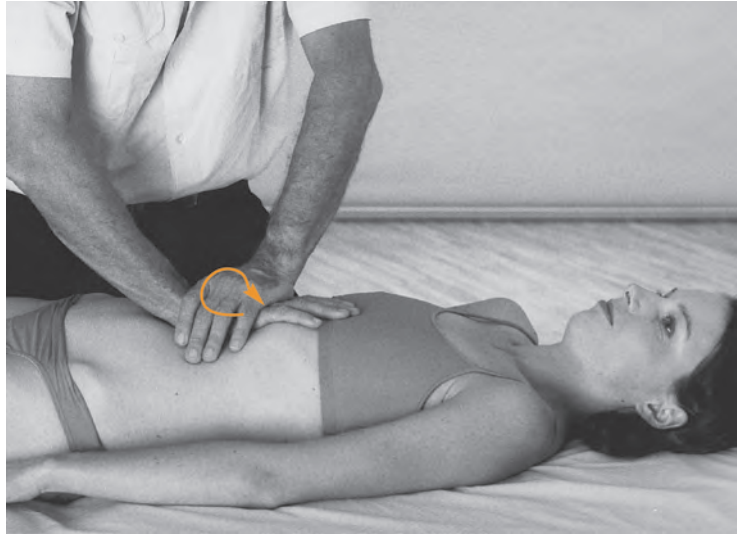
spasms of the descending duodenum, which will disrupt transit of digestive fluids from the pancreas and gallbladder. Direct manipulation is performed with a clockwise and counterclockwise compression/rotation combined with transverse pressure. Bring the pylorus toward the left at the end of the clockwise rotation (opening), and toward the right at the end of the counterclockwise movement (closing) in order to increase the stretching effect and help open the pylo-

rus (*Illustration 4-10*). Recoil is performed when you have finished bringing the pylorus transversely to the right or the left as far as you can. It is also used to “awaken” a frozen pylorus. Usually, best results are achieved when your hand moves to the left at the end of the clockwise rotation and to the right at the end of the counterclockwise rotation. Recoil must be very quick here in order to have any effect. After two or three repetitions, finish with an induction technique.

Another direct technique for the pylorus has the patient in the right lateral decubitus position. Put both your thumbs in deeply and to the left of the midline, fingers on the medial aspect of the descending duodenum. In order to reach this they have to go past the peritoneum, greater omentum, and small intestine. If you are unsure of the location of these organs, begin by looking for the medial part of the ascending colon; against it is the lateral part of the descending duodenum, which serves as a guide for finding the medial part. Your thumbs stretch the pylorus toward the right, while your hands push the duodenal mass to the left. Carry out this technique rhythmically until the spasm ceases and you can move the pylorus without producing pain. This area becomes restricted very deeply and you must be able

ILLUSTRATION 4-10

Pylorus: Compression/Rotation



to explore it at every level. For the recoil technique, let go with the thumbs when they have moved maximally to the right.

The pylorus can be in spasm, fibrosed, even stenosed, the latter condition being manifested by an absolute hardening. The pylorus is a highly reflexogenic zone like the sphincter of Oddi, gallbladder, duodenojejunal flexure, and ileocecal junction. Manipulation of the pylorus stimulates general circulation of the small and large intestine.

If you have problems getting a reaction, don't hesitate to stimulate the other reflexogenic zones. For example, ileocecal mobilization increases gastric evacuation. Good loosening of the pylorus provokes a characteristic noise from evacuation of liquid (sometimes mistakenly attributed to the gallbladder).

Induction

Induction of the pylorus consists of exaggerating the clockwise and counterclockwise movements of the pylorus. Be careful not to impose any direction on the pylorus. You have to follow the direction that the pylorus takes on its own. Induction is finished when your hand is not pulled into rotation anymore.

DUODENUM

The superior and descending duodenum can be manipulated to stretch the antropyloric region, which is often fixed by adhesions following ulcers. A direct technique with the patient in the seated position again starts with subcostal pressure. Place your fingers slightly to the right of the midline at two fingers' width from the costal margin. Go as deep as possible and bring the fingers back upward against the inferior side of the liver. This presses the bend between the superior and descending duodenum against the liver. Leaving them in this position, pull the patient into backward bending. In this manner you create a vertical longitudinal stretching of the superior and descending duodenum. The lengthening is painful in the case of a restriction. After five or six repetitions, the pain disappears. The recoil technique is performed by quickly letting go after you have pressed the superior and descending duodenum under the liver with your fingers.

The same technique as for the pylorus (the right lateral decubitus position) can be used for the superior and descending duodenum. However, the fingers move from the

intersection of the superior and descending duodenum toward the intersection of the descending and inferior duodenum.

Sphincter of Oddi

The sphincter of Oddi, another highly reflexogenic zone, is always fixed with injury to the stomach or duodenum. It is found posteroinferiorly inside the descending duodenum, two or three fingers' width above the umbilicus and slightly to the right. It is reached by going across the descending duodenum, and can be transversely manipulated in association with this organ or by direct compression/rotation. For the compression/rotation technique, exert deep pressure with the pisiform on the anterior projection of the sphincter, accompanied by clockwise and counterclockwise rotation, until maximal pressure is reached. At this point, make the pisiform (or the thenar eminence) slide medially and laterally. Finish the technique with recoil and then induction. Again, if loosening takes too long, use the help of the other reflexogenic zones.

INDUCTION

Because the different structures in this area are so closely interrelated (particularly the different parts of the stomach, the duodenum, and the sphincter of Oddi), restriction of one area usually affects the others. This is the situation in which general induction is particularly useful. General induction is usually performed with the patient in the seated position, your left hand on the left costal margin against the gastrophrenic attachments, and your right hand under the liver near the junction of the superior and descending duodenum. Allow the body to move as in an exaggerated form of general listening and it will manipulate itself in concert with your manual pressure.

REMARKS

As a general approach, I like to begin with the sphincter of Oddi, then the pylorus and cardia, because of their reflexogenic properties. Then I manipulate the stomach on its three planes and, finally, the duodenum. As mentioned at the beginning of the chapter, manipulation of the stomach should always be combined with that of the liver (Chapter 5). Don't forget the left triangular ligament, which often helps restrict the motion of the stomach.

At the end, listen to the cardia and pylorus. They should both have a clockwise rotation on local listening, i.e., be open. If this is not the case, treat (by induction) the one that goes counterclockwise and check them both again. Repeat this until they both go in a clockwise direction. If this does not happen, you have left something undone that relates to the stomach. Using this technique ensures that the entire stomach is working well at the end of the treatment.

Recommendations

Always undertake stomach manipulation with care. In the presence of a muscular spasm or irritation of the mucosa, you may increase the irritation, which will set off the patient's defense mechanisms.

The stomach and gallbladder are very closely related because of their shared innervations. Surprisingly, you may find that successful manipulation of the stomach is followed by development of gallbladder problems, or that improvement in the functioning of the gallbladder is accompanied by new stomach problems, and so on. This underscores the importance of treating these structures together.

You must be cautious when treating the stomach, as 30% of ulcers are asymptomatic. Gastric tumors can easily be confused

case ("uneven liver"), is characteristic of nodular neoplastic infiltrations.

- A liver covered with grooves ("tied-up liver") indicates a sclerotic framework typical of syphilis.
- The presence of 3-4 regular, round prominences which seem to shake on palpation indicates a hydatid cyst.
- One or more rounded, mobile prominences, very painful on palpation and accompanied by fever and alteration of general condition, means a liver abscess.
- A massive, hardened hepatomegaly which does not move with inhalation could be due to a primary hepatoma.

To conclude, if the liver does not have normal consistency and smoothness, or if it is painful outside the vesicular and renal zones, discuss with the patient the possible causes, and make sure that he undergoes appropriate diagnostic testing to rule out cancer and other serious pathologies.

Osteopathic Diagnosis

GENERAL LISTENING

On general listening, the patient (in the seated position) carries out a right sidebending accompanied by a very slight left rotation around an axis which goes through R9-10 on the right. This is also the most comfortable position for hepatitis sufferers.

LOCAL LISTENING: DIFFERENTIAL DIAGNOSIS

Liver

At the beginning of local differential diagnosis, the palm of the hand is applied above the umbilicus, the middle finger resting on the midline, the fingers slightly apart (*Illustration 5-2*). The palm is drawn toward

the right hypochondrium, rotates clockwise, and moves superiorly. The thenar eminence moves slightly into the abdomen and toward the right costal margin.

For the **gallbladder**, the palm only carries out very slight clockwise rotation, while the index finger and thenar eminence are placed on the midclavicular-umbilical line and then deeply under the costal margin.

For the **sphincter of Oddi** and the **head of the pancreas**, the hand pronates slightly so that the thenar eminence moves in deeply on the midclavicular-umbilical line, 3cm above the umbilicus, and is directed at a 30° angle from the transverse plane. At the end of the movement, the hand is only resting on the thenar eminence. For the **pylorus**, the hand moves toward the xiphoid process, moving slightly to the left or the right depending on the position of the pylorus. As a general rule, the pylorus can be found more frequently on the right, at about 6-7cm above the umbilicus.

For differential diagnosis of the **right kidney**, the thenar eminence moves toward the right (*Illustration 5-4*). However, it does not move upward in a subcostal direction. At the end of the movement it is pulled deeply into the abdomen, 2-3cm to the right of the umbilicus. For the **ascending colon**, the hand, with a significant clockwise rotation, moves toward the ascending colon and then into the abdomen. For the **hepatic flexure**, the hand rotates clockwise and moves toward the most lateral part of R10-11.

Differential listening tests for the liver

Local listening shows you that there is something wrong with the liver. The origins of the problem can be diverse, which is why your palm often subtly moves in another direction at the end of the listening test. It is sometimes just a hint of a directional change rather than a true movement (*Illustration 5-3*).

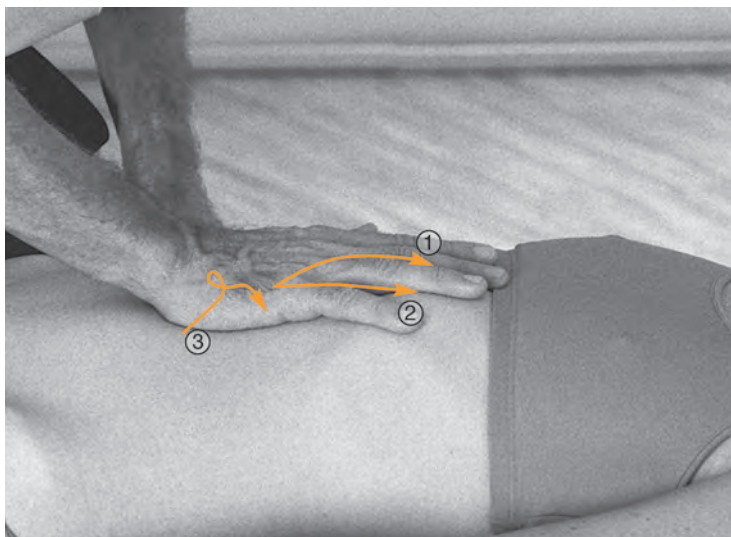


ILLUSTRATION 5-2

Local Differential Diagnosis: Liver

- 1. Liver
- 2. Gallbladder
- 3. Pancreas

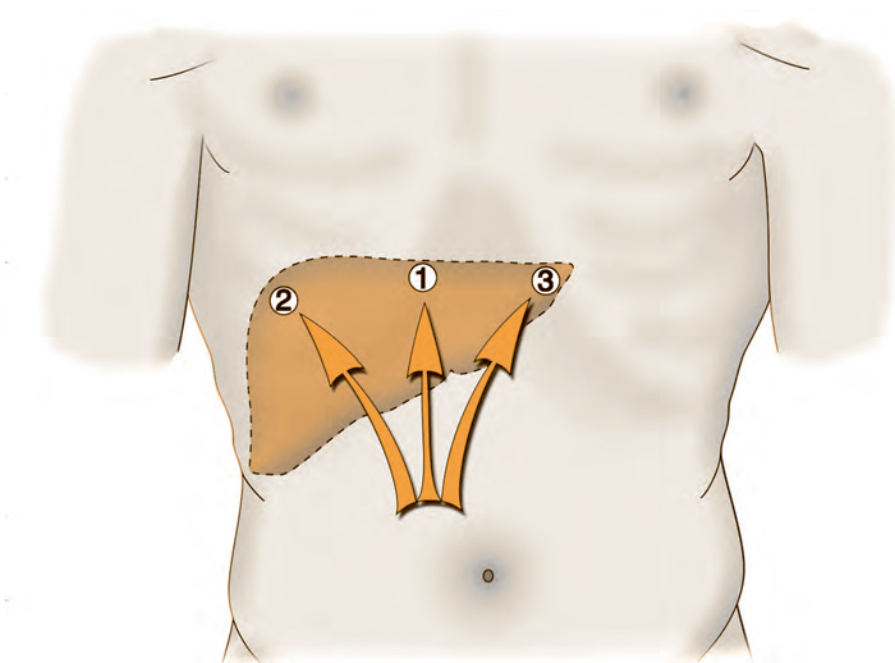


ILLUSTRATION 5-3

Listening Test for the Liver

- 1. Metabolic liver
- 2. Inflamed liver
- 3. Mechanical liver

These movements can be categorized into three main types (not counting the “emotional liver”):

- When the palm of your hand moves over the gallbladder without sinking in much, this points to a *metabolic liver*. These patients suffer from a liver problem due to indulgent eating, excessive drinking, certain medications, or drug use.
- When the palm of your hand moves to the right lateral side of the liver, this is an *inflamed liver*. You will find this in patients with hepatitis or, more rarely, with parasites. An interesting fact is that this area always has some kind of blemish. The memory of the liver cells is truly astonishing. Be sure not to confuse this result with listening for the hepatic flexure of the colon.
- When the palm of your hand obviously moves to the left side of the liver and even crosses over the midline, this is a *mechanical liver*. There is either a mechanical conflict between the gastroesophageal junction and the liver, or these patients had severe trauma, like a car accident or a fall on the back.

In *Trauma: An Osteopathic Approach*, Alain Croibier and I explain that, due to the oblique position of the heart, traumatic forces to the thorax mostly move toward the left side of the body. The highly elastic structure of the heart makes these collision forces rebound along the heart’s main axis. The left triangular ligament and the spleen are located along the way of these collision forces and suffer the consequences of the trauma.

Adson-Wright test

With hepatic dysfunction, this test is often positive, the pulse diminishing or disappearing on the right side, even without left rotation of the head. This positive result may be caused by tension of the hepatic fasciae. If the simple act of lifting the liver improves circulation of the right upper limb, you should look for problems of the liver, kidneys, and hepatic flexure. Remember that these organs are suspended from the liver. If participation of the liver is confirmed, systolic pressure on the right should be restored following successful treatment. In the case of a third degree renal prolapse (a kidney which has lost its attachment to the

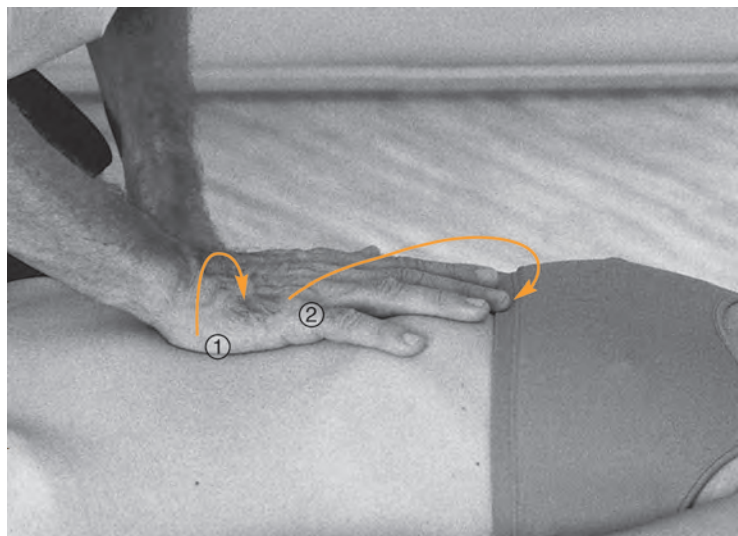


ILLUSTRATION 5-4

Local Differential Listening Test

- 1. Right kidney
- 2. Ascending colon (hepatic flexure)

liver), the hepatic lifting technique no longer affects it, and there will be no effect on the Adson-Wright test.

DIAGNOSTIC MANIPULATION

The area between the inferior edge of the right ribs and the umbilicus is certainly one of the most complex to investigate and often requires inhibition techniques in order to render a precise diagnosis. I shall only describe some sample techniques, leaving it to the practitioner to apply these principles to the organs which are not mentioned.

Inhibition

As one example, let's say your hand is drawn toward the liver without your knowing whether the liver, gallbladder, or hepatic flexure of the colon is involved. With the other hand, look for the motility of the liver and fix it in its neutral position halfway between inspir and expir. If your hand is no longer drawn toward the liver, this could be the source of the problem. Inhibition of the motility in this manner is the most precise method of testing whether a certain organ is or is not the source of a problem.

Now, suppose that inhibiting the liver has no effect on the movement of the hand.

The problem then involves either the gallbladder or the hepatic flexure. Inhibit the surface projection of the gallbladder found on the midclavicular-umbilical line at its costal intersection. If the palm still moves upward and to the right, you can conclude that there is a problem of the hepatic flexure.

The inhibition technique can seem either simple or complex depending on the ability of your hand. It requires long apprenticeship and, once mastered, enables you to be very precise. If others are unconvinced, this precision can be objectively demonstrated using imaging techniques such as fluoroscopy, ultrasound, or scanning.

Aggravation/relief

With hepatic injury, the liver is often sensitive and congested. The simple act of limiting its mobility can aid diagnosis. Suppose that you are hesitating between diagnosing a problem of the liver vs. the pancreas. One technique that will help you determine whether the liver is involved is to press with one hand on the posterior angles of R7-9 on the right (*Illustration 5-5*). If there is no problem with the liver, there will be no discomfort. If there is a liver problem, this

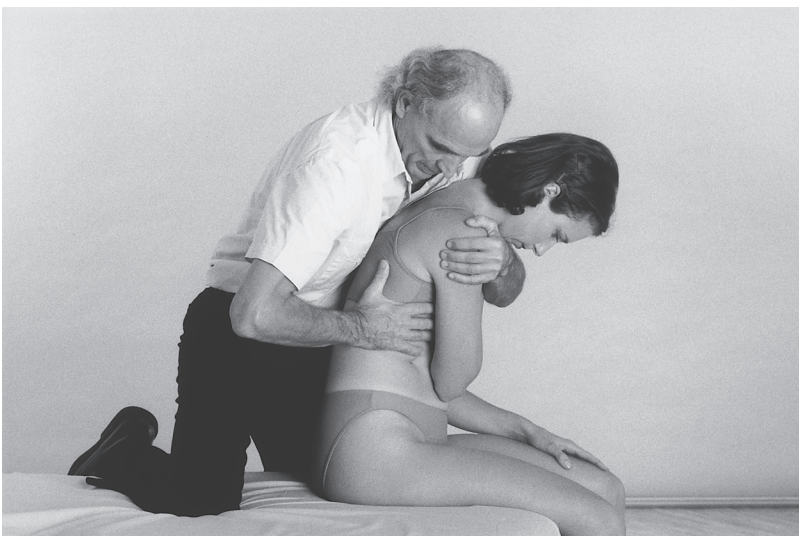


ILLUSTRATION 5-5

Costal Pressure Technique

pressure will be uncomfortable and even painful. Also, in patients with liver problems, as you follow the slight amount of motion that is there, respiration will become more difficult, and the sense of discomfort in the hepatic region will increase. In severe cases, the simple costal pressure causes the patient to hold his breath.

Relief maneuvers are less easily performed than those for the stomach. You can accompany the liver during exhalation and then maintain it. If this relieves hepatic discomfort, you can assume that the liver is the cause. But this would be to ignore all the organs suspended from the liver. I prefer to lift the liver, in conjunction with initial pressure on the posterior and lateral angles of the ribs. With hepatic problems, R7-9 are sensitive to this type of pressure. If the sensitivity disappears as you lift the liver, this supports the idea of hepatic involvement.

Lift

Of all the viscera, the liver is certainly the easiest to move completely. The liver lift is performed with the patient in the seated position and the practitioner behind him. Utilizing the direct subcostal approach, put your fingers below the liver and lift it up (see also *Visceral Manipulation*, pp. 70-71). Immediate provocation of pain signifies that the actual hepatic tissue is affected. If pain is felt when the liver is passively returning to its original position, a problem of its ligamentary attachments is indicated.

With serious problems of the liver (such as hepatitis), Glisson's capsule, the liver, and its attachments all become sensitive. The liver lift is particularly useful in patients with chronic hepatic disorders, in whom the liver is heavier than normal and Glisson's capsule less supple; i.e., the liver itself is sensitive and so are its attachments (as they are strained by the increased weight).

ASSOCIATED SKELETAL RESTRICTIONS

Thorax

Restrictions of thoracic vertebrae and ribs are well-known and fairly characteristic with hepatic injury; they typically involve T7-T10 and R7-10. Costovertebral mobility tests are disturbed and compression of the spinal and transverse vertebral processes, or the posterior angles of the ribs, creates liver sensitivity. A primary costothoracic restriction does not permit any movement during mobility tests, whereas a secondary restriction of hepatic origin may permit limited movement. This relationship between the ribs and the liver does not only go in one direction; a direct fall on the ribs can result in lifelong hepatic problems.

Cervical vertebrae

Liver problems often result in right or bilateral cervical vertebral restrictions (initially at the level of C4-5), while gallbladder problems usually lead to problems on the left. This ipsilateral restriction can be explained both by the interplay of the right cervical/pleural fasciae and the irritation of the right vagus and phrenic nerves. I am more and more convinced that relationships between liver injuries and cervical vertebrae restrictions are due to an irritation of the phrenic nerve, which innervates Glisson's capsule and the triangular and coronary ligaments. The phrenic nerve connects to the posterior cervical plexus which, in turn, innervates the capsules of the cervical articular processes and the intertransverse muscles. This may explain why C5-6 are restricted in patients with liver problems. Initially, these restrictions occur more on the right side and later become bilateral.

Glenohumeral peri arthritis

Glenohumeral peri arthritis is found mostly