

THE  
TREATMENT  
OF DISEASE  
*by*  
ACUPUNCTURE

*Part I* FUNCTION OF ACUPUNCTURE POINTS

*Part II* TREATMENT OF DISEASES

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## Periosteal Acupuncture

Over the past nine years I have evolved an acupuncture technique which I have christened periosteal acupuncture. It is particularly efficacious in diseases of the joints.

The technique is simple, though in some instances it requires a good knowledge of anatomy. An acupuncture or hypodermic needle is used. The needle at the appropriate place, pierces the soft tissue surrounding the joint and then stimulates the periosteum. The periosteum is 'pecked', much as a woodpecker pecks a tree, till the required degree of stimulation has been achieved.

If mild stimulation is required I use a 30 or 28-gauge stainless steel acupuncture needle and 'peck' only lightly for a short time. When stronger stimulation is appropriate a 25, 23, 21, or even 19-gauge disposable hypodermic needle may be used. The hypodermic needles being hollow are more rigid than acupuncture needles so that the 'pecking' may be done with considerable force, sometimes bending the tip of the needle. If one expects the procedure to be unduly painful (which is rare except with a calcaneal spur or occasionally with the greater trochanter or lateral epicondyle of the humerus) a local anaesthetic may be used. I use 2% xylocaine without adrenaline, injected at the surface of the periosteum. 1 cc or less is sufficient and after a delay of about a minute the more violent type of 'pecking' may commence.

In a patient who has say cervical osteoarthritis with resultant brachial neuralgia, a needle stimulating the transverse process of a lower cervical vertebra, will in the appropriate case alleviate the symptoms. If the needle does not stimulate the periosteum, but instead stimulates the overlying skin or muscles, or hits one of the nerves of the brachial plexus (producing a

shooting pain down the arm), the result is in most instances not so good. I have repeatedly stimulated the skin, muscle, or a major nerve trunk over a joint and found it as a rule not as effective as when the periosteum is stimulated in the correct place.

It is well known that there are more nerve fibres and endings in the skin and periosteum than in most other tissues and hence a needle piercing the skin or periosteum hurts more than when passing through the intervening subcutaneous tissue or muscles. I assume there is a local nerve network in the periosteum surrounding the joints and innervating their structures. And I also assume that the nerves in the muscles and skin only communicate with the periosteal nerve network somewhat sparsely. (This theory could explain why stimulating the periosteum of joints has a greater effect than pricking the skin.) On the other hand, if a disease does not involve a joint, stimulating the skin or periosteum have an equal effect for an equal strength of stimulation.

I would be interested to hear of any histological or physiological research that has been done concerning the above theory.

Whether or not the conditions mentioned below respond, depends mainly on the degree and reversibility of the pathological changes. Although the intra-articular bone rarely regenerates, the positions of the bones relative to one another may be altered by varying the pull of the attached muscles, and hence alleviate temporarily or even permanently the patient's symptoms.

### TRANSVERSE PROCESS OF LOWER CERVICAL VERTEBRAE (near Si16)

There are many patients who have pain at the back of the neck, in the occipital area, over the shoulders and down the arms to the fingers. There may be limitation of movement of the neck with crepitus.

A fairly high proportion of these patients may be helped, often even considerably, provided the main symptom is pain. When there are more

objective signs, such as paraesthesia, anaesthesia, diminished reflexes, loss of muscular strength and muscle wasting, the chances of success are considerably diminished, though not hopeless—one's clinical judgement being of paramount importance. I imagine the pain is more easily alleviated than the more objective signs, as pain is produced by a milder degree of nerve root compression and hence quite often the pathology is presumably less severe. I would be interested to hear the comments of others on this theory.

The stiffness of the neck may also be alleviated, according to its pathology. Restriction of sideways movement and rotation is easier to alleviate than flexion and extension.

A 30-gauge acupuncture needle is the best. Do not use a hypodermic needle as these are sharpened in such a way as to produce a cutting edge, which cuts its way through the tissues and blood vessels and may thus produce a haematoma. An acupuncture needle is pushed through the tissue like a wedge and hence only rarely causes bleeding.

The transverse processes at the side of the neck are palpated by pressing the overlying muscles firmly against the bone. The greatest tenderness is usually at the level of the 5th or 6th cervical vertebra on the affected side.

The transverse process of maximal tenderness is selected. The needle pierces the overlying skin and muscles going in horizontally and at right angles to the neck. *For this technique, more than any other, the relevant anatomy must first be studied.\**

It is often surprisingly difficult to hit the transverse process, the needle passing anteriorly or posteriorly. An accurate assessment should be made of the depth of the tip of the transverse process in each patient, and if this

\* The books I refer to continuously are: J. C. Boileau Grant, 'An Atlas of Anatomy', Williams & Williams, Baltimore. Johannes Sobotta, 'Atlas of Descriptive Human Anatomy', Hafner Publishing Co., New York. (In German: Urban & Schwarzenberg, Munich-Berlin). Eduard Pernkopf, 'Atlas of Topographical and Applied Human Anatomy', W. B. Saunders Co., Philadelphia. (In German: Urban & Schwarzenberg, Munich-Berlin). 'Gray's Anatomy', Longmans, London.

depth is exceeded the needle partially or totally withdrawn and reinserted to find the tip of the transverse process. The vertebra should not be 'pecked' too vigorously.

All the lower cervical vertebrae may be stimulated in the above manner. It is perhaps safer to avoid stimulating the transverse processes of the upper cervical vertebrae considering the more intricate anatomy.

### GREATER TROCHANTER (G30)

Mild osteoarthritis of the hip may be alleviated for a few years by needling the greater trochanter. Total replacement of the hip joint is of course the only final answer, but often the degree of pain or limitation of movement does not warrant such a major operation. These mild cases may not too infrequently be helped, but only to a moderate degree. Often the pathology advances and something more drastic has to be done later. There are some patients with pain in the region of the hip joint with a negative X-ray. These patients can be cured, though some of them develop osteoarthritis a few years later.

Although a fine acupuncture needle may be used in the mildest cases or in hypersensitive patients, a thicker hypodermic needle is more often appropriate. Mostly I use a 21-gauge  $1\frac{1}{2}$ " needle. In fat patients a 19-gauge 2" needle is needed. The greater trochanter apparently moves nearer the surface, thus facilitating needling, with the patient supine. On rare occasions a local anaesthetic is advised.

K5 and G40 on the opposite side may also be used. Also G30 and G26. Liv9 ipsilaterally helps groin pain on abduction.

### CORACOID PROCESS (near L1)

The so-called frozen shoulder may be helped or cured by stimulating the coracoid process. If the patient can raise his arm only a few degrees, this method will not help. It is useful though in moderate and mild cases.

The tip of the coracoid process is 'pecked' with either an acupuncture needle or a 25 or 23-gauge disposable hypodermic. The needle is held horizontally and pierces the skin overlying the tip of the coracoid process.

If the above does not have an immediate effect, needling the transverse process of a tender cervical vertebra may help, for there often seems to be an association. The biceps tendon in the bicipital groove may be palpated for a tender area and needled. Otherwise one may use Li15 Si9 Si10 L5 P3.

It is also important to exercise the shoulder by asking the patient to do those movements he cannot do or finds painful. (Swinging the arm in an arc that does not cause pain is in my experience useless.) The painful and restricted movements should be forced to such an extent that the patient has tears in his eyes and the movements should be repeated several times a day. The exercise should not be so severe as to cause aching in the shoulder for more than a few minutes after the cessation of the exercise.

*painful  
movement  
helpful*

#### LATERAL EPICONDYLE OF HUMERUS (near Li12)

A reasonable, but not too high, proportion of patients with a tennis elbow may be helped or cured by needling the lateral epicondyle of the humerus.

The epicondyle is easiest felt with the elbow at a right angle. A 25-gauge needle is the best size.

If the above procedure does not help, needling Gv14 very strongly may help. Sometimes the neck is also implicated, in which case the appropriate tender transverse process of a cervical vertebra should be stimulated. The following may also be tried: Li4 Li14 Li15 all on the affected side.

A cortisone injection is sometimes more effective. I suspect this is due to its strong irritant properties, for the patient often has severe pain for the following two days, whilst with acupuncture the pain wears off in seconds or minutes. It could be said that cortisone injected at the correct place is no more than powerful acupuncture. It has though the disadvantage that

it may cause a small localised area of necrosis, which normal acupuncture does not.

An injection of a local anaesthetic at the appropriate place is of greater benefit whilst the anaesthetic lasts, but afterwards has no greater effect than a dry needle.

If the pain is over the medial epicondyle or the olecranon process, these should instead be needled. As additional stimulation (instead of using large intestine points), one should use in the former instance heart and small intestine and in the latter instance triple warmer acupuncture points.

If the tennis elbow is due to an entrapment lesion, an operation is necessary.

### CALCANEAL SPUR

The pain that may be caused by a calcaneal spur or plantar fasciitis may be cured in a high proportion of patients.

The tender area is localised with strong digital pressure on the heel. A 23 or more often 21-gauge needle is used and 1 cc of 2% xylocain is injected down to the bone. The bone is then 'pecked' with considerable strength in the case of a spur and more gently with plantar fasciites. Not infrequently the patient may have some pain for three days afterwards due to the strength of stimulation that is required for this procedure to be effective, and also presumably due to the heel being dependent and walked on. K3 K4 B62 B61 occasionally help.

### SACRO-ILIAC JOINT (B26)

A large proportion of patients with low backache or sciatica may be helped by needling the sacro-iliac joint.

Mostly I ask the patient to sit in a chair and lean forwards. A 21-gauge needle is inserted in or near the dimple which overlies the joint. The needle is pushed into the joint between the sacrum and the ileum, which often

necessitates touching the bone on either side of the joint till one finds the space between the bones.

This technique works (as with the transverse process of the cervical vertebrae) if the main symptom is pain in the lumbar or sacral area, or is of sciatic distribution. The chances of success are considerably diminished when there is anaesthesia, paraesthesia, muscle weakness or wasting, reduced reflexes, or there are trophic changes.

I assume acupuncture is of benefit in these conditions as it alters the tone of the lumbar muscles, thus altering the alignment of the vertebrae and hence relieves pressure on the nerve roots. I would be interested to hear of readers' comments on this.

In some instances other acupuncture points (acupuncture points do not exist—but one has to describe something) are more effective. My favourite ones at the moment are Liv3 and B62, though there is a choice of about twenty acupuncture points, depending on the distribution of pain or other symptoms and also on the findings of pulse diagnosis.

If a patient has advanced pelvic malignant disease with pain over the sacrum, but anaesthesia of the legs due to involvement of the lumbo-sacral plexus by the tumour, normal acupuncture does not work. Normally with sacral pain one might stimulate B62, but clearly this does not work when the nerve has been interrupted. In this instance an acupuncture point at the opposite end of the body such as B2 works very well.

#### BELOW MEDIAL CONYLE OF TIBIA (Sp9)

The majority of women have a small, tender oedematous area below the medial condyle of the tibia, a position which could be called Sp9. It is at the insertion of the medial ligament of the knee. Sometimes the tender area is 2 cm in diameter, sometimes there are one or several small areas.

The periosteum at this point may be stimulated gently or strongly according to the case.

Acup points  
don't exist  
→



This method is surprisingly effective in many painful conditions of the knee. Whether the pain be medial, lateral, anterior or posterior, it is the point of first choice.

Alternative points are G33 B54 peripatella points.

## POSTERIOR SPINES OF LOWER LUMBAR VERTEBRAE

Skyrme Rees of Sydney considers that the pain of ordinary low backache and sciatica originates from the lumbar posterior intervertebral joints, the hypophyseal joints—this theory does not include genuine herniated intervertebral discs. The nerve supply to the posterior intervertebral joints arises from the posterior primary division of the segmental nerves, being the first extradural branch. Skyrme Rees divided the above nerves, in the appropriate segments, percutaneously, using a fine scalpel,\* a method called rhizolysis.

Norman Shealy of Wisconsin, a neurosurgeon, from whom I first heard of this technique, modified Skyrme Rees' method. Under X-ray control, he inserted, percutaneously, a diathermy probe directly onto the posterior intervertebral joint.

Benjamin Cox of California, likewise a neurosurgeon, modified Norman Shealy's method, which likewise had been a modification of Skyrme Rees'. He inserted, percutaneously, under X-ray control, a dry needle and merely pecked the posterior intervertebral joints.

After the above two doctors told me their methods, I tried to modify them in such a way as to be more easily applicable to the practice of a general practitioner using acupuncture:

Using a 28-gauge 2" acupuncture needle, I needled, without X-ray control, the posterior intervertebral joint. The result was good, but difficult

\**The Treatment of Pain as the Major Disability* by W. Skyrme Rees 1975. Visual Abstracts (Australia) Pty., Sydney.

to perform, except in the thinnest of patients. I was also not too sure that the needle was always in the correct position.

Later I stimulated instead the lamina of the lower lumbar vertebrae: a simpler technique with equally good results.

Most recently I have merely stimulated the posterior spinous process. I ask the patient to sit on a chair, leaning forward, to produce a slight kyphosis in the lumbar area. The posterior spine is palpated and a 28-gauge 2" acupuncture needle is inserted about one inch laterally. The needle is angled in such a way that the lateral side of the spine is stimulated, rather nearer the lamina than the tip of the spinous process. As the spinal cord terminates at L2, I only use the above technique for the lower three lumbar vertebrae. Above this level I use a modification—see below.

A comparison of the results obtained by Skyrme Rees, with the modifications of Norman Shealy, Benjamin Cox and myself is difficult, as all four methods depend to a considerable extent on the skill of the individual doctor. The experience of my own practice and the hearsay of colleagues suggests the results are similar, though I know several doctors prefer one method to another.

G. S. Hackett has for many years used a related technique in which a sclerosing solution is injected into, and around, various ligaments in the lumbar and sacral area, a method called prolotherapy. Some doctors who used these sclerosing solutions for several years, have since tried my periosteal needling techniques, and have found that both methods produce similar results.

## POSTERIOR SPINES OF THORACIC VERTEBRAE AND UPPER LUMBAR VERTEBRAE

The posterior spines of the above vertebrae may be stimulated by a slight modification of the technique described for the lower lumbar vertebrae. Due to the proximity of the spinal cord, I needle the lateral side of the

spinous process somewhat nearer the tip of the spinous process (whilst for the lower lumbar vertebrae it was somewhat nearer the lamina). In the upper lumbar and lower thoracic region I still use a 28-gauge 2" needle. In the upper thoracic area, where the spinous processes are nearer the surface I use a 30-gauge 1" needle, piercing the skin only  $\frac{1}{2}$ " lateral to the midline.

The needle may also be inserted in the midline so that the tip of the spinous process is stimulated. At the moment I am inclined to think that the results of this method are not quite as good as when the lateral side of the spinous process is needled.)

The upper lumbar and thoracic vertebrae may be stimulated in painful conditions, which one thinks are of vertebral origin and of a partially reversible nature.

Stimulating the transverse processes of the cervical vertebrae may often be used for treating pain in the head, neck and even interscapular area down to a level of T6 or 7. Treatment of the sacro-iliac joint, the ischial tuberosity or the lumbar vertebrae often helps in the ordinary types of lumbago or sciatica. Neither of the above methods though, help pain in the lower half of the thoracic area, which is best treated by stimulating the tender vertebrae. Interscapular pain, as mentioned above, is often referred from the cervical area, and should then of course be treated via the cervical vertebrae. Sometimes interscapular pain is of upper thoracic origin, in which case the appropriate thoracic vertebrae should be treated.

## ISCHIAL TUBEROSITY

The patient is asked to sit on a chair and lean as far forward as possible. A second chair may be placed in front of him so that the patient may lean his arms or head on it. The ischial tuberosity is palpated and 'pecked' with a 28-gauge 2" needle.

This method helps selected patients with low backache and suprisingly enough patients with pain in the knee. On a few occasions it helps coccydynia, though at the time of writing (I still do not have a satisfactory answer for most cases.)

## TEMPERO-MANDIBULAR JOINT

The patient is asked to open and close his mouth several times, so that the head of the mandible may be palpated, and most particularly the joint space above it identified. A 30-gauge 1" needle is inserted into the joint space.

This technique may be used in patients with mild pain in the tempero-mandibular joint. Sometimes orthodontic treatment is more satisfactory.

Catarrh of the eustachian tube occasionally responds.

There are some patients who have pain below the eye, along or just below the inferior orbital margin. This may respond to needling the tempero-mandibular joint, suggesting it is pain referred from this joint. On a few occasions even pain anywhere in the cheek, or mandible may respond, possibly even supraorbital pain.

## FIRST METACARPO-PHALANGEAL JOINT

Osteoarthritis may develop in the joint, with a tender nodule over its lateral aspect. Sometimes local needling helps.

## LIVER AND ABDOMINAL SYMPTOMS

One of the commonest symptoms I treat are patients who are 'livery'. I use the word in its French rather than in the Anglo-Saxon sense, which is described in detail in my book *Meridians of Acupuncture.*

This may not infrequently be helped by needling the periosteum or perichondrium of the lower ribs. I usually stimulate in the mid-nipple line between the inferior margin of the breast and the lower costal margin. The nearest, non-existent acupuncture point, would be liver 14.

If the patient's symptoms involve the lower abdomen, the anterior superior iliac spine may be pecked. Sometimes the rib point mentioned above as well as the anterior superior iliac spine are needled.

### STERNUM, MANUBRIUM, ANTERIOR RIBS

The above may be stimulated in mild conditions of the chest involving bronchospasm.

Usually I needle the sternum or manubrium anywhere in the midline. Sometimes I needle in the region of the costo-chondral junction of the 2nd and 3rd ribs.

The needling of ribs may easily be performed in thin patients whose ribs can be palpated. Unless one is completely sure that one has been able to isolate a rib between two fingers, the procedure should not be performed.