When the back hurts – our supporting structure and its problems

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Introduction
The human back is a complicated structure made up of bone, muscles, tendons, ligaments and intervertebral discs. The supporting element is the spine.

The adult spine has four segments and displays in the sagittal plane four typical curvatures which have developed in order to cushion stresses following man’s adaptation to an upright gait on two legs. More precisely from cranial to caudal the following segments and curvatures may be differentiated:

1. Cervical spine – cervical lordosis
2. Thoracic spine – thoracic kyphosis
3. Lumbar spine – lumbar lordosis
4. Sacral spine (os sacrum) – sacral kyphosis

The cervical spine together with the thoracic and lumbar spine are also termed the presacral spine. From a medical viewpoint the transitional regions between the individual segments of the spine are clinically significant as they represent those points most prone to spinal conditions such as disc herniation. The vertebrae in these transitional regions may occasionally display an atypical shape and are then termed “transitional vertebrae”. This is relatively often the case at the transition from the lumbar spine to the sacrum. Depending on how the atypical transition is formed, we differentiate between lumbarisation where there is non-fusion of the 1st sacral vertebra with the os sacrum making an additional lumbar vertebra, and sacralisation where the 5th lumbar vertebra fuses with the sacrum.

The spine is usually curved and integrated into the pelvic girdle in such a way as to produce characteristic angles and axes.

It is interesting that within the weight vector of the human body lie the external auditory canal, the Dens axis of the 2nd cervical vertebra, the anatomically-functional transition zones of the spine between lordoses and kyphoses plus the centre of gravity of the whole body immediately ventral to the promontory.

Of particular interest is the research conducted at the Institute of Anatomy at the University of Erlangen (Professor Rohen, Professor Lütjen-Drecoll) which showed that the normal position of the spine in the newborn is kyphotic without any lordotic segment of the cervical or lumbar spines. This comes from the curved position of the foetus during pregnancy. The position of the spine only develops during post-natal life. Therefore in the first instance cervical lordosis develops for balancing the head involving the neck muscles as they become stronger, and over time lumbar lordosis also as we learn to sit, stand and walk. This continues in strength until the legs can be stretched out into the hip joints. Lumbar lordosis stabilises in the end but not until puberty.

The anatomy of a vertebra
All vertebrae with the exception of the 1st and 2nd vertebrae of the cervical spine have the same basic fundamental design and are composed of the following structures:
- a vertebral body (corpus vertebrae)
- a vertebral arch (arcus vertebrae)
- a spinous process (processus spinosus)
- two transverse processes (processus transversi and processus costales in the lumbar vertebrae)
- four processes in the joints (processus articulares)

The spinous processes serve as attachment points to the muscles and ligaments and in the area of the thoracic vertebrae form the joints with the rib cage. Vertebral bodies and vertebral arches enclose the vertebral foramen. The totality of the vertebral foramina forms the spinal canal (canalis vertebralis) through which the spinal cord runs. Overall the vertebrae become progressively larger from cranial to caudal in order to bear the increasing stress from the weight of the body, while the vertebral foramina become progressively smaller because the spinal cord, which in an adult man ends at the level of the 1st and 2nd lumbar vertebrae becomes increasingly narrower in a caudal direction.

Between the vertebral bodies are found the intervertebral discs (disci intervertebralis), which consist of a central jelly-like nucleus (nucleus pulposus) and an outer fibrous ring (anulus fibrosus).

The spine itself possesses a complicated ligamentous apparatus with the spinal ligaments interweaving to form a stable connective network between the vertebrae allowing exposure to a high level of mechanical stress. Here we differentiate between the ligaments of the vertebral bodies

1. Ligamentum longitudinale anterius (anterior longitudinal ligament)
2. Ligamentum longitudinale posterius (posterior longitudinal ligament)

and also the ligaments of the vertebral arch

1. Ligamenta flava (flaval ligaments)
2. Ligamenta interspinalia (interspinous ligaments)

3. Ligamentum supraspinale (supraspinal ligament)
4. Ligamentum nuchae (nuchal ligament)
5. Ligamenta intertransversalia (intertransverse ligaments)

Even more complicated is the structure of the ligamentous apparatus of the cervical spine and the occipital joints.

Another of nature’s wonders is the structure of the musculature in the trunk and back. The first volume of the textbook Lehrbuch der Anatomie by Benninghoff-Goerttler, perused by generations of medical students, features a very fine picture of the spine and back musculature. Here the spine is compared to the mast of a square rigger where the spine represents the mast which is embedded in the pelvis. The yard arms of the mast correspond to the transverse processes of the spine. Mast flexibility is ensured because like the vertebrae it channels into individual linked members so that the mast acts like an elastic rod, bending to accommodate additional stresses. We know from the spine that even the weight of the head, which is around 4 kg, is enough to change its curvature. So the passive components on their own are not enough to hold the spinal column firmly in place, active elements are needed too in the shape of the muscles.

These muscles brace the spine. They are shown on our model as cables. We differentiate short cables, which go from one yard arm to another and those which go from the yard end obliquely to the mast, known as the metameric muscles. These oblique cables also pass over some of the members and represent the transversospinal system, which forms the main mass of the medial tract of the muscle.

We also see long cables, which approach the yard arms laterally from the ship’s deck as it were (the pelvis). In this way the segment of the lateral tract is visible which has attachment points on the spine. The remaining part of the lateral tract extends
to the ribs, which represent the even longer levers of the spine. We have to imagine all the cables are tensioned (tonus) and the system is at rest. But if one cable is shortened (contraction), the system will move. It can be easily seen from the diagram (shown in the oral presentation) that shortening a cable makes it necessary to readjust all the other ones too in order for the mast to be brought into a new position and maintain it. Many cables have to be loosened and lengthened and others retensioned, i.e. shortened. A single change to a cable therefore affects the whole system. A complicated action by the nervous system is a prerequisite for every movement and by means of a graduated series of impulses with each movement must regulate the whole system. We have a functional system here in which a member cannot be moved in isolation. Each change to a member means a new regulation of the whole.

Let us now look in more detail at the mobility of the spine:

The overall mobility of the spine derives from:

a Lateral flexion (lateral inclination)
b Ventral flexion/dorsal flexion (bending forwards and backwards)
c Rotation (turning movement)

All of the movements of the thoracic and lumbar spines also consist of lateral flexion, ventral flexion/dorsal flexion and rotation. These movements are effected by the musculature of the back, thoracic wall and abdominal wall.

Here in fact would be the place to discuss the pelvis and hips. However, this would go beyond the scope of this paper.

As will be evident from the complicated structure of the back, pathological conditions and problems can become manifest here in many different forms. As a result, back pain and back problems frequently pose a major challenge for all therapists. Back pain and spine pain present a frequent clinical picture and are also a frequent reason for treatment in the practices of GPs, orthopaedists, alternative practitioners and physiotherapists. Back pain can occur as either acute or chronic and is usually very difficult for patients to deal with.

It is particularly important for Bicom therapists to prevent pain becoming chronic and to interrupt chronicity that has already started. Otherwise massive psychosocial effects can threaten the patient as a result of chronic pain, where family, profession, friends, hobby, sleep, holidays and many other areas of personal life can be affected. This is an important point of intervention for Bicom therapists because many patients try different treatments before they come to us for help and often only after a real voyage of discovery through all sorts of practices.

Causes of back pain

Major causes of back and spinal pain include:

- Injuries such as sports injuries, accidents and traumas, cervical spine distortions (whiplash injury to the cervical spine) and similar things
- Operations such as thyroid operations where there is a maximum inclination angle of the cervical spine
- Damage to intervertebral discs and disc herniation
- Inflammation around the spine, the fascias and musculature
- Infections such as borreliosis or even zoster infections
- Congenital malformations and deformities
- Damage to bone, fasciae, musculature, jaws and teeth either caused by a predisposition or hereditary factors
- Bone diseases e.g. osteoporosis
- Tumours
- Damage from excessive physical training
- Being overweight, one of the major scourges of the 20th century.
- Overburdening the spine in general e.g. from lifting heavy items or lifting
incorrectly, e.g. dragging heavy boxes (moving house, post)
- Pregnancy
- Diseases of the pelvis and hips
- Dental and jaw problems
- Damage from inappropriate stress or incorrect posture at the workplace.
- Psychological and emotional stress
- Depressive moods
- Scar interference, e.g. around the bladder meridian
- Blocks
- Interference from harmful substances (amalgam)
- Disturbances around the place of sleep (bed)

Based on this picture it can be seen that back pain can have many different causes which require exact clarification. At this point the information that conventional medical findings e.g. from computed tomography or MRI (nuclear spin) are not necessarily consistent with the patient’s intensity of pain is of importance. We remember a young man in our practice with very severe pain in his lumbar spine who had a completely normal MRI; – no disc herniation, no spinal canal stenoses, but because of severe muscular problems he could hardly move. On the other hand we see a lot of patients who have considerable findings from a CT or MRI but who are pain free and have no problems with their backs and generally do not require any therapy.

It seems important to me here that we treat the whole person and not just findings in isolation.

**How to proceed with patients with back pain**

This is how we proceed in the case of patients who present with back or spinal pain:

1. We have an in-depth initial discussion with the patient
2. We produce a detailed anamnesis (the patient’s previous history)
3. We conduct a thorough examination of the whole back, spine and the whole patient
4. We conduct a bioenergetic examination of the patient’s back
2. We administer treatment using bioresonance therapy (Bicom optima)

**1st stage: In-depth initial discussion with the patient**

As a rule a detailed preliminary discussion is held after an appointment has been made in which we inform the patient about different therapy options and tell the patient about the option of receiving bioresonance therapy. Of course we make it clear to the patient during the preliminary discussion that bioresonance therapy is an IGel or self-paying service and we have the patient sign the necessary documents in this regard.

**2nd stage: Producing a detailed patient history**

At the beginning of every diagnosis there needs to be a good and detailed patient history. This is of course always the case irrespective of whether traditional medical procedures or alternative therapies are applied. The more detailed and thorough the patient history the more successful therapy will be.

A properly conducted patient history includes the following points:

1. The patient’s name, date of birth and address: At the same time it is possible to establish whether the patient lives in a city/town or the country or in an old house with exposure to harmful water pipes (lead) or in an older damp house where for example there may be a question of exposure to mould.
2. Profession and hobbies: This information is also very important in order to know whether the patient uses weed killers, pesticides or herbicides in the garden or for instance welds or solders electrical parts when building model railways or whether there is exposure to high levels
of physical and mental stress and strain in the workplace.

3. Own personal history. The following points are important here:

3a How long have the symptoms been present?
3b Are symptoms persistent or intermittent?
3c Are there seasonal differences for instance caused by the time of the year or time of day?
3d Are there problems when coming into contact with other life forms/animals?
3e Are there any bowel or stomach troubles?
3f Do symptoms occur regularly at certain times of the day (Chinese organ clock)?
3g Do symptoms differ under stress or at the weekends or on holiday, which may indicate problems in managing stress or a disorder of the autonomic nervous system?
3h Before the symptoms occurred were there any particular events or injuries, serious illness or a change in life style or habituation?
3i Are the symptoms worse particularly in the mornings after waking up and do they improve throughout the day? It is possible from these questions to infer clues to a geopathic exposure.

4. It is also important to ask about medication that the patient takes and have the patient show you any and also sometimes to carry out tests for intolerance.

5. Childhood illness and vaccinations: This is an important point in the patient history because vaccinations irrespective of whether they are single or multiple vaccinations can cause stresses and lead to subsequent massive problems with pain.

6. Operations: Important information is provided in this way about possible scar interference fields. Important too is also the question about dental operations and surgical care of lacerations. But small scars too can trigger pain during endoscopies.

7. Allergies, intolerances and stresses. We have seen a huge increase in these problems over recent years. Therefore clarification is very important.

8. Family history: Producing a family history is very important: This should include questions about allergies, metabolic problems such as gout and diabetes (polyneuropathy). Furthermore it is important to ask about cancer, rheumatic illnesses, heart and vascular diseases (erosion of the spinal column in the case of aortic aneurysms) but also the knowledge of diseases of the nervous system such as depression, psychoses and MS.

9. Nutrition and digestion: Eating habits are important including habit about intake of fluid, nicotine and alcohol consumption. Important too is the question about digestive disorders.

10. Dental history: To gain information about pathological currents or stresses in the mouth it is important to enquire whether there are different foreign materials such as gold, amalgam, palladium, etc. present here, furthermore plastic, ceramic or tooth implants. If this is the case a brief reading later of the currents or stress in the mouth makes everything clearer. The condition of the teeth and knowing whether there are dead or inflamed teeth present is important for me in establishing whether possibly a focal toxicosis may be present.

11. Emotional stress: You should always enquire about emotional stress, worries, cares and problems, anxiety caused by unemployment, relationship problems or worries about children. These problems can put people under stress and wear them down so that severe psychosomatic symptoms can occur very often with backache too. An ancient Chinese proverb says “Whoever turns his back to the wall will get backache”. Indeed we cannot always solve the spiritual problems of our patients but we can perhaps gain an insight into why therapeutic efforts for the patient have hitherto been unsuccessful.
12. Special patient history in the case of backache: Especially for patients with backache and spinal pain we clarify the following things in the framework of a discussion about patient history:
- Is the pain acute or chronic?
- How long have the symptoms been present?
- In which region of the spine or back do the symptoms occur and with which movements and at what time of the day?
- Are there events which are related in terms of time to the symptoms of discomfort?
- Operations, injuries, pregnancies, dental and maxillofacial treatment
- House move or change of job
- Psychological and emotional stress
- Which therapies were carried out and in what establishments were these therapies implemented?
- Which treatment techniques and what initial settings can temporarily relieve backache?
- Patient history regarding place of sleeping, such as sleep disorders, nightmares, night calf cramps, sweating, cramps. Possibly to be recommended also are further diagnostics by a building biology practitioner.

3rd stage: In-depth examination of a painful back/painful spine and the whole patient

Next the patient’s back and spine is examined along all its segments for pain, muscle tension, lateral inclination, rotation and flexion and any pathological functions established. It is necessary here that the patient undresses so that it is also possible to examine how the vertebrae interact with each other during these movements. Measurement of the ventral flexion of the thoracic and lumbar spine according to Schober’s and Ott’s methods is important. For this measurement the spinous process from S1 and a second point positioned around 10 cm in a cranial direction is measured with the patient in an upright position.

After bending forward as far as possible the two marks made on the skin move apart up to a distance of around 15 cm (10 + 5cm) (lumbar spine mobility).

To measure the degree of thoracic spine mobility, the distance when standing is measured from the spinous process of the 7th cervical vertebra (vertebra prominens) 30cm downwards and this point is marked. The increase in length with a maximum forward bend can be as much as 4cm (30 + 4cm). Alternatively the minimum finger-floor distance (FBA) can be established with the knees in a stretched position.

When examining the back and spine the following important points should be heeded:
- Motility (mobility)
- Sensibility (perception of feeling)
- Reflexes

Only in this way can the spine and extremities be evaluated. If there is massively acute damage such as pareses (paralyses) then it is worth considering involving a specialist (e.g. neurosurgeon).

After examining the back, an examination of the whole patient takes place to detect scars and blocks. At the same time the mouth should be remembered so that damaged teeth, dental foci among other things are not overlooked.

4th stage: Bioenergetic examinations of the back using kinesiology or tensors or the CTT test set Orthopaedics or Teeth

Before starting the examinations we need to establish a few important points on the unclothed patient. For instance point C7 (the 7th cervical vertebra also called the vertebra prominens) which is clearly visible. Near the centre of the connecting line of both inferior shoulder blade angles can be found the 7th thoracic vertebra and at the level of both iliac crests, the crista iliaca, is the 4th lumbar vertebra.
**KINESIOLOGY:**
A head electrode is connected via a cable to a cylindrical hand electrode which the patient holds tight and held over the individual spinous processes of the spine. All the vertebrae and areas from the back of the head (C0) are tested through to the coccyx (os coccygis). A weak muscle test means a disturbance of energy in the corresponding spinal segment.

**TENSOR TEST:**
The Biotensor is connected via a cable with the magnetic depth probe ("Hammer"). Using the magnetic hammer the spine is tested from the back of the head through to the coccyx. Oscillation up and down of the tensor indicates a disturbance in energy in the spinal region.

**Bioenergetic examination using the CTT test kits:**
To begin with, I will describe the procedure using the CTT orthopaedic test kit. Firstly we test using program 192 (A) the pink "General stabilisation of the spine" ampoule. If this ampoule tests positive, it can be assumed the spine is blocked. Next we test the cervical spine from C1-C7 then the thoracic spine from Th1-Th12 and the lumbar spine L1-L5 using program 191 (Ai). To do this we use the ampoules with the green label and black lettering. If one of these ampoules tests positive it shows you have to search in this segment of the spine for a block. Then using program 191 (Ai) we retest region C1 to the iliosacral joint / hip using the ampoules with the green labels and white lettering. Individual disturbed vertebrae can be located using this test.

Alongside these ampoules other ampoules can be tested from the extended orthopaedic test set, also green ampoules with white lettering. They will provide evidence as to whether the spinal segment is blocked by a scar, whether inflammation is present or whether the effects of lumbar anaesthesia need to be treated.

The ampoules with yellow labels and black lettering can be used to determine whether a block is more likely to be found in the joints, the bones, muscles, or tendons and ligaments of the tissue surrounding the spine. The yellow ampoules are tested again using program 191 (Ai).

Program 192 (A) tests the pink stabilisation ampoules -- (muscles, ligaments, tendons, joints, bones and bone fractures).

Using program 192 (A) we can test the ampoules with yellow labels and black lettering and green ampoules with white lettering for provocation and carry out treatment.

For tooth treatment we recommended the following approaches:
The temporomandibular joints and teeth may of course also be tested by kinesiology or with the tensor, as described above for the spine.

Alternatively, the dental test kit may be used.

It is known there are many relationships between the teeth and organs e.g. to the vertebrae, the segments of the spinal cord and the joints. When using the dental CTT test kit it is best to use the Bicom optima for testing; set up and start program 192 (A) (A = 10-fold amplification / 3 second frequency sweep). The patient is connected to the output only. The yellow tooth ampoules are placed in the input cup. With the help of the dental test kit all the teeth can be identified which need energetic support in some way or the other. In so doing all the yellow ampoules for the right side, the right upper jaw (1) and right lower jaw (4) are tested at the patient's right-sided point lymph 2.

All the yellow ampoules of the left side, left upper jaw (2) and left lower jaw (3) are tested at the patient's left-sided point lymph 2.
The point lymph 2 according to Dr Voll represents the point of measurement of lymph drainage for the upper and lower jaw = point of measurement of the teeth.

Let me show you how we work with the CTT test kit Teeth

All the ampoules in this test set are tested with an A program (192).

We test the yellow ampoules with the black lettering with program 192 (A) initially. Here we test the individual tooth sockets (4 x 8 = 32 sockets). If an ampoule tests positive this means that the corresponding tooth needs energetic stabilisation, nothing further as yet. This tested tooth is then placed in the input cup.

We then test the pink ampoules with the black lettering using program 192 (stress ampoules with pathological information). The ampoules that tested positive are also placed in the input cup.

Then we test the blue ampoules with the white lettering using program 192 (A) and obtain here bioenergetic information as to whether we are dealing with an acute or chronic process. Furthermore we test the ampoule “tooth attenuation” (yellow ampoule with black lettering) using program 192. This tells us whether a tooth socket needs to be attenuated, possibly as a result of a hyperergic reaction.

Finally using program 191 (Ai) we can test the yellow tooth ampoules for provocation and carry out treatment. On Ai we can test and treat the individual tooth sockets if a dental stress has been brought from deep down to the surface and the organism needs a stimulus for final energetic consolidation.

At this point may I once again refer to the relationship of the teeth to the organs and in our case specifically to the joints, the segments of the spinal cord and the vertebrae. These relationships are set out in our manual.

5th stage: Treatment based on bioresonance therapy and the Bicom optima

Bioresonance therapy offers the following options:

1. Simple therapy with tried and tested therapy programs
2. Additional therapy via the 2nd channel of the Bicom optima
3. Application of program series according to the Manual.
4. Therapy with the CTT test kits Orthopaedics and Teeth
5. Application of the double roller electrode

1st option: Therapy with known therapy programs

Simple therapy with known therapy programs is particularly suitable for those practices where therapy sometimes has to be delegated and where it is impossible to care for the patient constantly over a period of 30–60 minutes.

We place the patient on the modulation mat (building up DMI). The input is a flexible electrode in the patient’s area of pain. We use saliva, urine or possibly a drop of blood in the input cup. In addition at the end of therapy we provide each patient with a Bicom chip with the frequency patterns from the therapy session saved on to it.

The following programs have proved beneficial:

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>211.2</td>
<td>Sacrum/coccyx block</td>
</tr>
<tr>
<td>230.6</td>
<td>Nerve treatment, acute (energ.)</td>
</tr>
<tr>
<td>231.5</td>
<td>Nerve treatment, chronic (energ.)</td>
</tr>
<tr>
<td>340.5</td>
<td>Connective tissue treatment, acute</td>
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<td>341.3</td>
<td>Slipped disk, supporting</td>
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<td>381.2</td>
<td>Cervical spine problems (kidney-related)</td>
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<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>390.1</td>
<td>Bladder meridian, acute</td>
</tr>
<tr>
<td>391.1</td>
<td>Bladder meridian, chronic</td>
</tr>
<tr>
<td>422.4</td>
<td>Problems in lumbar spine (intestin-related)</td>
</tr>
<tr>
<td>425.0</td>
<td>Pain therapy (exchange with 426)</td>
</tr>
<tr>
<td>426.0</td>
<td>Pain therapy (exchange with 425)</td>
</tr>
<tr>
<td>433.2</td>
<td>Reaction block</td>
</tr>
<tr>
<td>440.1</td>
<td>Slipped disk, supporting</td>
</tr>
<tr>
<td>502.5 / 502.6</td>
<td>Pain in the back of the neck, one side</td>
</tr>
<tr>
<td>531.2 / 531.3</td>
<td>Pain in the back of the neck, one side</td>
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<tr>
<td>532.1 / 532.2</td>
<td>Pain in the back of the neck, one side</td>
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<td>533.1</td>
<td>Cervical spine syndrome</td>
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<td>533.2</td>
<td>Pain in back of neck</td>
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<tr>
<td>550.1</td>
<td>Worn intervertebral disks</td>
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<tr>
<td>560.1 / 560.2</td>
<td>Problems in lumbar spine</td>
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<tr>
<td>581.1</td>
<td>Spinal block (energetic)</td>
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<tr>
<td>581.2</td>
<td>Spinal segment blocked</td>
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<tr>
<td>630.1</td>
<td>Muscular pain, myogelosis</td>
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<tr>
<td>710.2 / 710.4</td>
<td>Convulsive pain</td>
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<tr>
<td>910.3</td>
<td>Elimination of scar interference</td>
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<tr>
<td>910.5</td>
<td>Elimination of scar interference (Internal scars)</td>
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<tr>
<td>911.1</td>
<td>Nerve calming</td>
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<tr>
<td>911.2</td>
<td>Neuralgia, dragging</td>
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<tr>
<td>915.1</td>
<td>Spinal blocks</td>
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<tr>
<td>915.2</td>
<td>Blocks, releasing (energetically)</td>
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<tr>
<td>922.2</td>
<td>Tissue processes, acute</td>
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<td>923.2</td>
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<td>951.1</td>
<td>Tissue block</td>
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<td>3017.0</td>
<td>Blocks, releasing (deep-seated)</td>
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<tr>
<td>3038.0</td>
<td>Regulating fatty tissue</td>
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<td>3059.0</td>
<td>Headache, forehead area</td>
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<tr>
<td>3065.0</td>
<td>Problems with lumbar spine</td>
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<td>3072.0 / 3073.0</td>
<td>Block in back of neck</td>
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<tr>
<td>3074.0 / 3075.0</td>
<td>Nerve regulation</td>
</tr>
<tr>
<td>3077.0</td>
<td>Nervous system stressed (toxins, pathogens)</td>
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<tr>
<td>10133</td>
<td>Basic program reaction block</td>
</tr>
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</table>

Using kinesiology we test which programs are suitable for the patient's needs and then treat as prioritised by kinesiological testing.

2nd option: Additional therapy via the 2nd channel of the Bicom optima

The Bicom optima gives us excellent options for giving the patient more therapies and for stabilisation using input SUBSTANCE COMPLEXES, for example arthritis, osteoarthritis, degeneration of the discs, fracture, bone healing, scars on skin, organs and bones, polyarthritis, soft tissue rheumatism, acute injuries or strains. We have these programs run alongside normal therapy programs.

Furthermore STABILISATION is possible USING THE HONEYCOMB, here we can apply among other things the CTT ampoules wood, spine, musculature, “Stabilise spine for general”. At the same time we can run the ampoules bone, tendon, ligaments.
Another option consists of administering the WALA spinal ampoules using the honeycomb, e.g. longitudinal, anterior and posterior ligaments, the intervertebral discs and the dura mater of the brain.

Furthermore known preparations from the company Heel (e.g. Zeel, Traumeel) and Devil’s Claw and Arnica preparations can be applied to the patient using the honeycomb and appropriate precious stones may be used such as rock crystal or tiger’s eye.

3rd option: Application of program series according to the manual

The Bicom optima manual describes a series of programs (highlighted in yellow) which are very easy to apply, e.g.

10022  Worn intervertebral discs
10023  Slipped disk, supporting
10026  Tissue block
10027  Blocks, releasing (energetically)
10036 / 10037  Lumbar spine pain
10058  Tissue process chronic
10061 / 10062  Cervical spine pain
10091  Sacrum/coccyx block
10094  Lumbar spine pain
10096  Lumbar spine/sciatica
10107  Pain in the back of the neck
10109  Nerve calming, children
10110  Nerve calming, adults
10111  Nerve degeneration (impaired reflex)
10112  Nerve pain, dragging
10138 / 10139  Pain in back of neck
10140  Pain in the lumbar region
10142  Cramp-like pain
10145  Pain therapy
10183  Spinal blockage
10184  Spinal segment blocked

4th option: Therapy with the CTT test kits

Orthopaedics and Teeth

Therapy with the CTT test kit Orthopaedics takes the following form:

- Conduction of basic therapy with the area of pain at the input (black cable). The output is the modulation mat, the input cup is filled with a bodily fluid such as blood, urine or saliva. An indication-related follow-up program takes place with the patient connected to the input and output.

With the following programs the patient is no longer connected to the input and we test amplification and time.

- Therapy with program 191 (Ai). We treat the patient with tested green ampoules with white lettering and possibly also with a yellow ampoule with black lettering.
- Therapy with program 191 (Ai). We treat with a suitable yellow ampoule with black lettering.
- Then treatment with program 192 (A). The patient is treated with pink elimination ampoules with black lettering and green ampoules with pink lettering.
- Treatment with program 192 (A). The patient is stabilised with 5 element ampoules, e.g. element or meridian related.
- Then treatment with program 192 (A). Where necessary therapy with the attenuation ampoules from the 5 element test kit.

Treatment with the CTT test kit Teeth is carried out as follows:
- Basic therapy with a basic program, pain region at the input, output the modulation mat. The input cup is filled with bodily fluids (e.g. saliva, urine, blood).
- Indication-related follow-up programs with the patient connected to the input and output.

With the following programs the patient is no longer connected to the input and we test amplification and time.
- Therapy with program 192 (A). The patient is treated with the appropriate dental ampoule (yellow ampoule with black lettering) in the input cup. Output is the large modulation mat and the gold finger on a red cable on the corresponding region of the tooth root.
- Therapy with program 192 (A). The patient is treated with pink elimination ampoules with black lettering in the input cup.
- Treatment with program 192 (A). Stabilisation is carried out with 5 element ampoules, element or meridian related, in the input cup.
- Where necessary treatment with program 192 (A). If need be the attenuation ampoule “tooth attenuation” is placed in the input cup.

5th option:
Application of the double-roller electrode
The patient lies face down on the large modulation mat, (building up DMI). Endogenous fluids are placed in the input cup. The double-roller electrode is connected to a long red and a long black cable. Then the therapist rolls the deep back musculature along the entire spine from the sacroiliac joint to the occiput. At the same time the double roller is turned time and again so that each area is in the input and then the output. Unilateral double roller action is also an option from the back of the head to the sacroiliac joint and back again. Usually the patient will experience hyperaemia, increased blood supply, which will be recognisable by reddening of the skin. Useful programs apart from basic therapy are for example programs 915 spinal block release or 581 spinal block. Suitable programs as described above can be found under the heading “Suitable therapy programs”.

In the last few years we have treated many patients with backache successfully and can give most patients a good deal of help with the methods mentioned above. Since we have changed our equipment pool to three Bicom optima, it is of course even easier for us to treat patients. Among other things, the programs in the 2nd channel and also the low deep frequency programs have brought us the most progress in terms of our treatment so that for our backache patients the Bioresonance method is now the method of choice, and these patients in particular with this problem become pain free relatively quickly and can avoid the side effects of medication. Of course it is also important to note that obstacles to therapy and therapy blocks such as stress from amalgam, environmental damage, stresses from electrosmog etc. have to be treated early on in therapy process in order to achieve good results.

I hope I have been able to provide some insight into treating back pain and would like to thank you for your patience and interest.

Literature
Sources and literature available from the author. Email: dr.hammerschmidt@t-online.de