

## Therapy of the spine via the tooth and jaw region

Marcel Riffel, Naturopath and Physiotherapist, Ostfildern, Germany

Dear colleagues,

I should like briefly to introduce myself. My name is Marcel Riffel. I am 33 years old and a qualified physiotherapist. I have been working as a naturopath for 3 years. My wife and I run a physiotherapy practice together in which I now work almost exclusively with Bicom bioresonance therapy.

My intention in this lecture is to show you how I came upon the idea of treating spinal complaints through the maxillo-dental region. To do so I will refer to anatomical, physiological, empirical and energetic background knowledge.

This approach came about by combining my existing knowledge from the field of physiotherapy with Bicom bioresonance therapy.

During my 8 years spent working as a physiotherapist, I was confronted with a wide range of spinal complaints on a daily basis. The treatments I offered initially included conventional physiotherapy, then manual therapy techniques and finally the fascinating world of osteopathy.

As my level of training advanced, so the way I treated back injury altered.

However I was unable to achieve lasting solid success with any of these treatment approaches in the case of chronic recurrent spinal complaints.

I have now been working with the Bicom 2000 since October 2004.

At the start I didn't treat any spinal

syndromes with Bicom but used the device mainly for allergy therapy.

After a short time, however, I became aware that Bicom therapy is more than just an allergy therapy.

I now know that there is virtually no end to the range of complaints with which this form of therapy can be used.

After twelve months' experience of using Bicom, I attended an introductory seminar by Sissi Karz.

The temporomandibular joint (TMJ) is generally treated in the second session within her therapy system. Treating the whole body through the jaw is also a main focus of indication-based follow-up therapies.

Both areas, the temporomandibular joint and the teeth, finally became the basis of my current method.

### **2. Empirical connections between the maxillo-dental region and the postural system**

Interactions between posture and the maxillo-dental region have been discussed for years both in dentistry and orthodontics as well as in orthopaedics.

Many therapists and doctors practising holistically are aware of the connection between the postural system and the maxillo-dental region.

We know of numerous connections between the teeth, spinal segments and organ structures from the empirical

findings of VOLL and KRAMER, both of whom claimed the teeth to be an overlying safety system.

Kinesiologists are also responsible for assigning individual teeth to the meridian systems.

The question now is: „How do the postural system and the maxillo-dental region affect one another?“

The answer lies in the area of the connective tissue, the fascia system, our basic regulatory system.

## **2. General anatomical and physiological principles of the basic regulatory/fascia system**

We are all familiar with PISCHINGER's basic regulatory system. The basic substance or matrix (parent tissue) in which the processes of supply and removal by parenchymal cells take place.

PISCHINGER is not alone in regarding the connective tissue as phylogenetically the body's oldest and largest regulatory system serving the whole body. Osteopathic medicine also considers the connective tissue to be a uniform system running through the entire body. It refers to this as the connective tissue organ or fascia system.

This basic substance (fascia system) represents the anatomical and physiological basis of holistic medicine.

Let us now consider this fascia system (connective tissue organ) from a functional perspective.

## **3. Subdivision and organisation of fascia systems**

The fascia are divided topographically into 3 different layers. We distinguish between:

- a) the musculoskeletal fascia system**  
(contains the superficial fascia layers of skin and muscles)

- b) the visceral fascia system**  
(known as the middle fascia layer, serves to suspend and protect the internal organs)
- c) the dural, or cranio-sacral fascia system**  
(surrounds the brain and spinal cord)

This arrangement is purely didactic in nature. In reality we are dealing with a continuous system.

The fascia are aligned longitudinally or transversally. Within the longitudinally aligned fascia structures are interconnections, transversally aligned fascia systems which are referred to as transversal diaphragms.

## **4. Transverse fascia systems = diaphragms**

These transverse fascia systems are important buffer systems which are linked diagonally with one another (see diagram). They are arranged cranially to caudally as follows.

### **a) Fascia system of the maxillo-dental region**

The 4 upper diaphragms (Diaphragma sellae, Tentorium cerebelli, base of the skull and Diaphragma oris (floor of the mouth)) are grouped together functionally. This fascia system is moved via the temporomandibular girdle, in other words via the temporomandibular joint. This girdle must be regarded as the transverse axis of the whole fascia system which is closest to the cranium. Next follows the

### **b) inlet of the thorax = apertura thoracis superior**

This is largely considered to be the shoulder girdle. This cervico-thoracic diaphragm represents the control centre between the upper hypermobile cervical spine and the lower hypermobile thoracic spine region. The abdominal and chest area are separated by the

## c) respiratory diaphragm

The diaphragm is our most important inspiratory muscle. This thoracico-abdominal region is acted on by cranial forces, e.g. pericardium, and caudal forces, the abdominal fascia and the weight of the organs suspended from the diaphragm.

## d) Pelvic diaphragm (diaphragma pelvis and urogenitale)

Represents the caudal boundary of the transverse diaphragms. In the widest sense, this is taken to include the pelvic girdle together with the pelvic floor. The latter represents the biomechanical control centre between the rump and the lower extremities.

The fascial tension within these diaphragms is essentially transmitted towards the cranial and caudal regions. If a transverse diaphragm is exposed to additional irritations, then as a result the entire statics of the body are affected proprioceptively and mechanically. In other words, incorrect posture and/or spinal dysfunction may occur.

These transverse fascial integration points can therefore be regarded as areas of considerable stress, so-called predilection sites of functional disorders.

Fascial tension frequently ends in the overlying maxillo-dental region, which is heavily integrated into all 3 parts of our fascia system. Abnormal fascial tensions then occur in this maxillo-dental region.

So it may be that the optimal point of entry for regulating fascial tension may be located in a region which is not causing the patient any problems. To put it another way, the symptoms of the complaint manifest themselves in a totally different region.

For a deeper understanding it is necessary to take a closer look at the fascial integration of the maxillo-dental region.

## 5. Relationship between the maxillo-dental region and the fascia system

As mentioned earlier, the 4 upper diaphragms can be grouped together functionally as the fascia system of the maxillo-dental region, which is moved via the temporomandibular girdle. Consequently this girdle is regarded as the transverse axis of the fascia system closest to the cranium.

The maxillo-dental region is integrated into our 3 fascia systems as follows:

- a) Connections to the musculoskeletal superficial fascia system exist ventrally via the hyoid muscle, laterally via the sternocleido-mastoid muscle and the cervical fascia and dorsally via the occipital belly of the occipitofrontalis muscle and the cervical muscle.
- b) The visceral fascia system makes contact with the maxillo-dental region via the muscles of the roof of the mouth and the pharynx (this middle fascial system is attached to the base of the skull).
- c) The dural fascial system is linked to the maxillo-dental region via the masticatory muscles (masseter and temporal muscles). These masticatory muscles are located outside the skull bone; the dura mater of the brain, which is mobilised by the chewing motion, is located inside this bone.

## 6. Irritations to the fascia system and its histopathology

The entire fascial tension can be altered by various irritations. As mentioned earlier, this results in the entire statics of the body being affected proprioceptively and mechanically. In other words, incorrect posture and/or functional disorders of the spine may occur.

The fascia system may be exposed to various irritations:

## a) Mechanical irritations

Somatic dysfunction, morphological changes/degeneration, scars ...

## b) Chemical irritations

Environmental stresses, allergens, heavy metal contamination ...

## c) Psychological irritations

Emotions; cause fascial tension to change

## d) Nervous irritations

Disorders in the central nervous system (CNS), peripheral nervous system (PNS) and autonomic nervous system and

## e) Physical irritations

e.g. radiation and external physical interference fields may also have an irritant effect on the biomechanics of the fascia.

We can now deduce the origin of incorrect posture and its clinical manifestation from this histopathology of the connective tissue (fascia system), arising from a wide variety of irritations.

## 7. Summary

- a) Experimental research and experience have revealed numerous links between the maxillo-dental region and postural system.
- b) The connective tissue (basic substance) represents our largest regulatory system and provides the anatomical and physiological basis for holistic medicine.
- c) Fascia exist throughout the whole body and are linked with one another. Fascial tensions are transmitted cranially and caudally within the fascia system.
- d) The maxillo-dental region is connected very closely with all 3 fascia layers, especially the transverse diaphragms.
- e) If these fascia systems are affected mechanically, chemically, psychologically, nervously or physically, this leads to dysfunction.

- f) These dysfunctions tend to manifest themselves in the transverse fascia systems in particular. This is due to the diagonal linking of these diaphragms.

This means that we find vertebral dysfunction relatively frequently in the area of the sacroiliac joint, L4/L5 in the thoraco-lumbar transitional zone (Th10-L2), in the cervico-thoracic transition C7-Th3 and in the atlanto-occipital region.

As the maxillo-dental region must be regarded as the axis of this transverse fascia system nearest the cranium, it can act upon the regulation of all fascia systems below it and consequently on the associated spinal dysfunction.

It therefore has a considerable influence on the regulation of the entire fascia system.

The concept of the transmission of fascial movement has not been recognised in the medical science in the past due to lack of scientific proof.

This theory serves us as a working hypothesis and basis for our diagnosis and therapy. This working hypothesis permits plausible and practical theories, which can explain the connection between the maxillo-dental region and somatic dysfunction and be utilised for diagnostic and therapeutic practice.

## **8. Aim of therapy**

The aim of therapy is to find the optimal point of entry into this regulatory system. The point of entry must be specifically sought. This point of entry is the best means of setting the body's own regulatory powers in motion and of optimising the balance within the tissue. This means that symptoms in the sacroiliac joint and the lumbar, thoracic and cervical spine can be treated through the maxillo-dental region; provided that the maxillo-dental region is the optimal point of entry into the transverse fascia system.

To find this out, the procedure is as follows:

## **9. Diagnostic results and checks**

Two manual tests are first conducted on the pelvic girdle,

**a)** the Standing Flexion Test or **SFBT**  
(Standing Forward Bending Test)

**and**

**b)** the **SPINE** Test.

Both tests provide information on possible impaired mobility in the area of the sacroiliac joint. This will be described in more detail in the workshop.

Next the thoracic spine and lumbar spine are examined overall.

**c)** Test of passive rotation of the lumbar and thoracic spine through the Pharaoh grasp.

After passively testing mobility in the thoracic spine, the cervical spine is checked;

**d)** **passive rotation of the cervical spine from maximum inclination** (= testing the atlanto-occipital region by locking the lower cervical spine through the tension of the ligamentum flavum and nuchae).

**e)** Now the lower cervical spine is checked using a **passive rotation of the cervical spine from maximum reclination** (= locking between C0/C1

and C1/C2 by tightening the alar ligaments of the odontoid process).

**f)** After checking passive rotation of the lower and upper cervical spine, **lateral flexion** (left/right) **of the cervical spine** is checked.

Abnormalities and positive findings are noted. Attention is also paid to the patient's sensitivity to pain, the endpoint at the end of the movement (soft, hard, firm elastic) and to any evasive movements.

It is now investigated whether the maxillo-dental region can produce any change in the findings. The procedure is as follows:

The patient is asked to touch their left temporomandibular joint with their left hand. The therapist checks the previously positive results manually once again while the patient touches their left temporomandibular joint. If the results are evened out, the temporomandibular joint (left TMJ) which the patient is touching is responsible for the dysfunction in the sacroiliac area and for the vertebral problem.

The left temporomandibular joint is then treated leading to the results being adjusted. This gives us direct access to our fascia system. Now the body's own regulatory powers can be set properly in motion.

If the result does not change, then the patient is asked next to touch his right temporomandibular joint with his right hand. The result is checked as described earlier.

If the pelvic result/spinal result is now overridden, then the right temporomandibular joint is responsible for the pelvic dysfunction/spinal dysfunction. The right temporomandibular joint is treated.

If this second step does not improve the result, the patient is asked to bite their teeth

firmly together. This exerts stress on all the teeth's roots.

If the results even out, this indicates a disorder in the area of the teeth's roots which is responsible for the pelvic dysfunction/spinal dysfunction.

The search is now on to find the affected root region. This can be identified with or without the device depending on the test method.

## **10. Treating the temporomandibular joint or dental root region**

The temporomandibular joint is treated according to the usual procedure as taught in the seminar on therapy with the patient's and substance's frequency patterns. It can be extended further, depending on the result, e.g. using program 331. Programs 630 and 900 can be used as an alternative to program 530, depending on the test and situation as regards indications.

Once the therapy is completed, the results are checked again in the pelvis (SPINE and SFBT). Mobility in the individual vertebral segments is also checked once again.

Improvements in mobility and pain are now observed.

The teeth are now treated using Sissi Karz's method of jaw treatment, as explained on pages 10 and 11 of the user manual. Therapy is applied via the chronic degenerative meridian program. The tooth is generally in the output. The input electrode is placed contralaterally on the relevant main segment-indicating muscle of the meridian system assigned to the

tooth. Therapy parameters and time are adjusted individually. For my part I extend therapy using, in some cases, additional and slightly modified electrode units.

Here too the patient is retested, checking the pelvis and spine once again.

## **CASE STUDIES**

### **Case 1: Male patient, aged 35**

#### Clinical evidence:

*Pain in the right thoracic vertebrae Th6-Th9 (reflex zone of the liver) at rest, accompanied by a sense of constriction and partial dyspnoea on rotation for around eighteen months. X-ray results and MRI normal for age. Previous conventional treatment with NSAR and manual therapy unsuccessful.*

#### Findings:

Extremely painful and limited left rotation of thoracic vertebrae. Result improved on contact with tooth no. 35. Assigned to the liver according to the kinesiologist.

#### Therapy:

Program 311

Input: PMPS (pectoralis major pars sternalis) right

Output: Goldfinger 35

Input cup: urine + sputum

Storage device: 1 chip

DMI: attenuation / int. 5 / 5 mins

Time: 8 mins

#### Result:

*Complete freedom of movement in the area of the thoracic spine straight after therapy without any pain. It was however not possible to relieve the symptoms with lasting effect with this therapy as tooth no. 35 was infected and had to be removed surgically. The patient was symptom-free following this surgical intervention.*

### **Case 2: Female patient, aged 59**

#### Clinical evidence:

*Left coxarthrosis with Duchenne's muscular dystrophy and pain in the inguinal region. Symptoms for 18 months.*

Came to us each week for physiotherapy, took part in regular hip exercises.

## Findings:

Painful and limited internal rotation of hip joint with short lever; positive SPINE and SFBT tests on left side. Findings evened out on contact with tooth no. 33. Assigned to circulation-sexuality.

## Therapy:

Program 241

Input: plate on right buttock  
Output: Goldfinger 33 and  
small modulation mat on left  
inguinal area

Input cup: empty  
Storage device: 3 chips  
DMI: building up / int. 8 / 7 mins  
Time: 17 mins

## Result:

*All 3 chips were stuck to the left hip area and had to remain there for about 9 days. Just 2 days after therapy the patient was completely symptom-free (for about 6 months). No physiotherapy needed during this time. 6 months later a tooth had to be treated again.*

## **Case 3: Male patient, aged 50**

### Clinical evidence:

*Chronic persistent pain in the sacro-iliac joint for years, especially when in dorsal position; previous fracture of body of thoracic vertebra 12, now healed; parafunction of left temporomandibular joint; excessive use of analgesics.*

### Findings:

SPINE and SFBT positive on right; results evened out on contact with right temporomandibular joint.

## Therapy:

Program 530

Input: roll electrode  
Output: old electrode unit from S. Karz  
Input cup: blood and sputum  
Output cup: oil  
Time: 15 mins

Programs 570 (6 mins) and 331 (8 mins)

## Result:

*Patient is now the happiest person in the world as he can move about without pain and, more especially, can lie down and sleep.*

## **12. Concluding remark**

I hope I have been able to raise your awareness through my approach for "Treating spinal and pelvic complaints through the maxillo-dental region." At first glance this system appears rather complicated as you have to think outside the normal lines. This comes easier with time however.

In any case I hope you have fun with this method. Give it a try and enjoy the "thrill" of finding the optimum point of entry into the system.

Your patients' symptoms will improve considerably anyway, a mark of their gratitude.

Many thanks for your attention and I wish you every success with all your endeavours and with Bicom bioresonance therapy.