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# NECK'S POSTURE: WOMAN 54 YEARS OLD SUFFERING FROM DIZZINESS, LABYRINTHITIS, HEADACHE, NECK PAIN, SHOULDER PAIN, CARPAL TUNNEL SYNDROME, TREATED WITH BIOMECHANICAL ANTHROPOMETRIC ERGONOMIC (B.A.E.) METHOD

Tiziano Pacini, Ferdinando Pivetta, Elisabetta de Juliis

Neck's posture: woman 54 years old suffering from Dizziness, Labyrinthitis, Headache, Neck Pain, Shoulder Pain, Carpal Tunnel Syndrome, treated with Biomechanical Anthropometric Ergonomic (B.A.E.) Method. Woman with Dizziness, Labyrinthitis, Headache, Neck Pain,

Shoulder Pain, Carpal Tunnel Syndrome with cervical hyperlordosis treated with Biomechanical Anthropometric Ergonomic Method checked after eighteen months we see the symptoms disappeared and a marked general improvement with change the shape of the skull and facial muscles of mastication.

*Keywords:* Posture, Biomechanical Anthropometric Ergonomic method, TMA, malocclusion, dizziness, labyrinthitis, scoliosis, spondylolisthesis.

JEL Codes: 11, 118

# INTRODUCTION

A 54 years old woman suffering from Dizziness, Labyrinthitis, Headache, Neck Pain, Shoulder

Pain, Carpal Tunnel Syndrome, treated with Biomechanical Anthropometric Ergonomic (B.A.E.) Method, she reported to be in continuous rehabilitation treatment from which fails to have benefits.



Fig. 1.

- 1. Correct position of the cervical spine
- 2. False compressive hump





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As we can observe in Fig. 5, the person has a spondylolisthesis between L2 and L3, and we can observe a rectification of the dorsal part of the spine. In Fig.4, we can observe a deviation of the spine and in Fig.2 and Fig.3 we can also observe a hernia between C5 and C6.

The correct natural position of cervical spine, line 1, and the false hump n.2, are indicated in Fig.2. The false hump was formed due to incorrect tension in that part of the back and always these incorrect tensions cause the wrong position of the cervical spine. That is a very interesting postural question because we have a correct situation but the

lumbar lordosis is reduced and we can note a big tension from lumbar part and dorsal part. They are not relations of coherence enough to cause a spondylolisthesis between L2 and L3.



In fact, the compensation mechanisms, in these cases, make kyphosis more vertical than normal with contraction of the muscles groups to a greater degree in the part closest to the cervical. That contribute to make the false hump. Following this type of tensions is formed a compensatory cervical hyperlordosis. The possible consequence is a high risk of cervical hernias, as in this case, because in this area there are two conflicting needs:

1.Keep the alignment of the head with horizontal;

2.Oppose the spondylolisthesis.

The person, in addiction of what just said, presents an incorrect occlusion particularly low in the back part; this bring the sternocleidomastoid muscles to be the fixer point on the sternum to attract the head down, thus increases cervical tensions (stomatognathic parachute closed). This is not an easy condition to manage for our brain; becomes necessary to use other parts of the muscles including the upper part of trapezius muscles, the splenium and elevator muscles of the shoulder blades. In this situation, as we got to say in previous publications, appears normal to have symptoms like dizziness, labyrinthitis, headache, neck pain, shoulder pain, carpal tunnel syndrome

If we look the person in the image of the front and back, Fig.1, we see only that she tends to move to the left side of the body.

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However do not emerge immediately visible conflicts that are in the spine. Also with Baropodometer we can be misled the values that appear. In fact if we make a mobilization of the cervical we can observe with our hands that we have a reduction of cervical rotation. After we can try to remove old postural engram with the finger pressure method and the effect is an immediate change of pressure visible on Baropodometer.

I would like to draw attention to the fact that in these cases there is the cervical and dorsal system almost stuck in his C7 and T1 point of contact. In this area there is the maximum tension that is necessary to bring the head back and then the cervical lordosis is expressed in most between T1 and C7, C6, C5. Fact is proof that you have a hernia just between C6 and C5.



Fig.6



Fig.7

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This kind of problems are among the most difficult to resolve as the dorsal and cervical, in their mating, form a very critical operational unit for postural engram and its resolution in the most ergonomic way (Euposture).

You can see how it was possible to change the relations between the cervical and dorsal parts from Fig.6 and Fig.7.

In Fig.6 you can see the differences with the application of tangent lines to the face performed in the START and reinserted in the After 18 Months.

Also you can be observed as the dorsal part has become more harmonious and the false hump was reduced in Fig.7 START and After 18 Months.

We will now show the Nuclear Magnetic Resonance images, Fig. 8 and Fig.9, that are of great interest.

However, we must point out that in the unfortunately available images are not exactly the same units as they have been made with different machines in many years away, and then with a little different technologies.

We can still see how shape of the skull has changed over time and so the structure of some masticatory muscles as a result of the different way of working.

In particular we can note that in the images After 18 Months both in Fig.8 and Fig.9 in that there is a greater symmetry between the left and right parts of the skull and, of course, is also visible in parts of the brain, cerebellum and pituitary gland.

The person was treated with Biomechanical Anthropometric Ergonomic Method (B.A.E.), symptoms are cancelled in about a year.

However as you can see from the images even at 18 months of treatment the system is not completely repositioned also because we are in the presence of large stable transformations such as hernia and spondylolisthesis.



# Fig.8

Fig.9

The treatment was composed by the use of custom occlusal decoupling plaques built for the recovery of the physiological heights (stomatognathic parachute open) and, at the same time, with podalic tutors consisting of ergonomic shoes and insoles.

The modifications of the position of the center of gravity included in the B.A.E. method's criteria.

The materials used for the construction of the tutors was chosen to allow a good canalization of postural corrections and, simultaneously, a modest destabilization of the body, to let in a large range of time the possibility of structuring a big number and ranges of motor engrams; this to permit a good and natural growth of the body.

# CONCLUSIONS

After 18 months of ergonomic treatment of posture, we evaluated the results with the Biomechanical Anthropometric Ergonomic (B.A.E.) method parameters.

The situation was:

1. The symptoms disappeared gradually one after the other during the first six months of treatment with Tutors made with Method B.A.E.

2. The person wore tutors for about eight hours a day and still use them (systems constitute to the person a new environment more suitable and natural.

3. The treatment included sessions of postural resets, performed manually and also using Bodyextension bench, these were scheduled as follows: one session per week for the first three months of treatment, one every two weeks for the next three months. Later, each month the person has made more postural reset sessions consist of finger pressure.

4. The results are visible and comparable in Fig. 6,7, 8, 9.

# Materials and methods:

Baropodometer Footcheker Loran Eng., 2012 Biomechanic Anthropometric Ergonomic Method (B.A.E.) Bodyextension bench Postural Center OOD., 2013

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# Contacts:

Tiziano Pacini ul. D. Vatax, 30 -1510 Sofia, Bulgaria Cell. +359878474304, +393355262723, e-mail: tizianopacini@gmail.com

Elisabetta De Juliis via Mulinaccio, 11 - 50032 Borgo San Lorenzo, Italia Cell. +393356477583, e-mail: elisadejuliis@gmail.com

Ferdinando Pivetta via Mazzini, 80 - 33080 Roveredo in Piano Cell. +393201428157, e-mail: pivettaferdinando@gmail.com