

INVERSION OF CERVICAL LORDOSIS²

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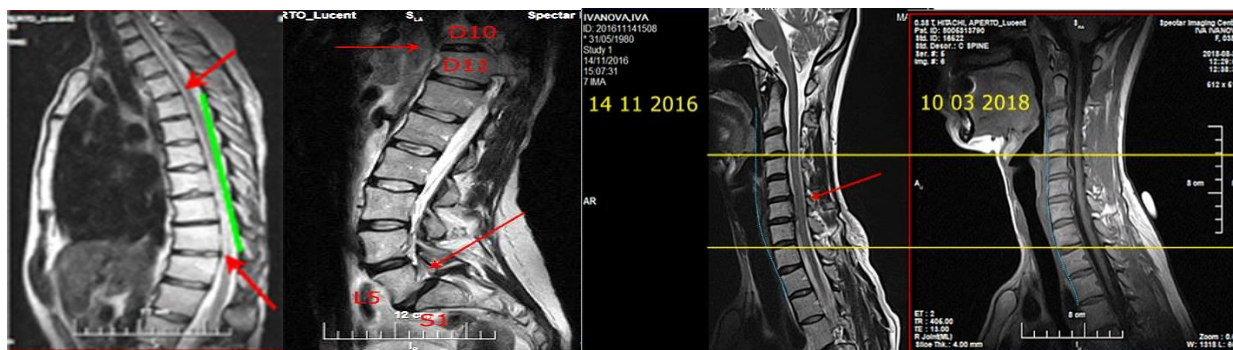
Abstract: Postural alteration of the rachis in a 37 years old female. The person has headaches and frequent low back pains since the age of 20. Treatment checked with the B.A.E. method. The person complained headaches and lumbar back pain. Method: person with negative physiotherapy and postural exercises outcomes, she was treated with the B.A.E. method for 2 years with positive outcomes. She started practicing sports after 8 months of the B.A.E. method.

Key words: Posture, B.A.E. method, scoliosis, headaches and back pain

JEL Codes: I 10, I 20

INTRODUCTION

The person is a female of 37 years old, she arrived with continuous headaches and back pains at the lumbar part of the body. She feels sometimes dizziness. She reports that she does physiotherapy and postural gymnastic but that however the pains are still persistent. We can see from Fig.1 a lateral dorsal RMN from which is underlined a disarmony of the rachis curve which is practically straight with the absence of the kyphosis, in Fig. 2 the RMN underlines a very horizontal sacrum and a curve of lumbar lordosis



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Fig. 1.
EXPOSITION

Fig. 2.

Fig. 3.

Almost all expressed between L5 and S1, with evident morfological alterations of the vertebral bodies, caused by the altered muscular tensions implemented by the necessity of maintainance of the posture. At last we ccan observe on Fig.3 (image on the left) alterations of the placement in the central zone of the cervical rachis with small herniations, while on the right we notice, on the most recent image after the treatment with the B.A.E. method for almost 8 months, a better situation.

The face, the neck, the mouth and all the skull results altered by disharmonious muscular tensions, Fig. 4. On Fig. 5 in the orthopantomography of the occlusal plane we can observe an important misalignment between the dental arches.

Materials and Methods:

Baropodometro Footcheker Loran Eng., 2012

Biomeccanic Antropometric Ergonomic method B.A.E.

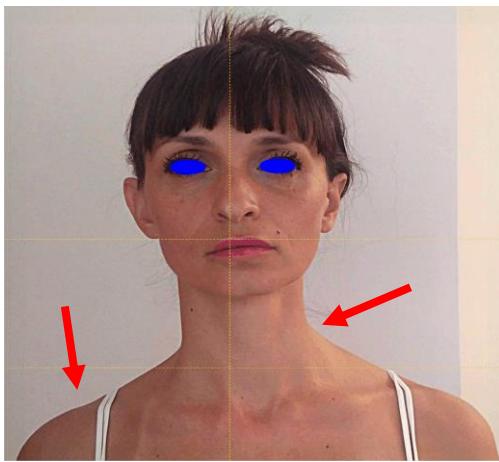


Fig. 4.

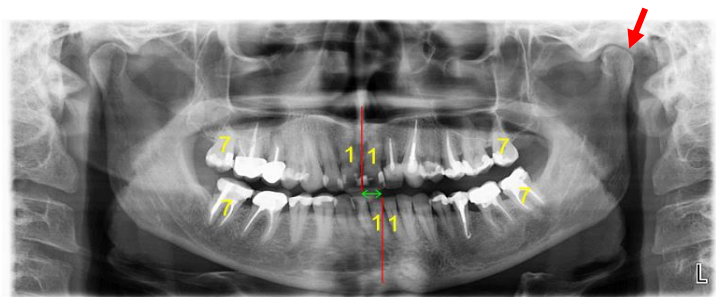


Fig. 5.

The left part of the face shows a shortening, see also the nose which rotates the most contracted area, causing altered muscular tensions which insist on the skull, caused by postural dystonia. The person wore ergonomic interfaces following the B.A.E. method obtaining a spontaneous retreat of the jaw, a repositioning of the pelvis and also a spontaneous reconformation of the skull due to the new antigravity need, gathered thanks to the tutors used by her.

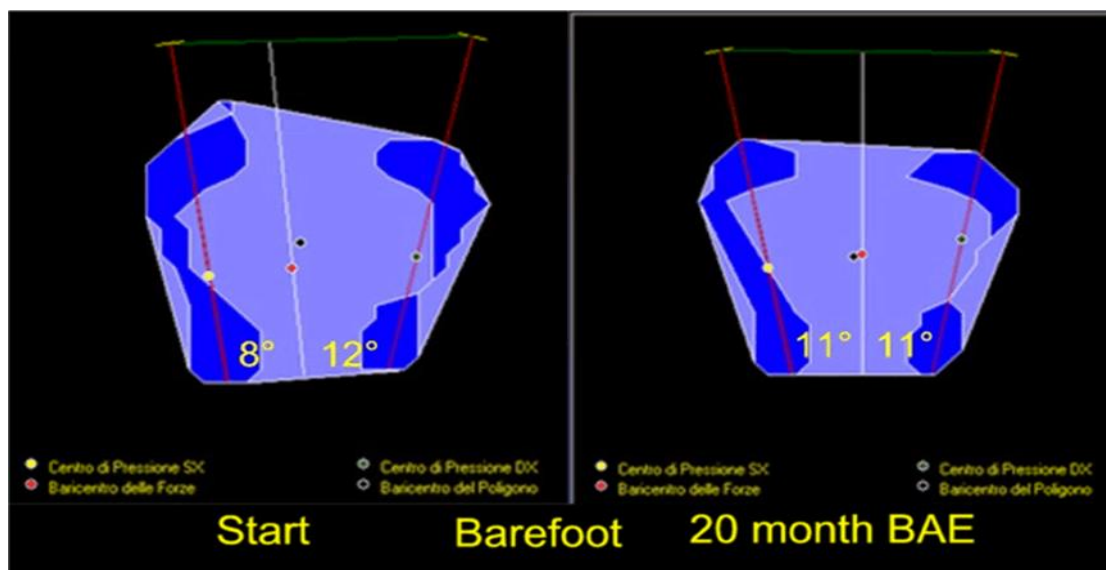


Fig. 6.

On Fig.6 we can observe the baropometrical images in stationary position at the moment of the beginning of the treatment with the B.A.E. method, left image, on the right we can observe how the image shows a greater podalic symmetry and a center of gravity correctly positioned (red point coincides with the black point). Equally on Fig.7, baropodometry during deambulation, we notice a center of gravity in a greater condition of symmetry on the right image.

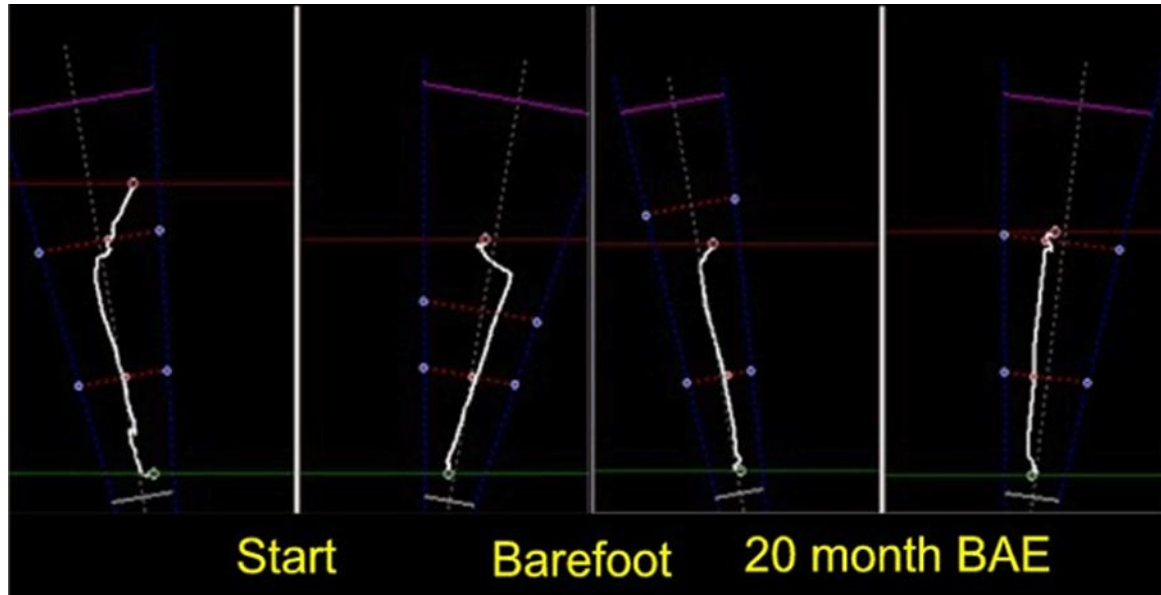


Fig. 7.

A substantial symmetry of the breech apparatus brings a change in the overall locomotor apparatus. All the groups of muscles symmetrical are put in a major armonic position. This allows the body not to be subjected to torsions, caused by countervailing necessities, from some muscles for the maintainance of the postural equilibrium discordant. The pelvis changed the position became symmetric and this force the rachis to stay symmetric in the lateral part and in the three dimension allows a better position of the kyphosis and lordosis curves. In this way that goes to compose the anti-gravity and that involves the body, from the feet to the galea aponeurotica, are found to be in great armony. It remains the nodes of occlusal, acustical perception of the labyrinths and optics. Between all, the one with the greatest impact, which involve salso the labyrinths, is the situation of the occlusal plane.

With the B.A.E. method are inserted on the occlusal plane of the bites which will allow the forces, that press on it, to find the armony that they couldn' previously find because of the incorrect posture and for the implication that this has done on the occlusal plane itself. In fact we can observe on Fig. 4, the labial rhyme, so all of the occlusal plane, results higher on the left side pointing also a greater compression on the internal ear for logic consequence. Observing attentively, Fig. 5, the mandibolar condili we can clearly see the shape of the two is different showing even the different function while they should be symmetrical. The jaw indeed is shifted on the left side dragging with it even the orientation of the teeth. Changing the perception of the environment we should think, not only to the locomotor apparatus and to its improvement, but also to all the series of the advantages that we obtain and that actually are not either considered nor measured but they do exist.

I would not excude that sometimes their effect on the welfare and the quality of life can be greater compared to the advantages of the locomotor apparatus.

In Fig.8 we can observe the anterior images of the person before and after the treatment with the B.A.E. method. In Fig. 9 we can see the posterior side of the body.

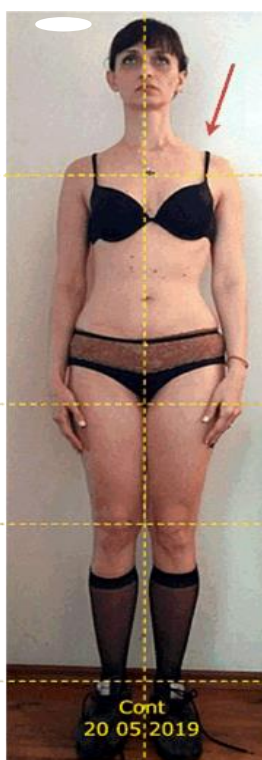
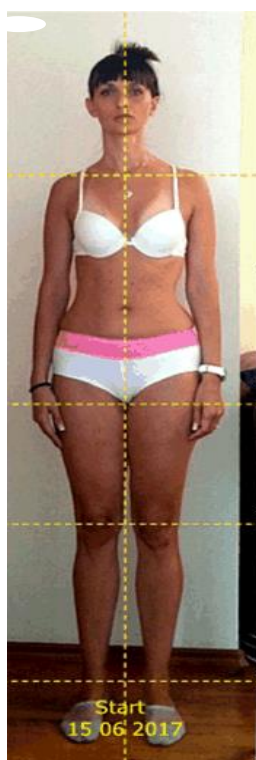


Fig. 8.

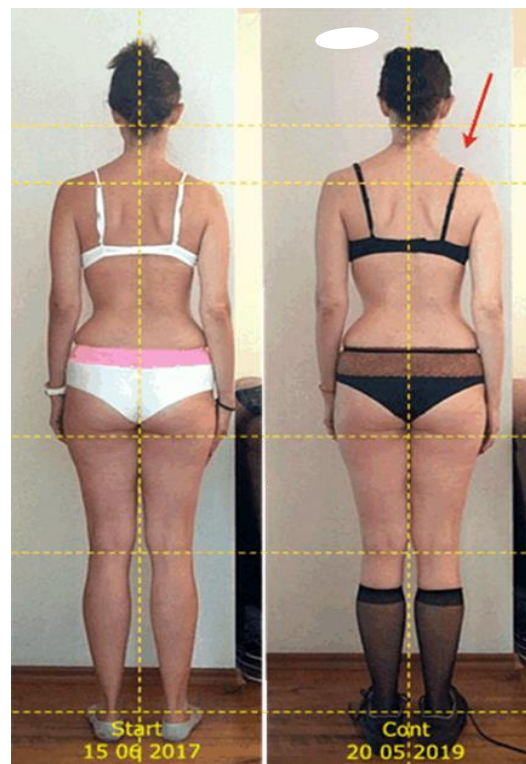


Fig. 9.

The fixed points, taken in order to able to perform a comparison between the images, have been fixated between the medial malleolus, the knees and the pubis. This means that the variation of the height that can be observed on the person, are only related to the part not bound from the fixed points. This means that in reality the increase in height is greater than how it could be observed in the images. The shoulders, pointed out by the red arrow, are now allineated; the muscles of the lower limbs and the weight in their whole became more tonic. We can see that the head is more centered and symmetrical and the labial rhyme is more horizontal, Fig. 8.

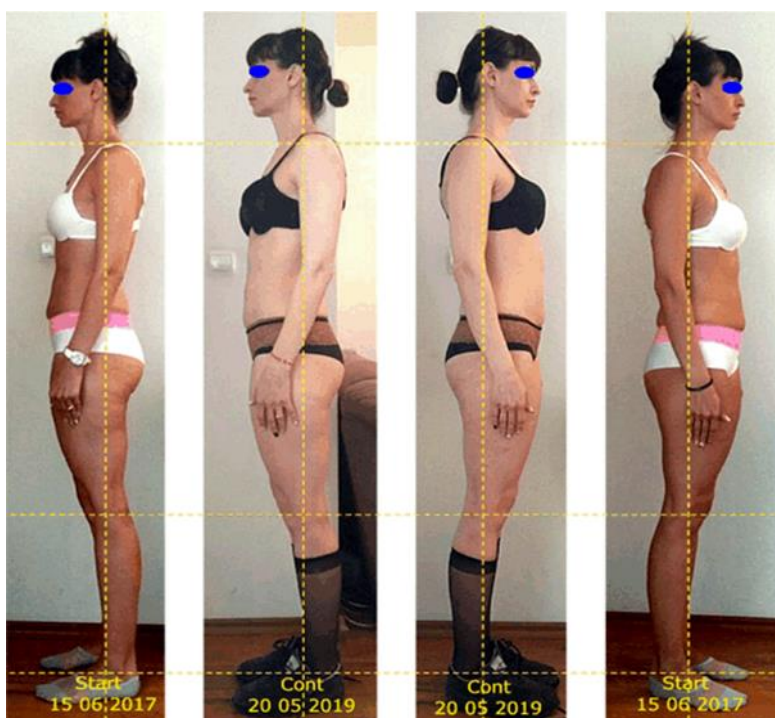


Fig.10.

Fig. 10. shows the side comparisons, we can see a reduction in the rotation of the bust and a great increase and tonification of the all body.



Fig.11.

In Fig. 11 we can see how the occlusal plane is spontaneously modified and the position of the teeth results now centered.

The growing of the body, at least in the greatest part, we can explain it with a reduction of the scoliosis, however it is more difficult to explain the great strenghtening.

We can see that at the growing of the ergonomic efficiency follows a reduction of the energetic consumption, but a reflection has to be done in the searching of endocrinological changes in relation to a different pituitary stress for changed position.

In this particular case we have a comparison between before and after the treatment with the B.A.E. method of how the cervical vertebrae changed towards the physiology, Fig. 12.

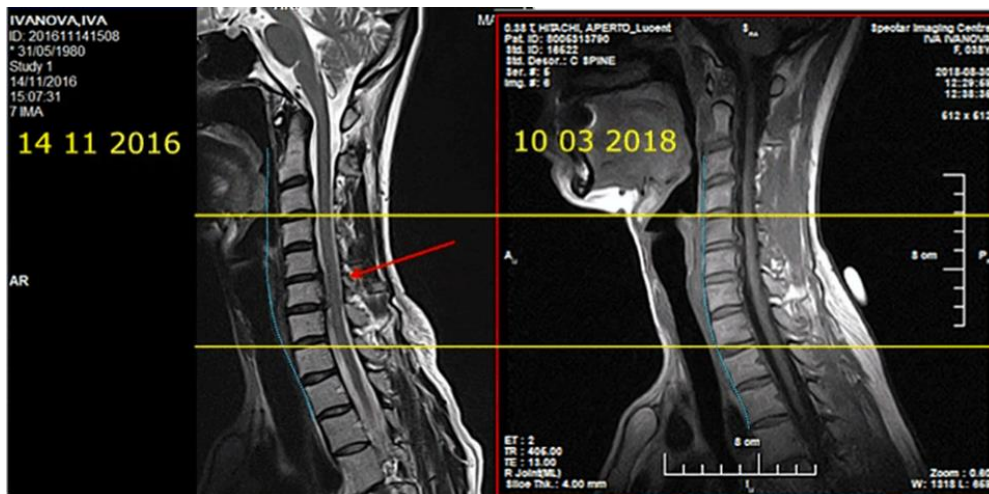


Fig. 12.

The blue line that is the anterior tangent of the carvical tract, on the right image, Fig. 12, position almost physiological, has been brought on the left cervical image. We can observe clearly that the left image departs from the phisiology and indeed we notice that the vertebrae are not armonic. The inversion of the lordosis curve which is known on the left image, included between the yellow lines, cause herniae which compress the bone marrow with secondary defensive effects musculoskeletal apparatus. Note in fact how the muscle bends external are different, more contacted, in the left image and more stretched on the right. This situation of defense have to be observed with attention from the

professional figures which works on the persona s, trying to resolve without a repositioning, means to prevent, at the central control (cerebral) to be able to defend itself risking to do structural damages in the long term.

A variation on the cervical curve, so important, implies also a consequently variation of the dorsal kyphosis curves and lumbar lordosis. The system is impied in its interior and the variation of every part imply the variation of the others and viceversa: from the feet we have checked the pelvis and all of the upper part of the body. Releasing the occlusion we allowed the correct reciprocity of implication between parts.

Below is reported a scheme that allows the comprehension of the whole ideal general postural situation and a correct management of gravity, Fig. 13.

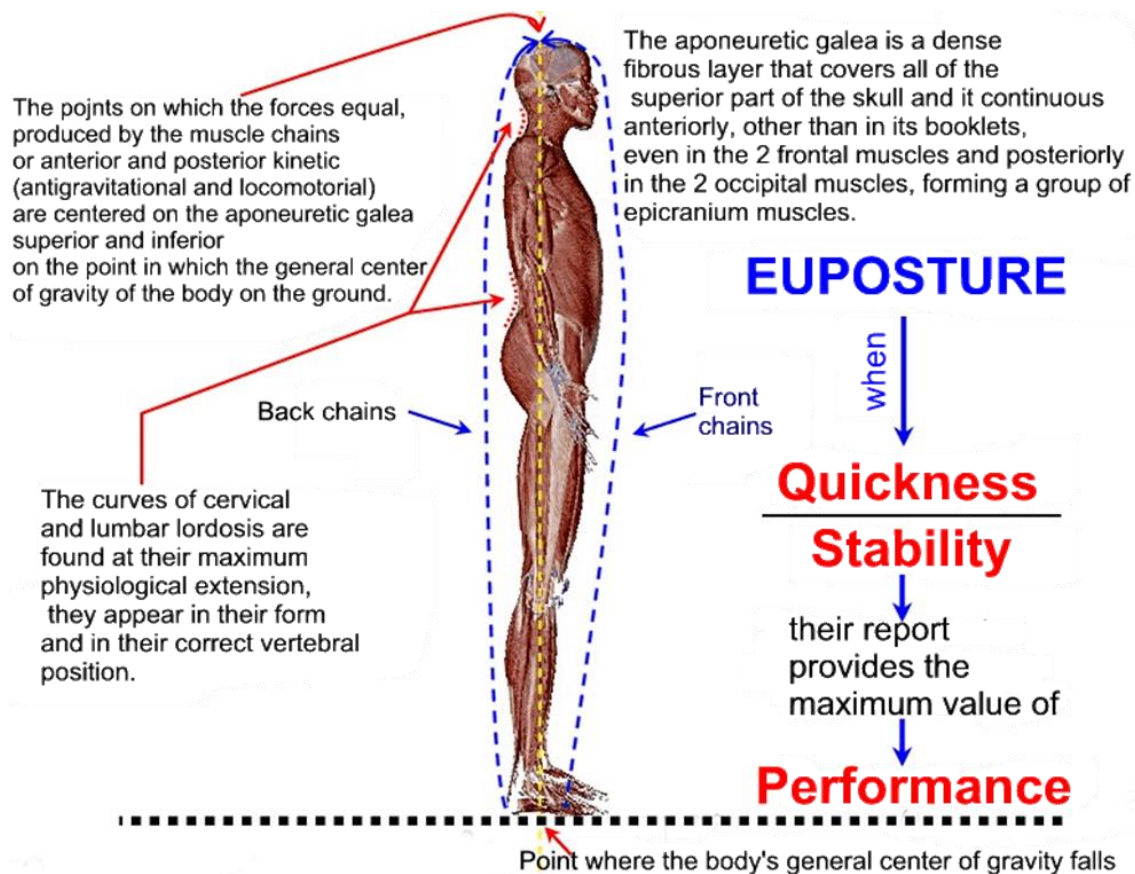


Fig. 13.

CONCLUSIONS

After almost 8 months of postural ergonomic treatment, we evaluated the results according to the parameters of the B.A.E. method.

The situation is:

1. The symptoms of pain vanished completely after almost 2 months of use of the Tutors made following the B.A.E. method.
2. The person says to have worn with great comfort the Tutors daily and is shown by the photographical improvement detected after almost 2 years.
3. It is proved how in some cases in which the classical methods of rehabilitation have been useless, is possible to obtain results never achived until today.

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