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# IMPLICATIONS OF THE POSTURE AND OF THE GRAVITATIONAL FIELD MANAGEMENT IN THE FIBROMYALGIA AND IN ITS SYMPTOMS OF PAIN AND PANIC 5

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Abstract: A 48 years old man who started the treatment with the Biomechanic Anthropometric Ergonomic method 18 months ago, referred pains diffused to the back and neck. The pain caused him panic attacks. The pains have attenuated but not subsided yet, the structural change is very important and it's detectable on the neck radiography.

Keywords: Posture, Biomechanic Anthropometric Ergonomic Method, Back and Neck Pain, Postural Correctors

## INTRODUCTION

The person is a 48 years old male, he initially showed pains diffused to the back, to the neck and to the temporo-mandibular joints. After 4 months we obtained a clear improvement and the person ceased the antalgic treatments. After 18 months the antalgic treatments had ceased for a year now. The treatment with the B.A.E method it's still ongoing and we performed a monitoring for the verify of the improvements. The test was taken both photographic and radiographic type to verify the structural changes of the body and the change in the usage of the muscle chains related to the position of the neck.



<sup>&</sup>lt;sup>5</sup> The research paper was presented on November 13, 2020 at the Health Promotion Section of the 2020 Online Scientific Conference co-organized by University of Ruse and Union of Scientists - Ruse. Its title in Bulgarian is: "ВЪЗДЕЙСТВИЕ НА ПОЗАТА И УПРАВЛЕНИЕТО НА ГРАВИТАЦИОННОТО ПОЛЕ ПРИ ФИБРОМИАЛГИЯ И ВЪРХУ СИМПТОМИТЕ НА БОЛКАТА".

# Fig.1

As we can observe Fig.1 at the Start the face shows evident asymmetries. We can see that the left cheek is very asymmetric compared to the contralateral.

The whole head is bend towards the right part of the body above the shoulders.

As we can observe in the images, the person shows an asymmetric posture in the projections on all levels during stationary Fig.2, Fig.3, Fig.4, Fig.5.



Fig.2



Fig.3

The person is clearly compressed with an alteration of the lordosis curves of the rachis.



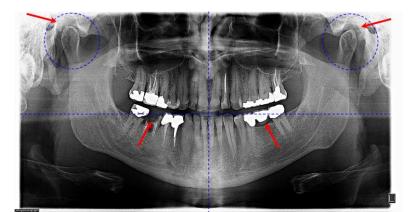
Fig.4

The person over time has extended and the lumbar and cervical lordosis are brought to proximity of the correct physiology.



# Fig.5

The situation, which has been clinically monitored, reported these images below.



RIGHT

Fig.6



Fig.7

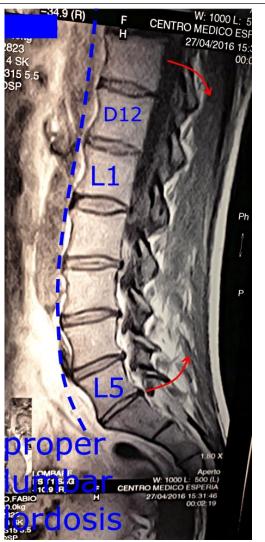


Fig. 8

As we clearly observe in Fig.6 we have an alteration of the ATM condyles and of the occlusal plane. In Fig.7 and Fig.8 the Nuclear Magnetic Resonances shows the lordosis curves of the cervical and lumbar column. They are altered compared to the normal physiology with consequent

morphological alterations of the relative vertebrae and we can also observe an alteration compared to the physiology of the spinal cord position.

Consequently, to this situation the person is in a disadvantage in the management of the gravitational field so that in the lumbar rachis tract we assist to an invention of position of the first vertebrae and also in the cervical tract, the third, fourth and the fifth vertebra turns out working in the opposite position compared to the correct one.

If the positions of part of the vertebrae are wrong, it means that some muscle groups in their work for the necessity of postural adjustment make a fixed point in incorrect rachis attacks.

Below we can observe the variation in the position of the cervical vertebrae in the 18 months of postural re-education with the Biomechanic Anthropometric Ergonomic method, Fig.9.

As we can observe from the comparing images in Fig.9 the difference in the physiology that is shown by the red dotted line, was greatly reduced and the occlusal plane (visible by the orientation of the molar teeth) it's now in the correct horizontal position. The curve inversion of cervical lordosis is cleared after 18 months and we now have a straightening which preludes in the near future to the restoration of the lordosis physiology.

During these 18 months were done repeated manual postural resets to facilitate the changing of the motor engram associated to the kinesitherapy re-education and periodic cycles of ozonotherapy in the dorsal area to reduce the pain and the inflammation during the change.

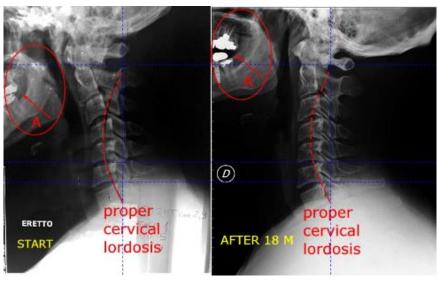


Fig9

### **Materials and Methods:**

Biomechanic Anthropometric Ergonomic Method B.A.E., <u>Coal Industrial & Mining Supplie</u>, tipe: <u>HT-A2 Handheld IR camera</u>, Baropodometer Footcheker Loran Eng., 2012.

## **CONCLUSIONS**

After 18 months of Ergonomic Postural treatment, we evaluated the results according to the parameters of the Biomechanic Anthropometric Ergonomic Method.

The situation is:

1 The pain symptoms were greatly reduced with the use of Ergonomic braces made following the B.A.E method.

2 The pharmacological treatment was kept unaltered for the first 2 months and later reduced by 50% up to four months. Later the medical treatment was interrupted apart of the 3 cycles of ozonotherapy made after a month in the last six months.

The person reports having worn with great comfort the Tutors daily and was established by the photographical improvement.

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3 It shows how even in cases of particularly worsening fibromyalgia was possible to obtain results never obtained with the classical methods of pain treatments thanks to the association of postural improvement.

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