



Case Report

Posture Analysis and Fascia Treatments – Two Case Reports

Sergio Palandri*

Abstract

Introduction: Several articles published in literature provide evidence of the importance of postural analysis, as well as the benefits of fascial treatments.

It is therefore logical to think of a close connection between the one and the other. The aim of this work is precisely to provide two simple, but significant case reports on the matter.

Methods: two cases were examined, for each of which a pre-treatment and a post-treatment postural analysis was performed using the S.E.P.A. system described in a recently published article. Postural analysis and treatment were carried out simultaneously, in sequence and in the same location.

Case 1: female subject aged 25, height 158 cm, weight 49 kg and BMI 20, with multiple muscular and visceral problems, treated with Holistic Osteopathy techniques.

Case 2: female subject aged 20, height 170 cm, weight 50 kg and BMI 17, with no specific problems, treated with relaxing Shiatsu techniques, according to the teachings of the school of M° Masunaga.

Results: The results obtained by comparing the postural analyses before and after treatment, document an evident postural improvement of both subjects.

Conclusions: Despite the limited number of cases considered, given the structure of the study, it is reasonable to state that from the postural analysis it is possible to deduce indications for treatment, the results of which can then be objectified by a second postural analysis.

These results undoubtedly encourage to continue in this direction, providing support for the construction of more extensive studies that can lead to inferential results.

Keywords: Fascia; Posture; Relaxation; Shiatsu

Introduction

There are now numerous articles in the literature that demonstrate how postural analysis has widely produced evidence of its ability to detect disharmonies starting from the observation of signs and symptoms that are often poorly or not at all correlated with each other, thus revealing a preventive character of considerable interest, as can be seen from what has been reported by several authors [1-10].

Similarly, the literature provides extensive documentation to support the existence, functions and properties of the fascia, together with positive

Affiliation:

Department of Radiology, Umberto I Hospital, Ordine Mauriziano di Torino, Largo Filippo Turati, Torino TO, Italy

*Corresponding author:

Sergio Palandri, Department of Radiology, Umberto I Hospital, Ordine Mauriziano di Torino, Largo Filippo Turati, Torino TO, Italy.
 Email: danaskully@b11036.org

Citation: Sergio Palandri. Posture Analysis and Fascia Treatments – Two Case Reports. Archives of Clinical and Biomedical Research . 8 (2024): 415-419.

Received: November 13, 2024

Accepted: November 20, 2024

Published: November 28, 2024

evidence of its involvement in the recovery of disharmonious conditions through its stimulation with manual manipulations [11-23].

It is therefore legitimate to affirm that postural analysis and fascial treatment are evidently and intimately connected, resulting logically and objectively in one being the consequence of the other, with a fascial treatment being able to resolve the disharmony highlighted by a postural analysis which in turn can confirm the resolution of a disharmony treated with a fascial manipulation, as could already be seen in 2019 from the article by Bianco [23].

The aim of this work is precisely to provide a practical example of this interdependence, presenting two cases of postural analysis, the consequent treatment with techniques that may be different, but all having the action on the fascia as a common basis and the subsequent confirmation in a post-treatment analysis.

Methods

Since postural analysis does not have a universally accepted reference standard and in fact each individual professional builds his own personal sequence of observations, tests, measurements, with tools and equipment that best meet his needs, in order to make the measurements performed repeatable, it was decided for this work to use the S.E.P.A. system, described in the literature by a recently published article [24], as it is simple, has a broad spectrum of analysis, is objective, flexible and has a very low cost if compared to other market models, undoubtedly more performing, but often too specific and with a non-negligible cost.

The article describes the structure and characteristics of the system in depth and therefore we refer to its reading for all the details.

The postural analysis before and after treatment and the treatment were performed in sequence with a maximum time gap between them of about 5'.

The two selected cases will now be presented.

CASE 1:

Female subject aged 25, height 158 cm, weight 49 kg and BMI 20.

She began Holistic Osteopathic treatments in March 2024 following a decontracting massage for widespread contractures combined with irritable bowel syndrome, bruxism, neuralgia and tinnitus. In her remote anamnesis she reports a fall on the ice at 13 years old with untreated coccygeal trauma. In June 2024, now at the fifth treatment with a clinical summary significantly improved compared to the initial one, the Osteopath who follows her decides, in agreement with the subject who provides his verbal consent,

to subject her to a postural analysis that is performed by a third-party operator not involved in the treatment cycle.

The fascial treatment performed after the initial postural analysis was carried out with Holistic Osteopathy techniques, and consisted of the execution of a decontracting technique on the right levator scapulae and the right pectoralis minor; subsequently the rib cage (right side) was worked on with a global mobilization technique and a fascial normalization technique. The ileocecal valve was then normalized at the same time using a visceral osteopathic technique. The treatment ended with a re-articulatory technique on the right sacro-iliac joint.

CASE 2:

female subject aged 20, height 170 cm, weight 50 kg and BMI 17.

She does not present any particular symptoms and there are no specific indications for postural analysis and treatment, other than the curiosity and willingness in this sense by the subject herself who verbally expressed her consent to receive both the analysis and the treatment. Only one note in her remote anamnesis: she reports a fracture of the middle third of the left tibia, treated with external fixator, in 2023.

The fascial treatment performed after the initial postural analysis was carried out with the techniques and philosophy of the relaxing Shiatsu treatment, in a sequence developed by the Professional Shiatsu Operator who performed it and is basically made up of Shiatsu pressures on the three postural meridians: Bladder, Stomach, Gall Bladder. These were combined with work on the neck/face, hands and feet, always with the specific aim of stimulating relaxation (parasympathetic activation).

Results

CASE 1:

The data obtained and the observations made in the postural analysis pre and post treatment are reported below in Table 1.

The treatment revealed in particular a restriction of mobility on the right side of the rib cage, an anomaly of the ileo-cecal valve that appeared to be dysfunctional and a blockage of the right sacro-iliac joint.

CASE 2:

The data obtained and the observations made pre and post treatment are reported below in Table 2.

The treatment revealed in particular the presence of jitsu on the Bladder Meridian in the lower limb at the level of the biceps femoris (largest on the right), of the gastrocnemius (largest on the right), on the Gall Bladder Meridian in the lower limb at the level of the soleus and on the Stomach

Table 1: Case 1 results.

BS00 – 19/06/2024	PRE-TREATMENT	POST-TREATMENT
OVERALL OBSERVATION		
TMJ	normal	
occlusion/tongue/swallowing	normal	
CPP	normal breakage and repair	
cover test	negative	
head rotation (AX-COR-SAG)	regular ROMs for extension and symmetry	
scapulo-humeral girdle rotation (AX – COR)	AX: counterclockwise rotation COR: absent	absent
pelvic rotation (AX – COR – SAG)	AX: clockwise COR, SAG: absent	absent
Barré's vertical	AP: normal LL: anteposed meatus, posteriorized lateral malleolus	posteriorized lateral malleolus
femuro-tibial joint	right patella more mobile and slightly internally rotated compared to the left one, normally positioned and normally mobile	patellars symmetrical and normally positioned
feet stand support	normal	
TEST		
postural cone	snap return in both AP and LL. oscillations slightly >4°	
Autet	descending	result identical to pre-treatment, but much clearer
Bassani	normal	
De Cyon	mild left hypertone	mild right hypertone
Fukuda	+ 80°	-10°
forward bending	slight right dorsal prominence at the mid-scapular level	
visceral	positive: fukuda – 80°	positive: fukuda 0°
taperulè	indifferent	

Table 2: Case 2 results.

RD00 – 19/10/2024	PRE-TREATMENT	POST-TREATMENT
OVERALL OBSERVATION		
TMJ	normal	
occlusion/tongue/swallowing	normal	
CPP	do not spit	
cover test	negative	
head rotation (AX-COR-SAG)	AX-COR-SAG: normal	
scapulo-humeral girdle rotation (AX – COR)	AX: clockwise COR-SAG: absent	absent
pelvic rotation (AX – COR – SAG)	absent/physiological	
Barré's vertical	normal	
femuro-tibial joint	patellae slightly internally rotated with lateral restriction. Left patella more cranial	Patellae more lateralized with symmetrical intra-extra movement
feet stand support	SN: varus,DX: normal	SN: varus, DX: normal
TEST		
postural cone	normal	
Autet	discending	
Bassani	negative	
De Cyon	normal	
Fukuda	-45°	0°
forward bending	reduced anterior flexion, slight right prominence at the level of D4-D6 approx.	pronounced increase in anterior flexion, slight right prominence at D4-D6 level remains approx.
visceral	positive: increases forward flexion, eliminates rotations of the shoulder girdle	positive: but in a decidedly lesser form, slight further increase in the front flexion, already aumentato dopo treatment

Meridian in the lower limb at the level of the tibialis anterior (largest on the left). The jitsu described are no longer detectable at the end of the treatment.

Discussion

In case 1, some aspects are particularly important and therefore deserve a specific notation.

The first is represented by the complete aseptis of evaluation by the operators, both unaware of the colleague's evaluations, demonstrating how postural analysis and fascial treatment intrinsically share a common basis for evaluating the subject and therefore detect, albeit with different tools, the same observations on the subject.

The second results from the comparison of the pre- and post-treatment results, where the effectiveness of this appears evident as well as the objectivity of the postural analysis.

In case 2, other aspects also deserve a specific notation given their particular importance.

The first wants to underline how the Shiatsu treatment performed, although formally different from the pure fascial treatment, is however absolutely similar as it acts through the same physical medium, the fascia precisely.

The second aspect focuses on the comparison of the results of the postural analysis pre and post treatment, from which the effectiveness of the treatment clearly emerges regardless of the fact that the operator this time is the same one who performed the postural analysis and regardless of the fact, not negligible, that the subject presented herself in the absence of specific symptoms, but only for pure personal interest. A further confirmation can come in this sense, even more clearly, from the comparison of the path of the Anterior Superficial Line and the Stomach Meridian, of the Lateral Superficial Line and the path of the Gall Bladder Meridian and of the Posterior Superficial Line and the path of the Bladder Meridian, where the close similarity between the fascial aspect and that of Shiatsu TCM is evident, confirming a common basis constituted by the fascia itself.

Conclusions

Although the cases described are obviously not sufficient to provide inferential evidence, it is nevertheless also evident the interconnection between postural analysis and fascial treatment and that their combined use can bring about a new synergy, useful to the Professional who treats the subject, but also and above all to the subject her/himself.

Acknowledgment

Special thanks go to the Accademia Archè – Turin - Italy in the person of its Director Dr. Federico Ghio, for the collaboration provided.

Declarations

Conflicts of interest:

The Author declare that he has no conflicts of interest.

References

1. Pizzigalli L, Micheletti Cremasco M, Mulasso A, et al. The contribution of postural balance analysis in older adult fallers: A narrative review. *J Bodyw Mov Ther* 20 (2016): 409-17.
2. Gouleme N, Ezane MD, Wiener-Vacher S, et al. Spatial and temporal postural analysis: a developmental study in healthy children. *Int J Dev Neurosci* 38 (2014): 169-77.
3. Zipori AB, Colpa L, Wong AMF, et al. Postural stability and visual impairment: Assessing balance in children with strabismus and amblyopia. *PLoS One* 13 (2018): e0205857.
4. Rasmussen LJH, Caspi A, Ambler A, et al. Association of Neurocognitive and Physical Function with Gait Speed in Midlife. *JAMA Netw Open* 2 (2019): e1913123.
5. Bruno G, Melissa S, Natalia C, et al. Posture and dysphonia associations in patients undergoing total thyroidectomy: stabilometric analysis. *Updates Surg* 72 (2020): 1143-1149.
6. Rafeemanesh E, Khooei A, Niroumand S, et al. A study on musculoskeletal complaints and working postures in pathology specialists in Iran. *BMC Musculoskelet Disord* 22 (2021): 1012.
7. Palandri S. Spinometric Analysis of Patient Affected by Scoliosis, Treated With Acupressure. *Int J Rhinol Otol* 3 (2021): 108.
8. Niaradi FDSL, Niaradi MFDSL, Gasparetto MERF. Effect of Eutonia, Holistic Gymnastics, and Pilates on body posture for pre-adolescent girls: Randomized clinical trial. *J Bodyw Mov Ther* 30 (2022): 226-236.
9. Kasović M, Štefan L, Piler P, et al. Longitudinal associations between sport participation and fat mass with body posture in children: A 5-year follow-up from the Czech ELSPAC study. *PLoS One* 17 (2022): e0266903.
10. Palandri S. Changing in Dental Setting and Postural Analysis -A Case Report. *Journal of Medical and Clinical Nursing* 3 (2022): 1-4.
11. Langevin HM, Yandow JA. Relationship of acupuncture points and meridians to connective tissue planes. *Anat Rec* 269 (2002): 257-65.
12. Langevin HM, Churchill DL, Wu J, et al. Evidence of connective tissue involvement in acupuncture. *FASEB J* 16 (2002): 872-4.

13. Dorsher PT. Myofascial Meridians Anatomical Evidence of Acupuncture Channels. *Medical Acupuncture* 21 (2009).
14. Stecco L. *Manipolazione Miofasciale: parte pratica*. Piccin – Nuova Libreria (2007).
15. Stecco C, Day JA. The fascial manipulation technique and its biomechanical model: a guide to the human fascial system. *Int J Ther Massage Bodywork* 3 (2010): 38-40.
16. Stecco A, Giordani F, Fede C, et al. From Muscle to the Myofascial Unit: Current Evidence and Future Perspectives. *Int J Mol Sci* 24 (2023): 4527.
17. Suarez-Rodriguez V, Fede C, Pirri C, et al. Fascial Innervation: A Systematic Review of the Literature. *Int J Mol Sci* 23 (2022): 5674.
18. Fede C, Petrelli L, Pirri C, et al. Innervation of human superficial fascia. *Front Neuroanat* 16 (2022): 981426.
19. Bianco G. Fascial neuromodulation: an emerging concept linking acupuncture, fasciology, osteopathy and neuroscience. *Eur J Transl Myol* 29 (2019): 8331.
20. Brandolini S, Lugaresi G, Santagata A, et al. Sport injury prevention in individuals with chronic ankle instability: Fascial Manipulation® versus control group: A randomized controlled trial. *J Bodyw Mov Ther* 23 (2019): 316-323.
21. Arumugam K, Harikesavan K. Effectiveness of fascial manipulation on pain and disability in musculoskeletal conditions. A systematic review. *J Bodyw Mov Ther*. 25 (2021): 230-239.
22. Bertoldo D, Pirri C, Roviario B, et al. Pilot Study of Sacroiliac Joint Dysfunction Treated with a Single Session of Fascial Manipulation® Method: Clinical Implications for Effective Pain Reduction. *Medicina (Kaunas)* 57 (2021): 691.
23. Bianco G. Fascial neuromodulation: an emerging concept linking acupuncture, fasciology, osteopathy and neuroscience. *Eur J Transl Myol* 29 (2019): 8331.
24. Palandri S. System expanded for postural analysis (s.e.p.a.): a starting point resulting from the evolution of an idea. *International Journal of Clinical Case Reports and Reviews* 18 (2024).