

Therapeutic test and probabilistic approach : revisiting the osteopathic diagnosis on basis of the therapeutic act model

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Introduction

With tenths of millions of osteopathic consultations being undertaken in many countries, osteopathy attained the status of a mass medicine. There are two consequences that arise from it :

- 1) It becomes directly involved in the handling of real public health problems
- 2) Patients regard it more and more every day as a serious option among the available treatment offers

In order to undertake this place and status, **osteopaths must respect ethical and deontological as well as economic and social-professional obligations** [1,2] whilst preserving the specificities and advantages of their practice.

The principle of therapeutic testing is thus regarded as sufficiently efficient to meet these constraints and simplify diagnostic approach in osteopathy [3, 4].

This tool comes under the framework of a probabilistic approach with which training centers were not so familiar yet, but it would give credibility to the osteopathic practice in the eyes of the scientific and medical world.

Methodology

The diagnostic approach of an osteopath is often guided by **deterministic reasoning** [5], that is only applied in very specific sectors such as air transport or nuclear security, with regard to risk management.

The question raised here is that :

are risks managed by the osteopath so damaging that they require such a costly approach ?

Whenever circumstances allow, we propose to base the osteopathic diagnosis on the probabilistic approach, which consists in :

- 1) Identifying existing array of solutions
↓
by literature review about effectiveness of treatments
- 2) Generating patient and functional trouble profiles for which such solutions are statistically efficient
↓
by literature review about individual risk factors
- 3) Regardless of the causes or disease history
↓
unless for pointing patients toward other practitioners

Perspectives

The therapeutic test is drawn from this approach. In order to ensure that its application is both coherent and adequate, it is necessary to **rethink the osteopathic diagnosis** and reorient it, in priority, not towards the comprehension of the physiopathologic mechanism but towards the conditions for the realization of a treatment which is considered as the most efficient [6,7].

Further the therapeutic test allows to meet the responsibilities inherent in a health practice, like :

- **Ethical and deontological obligations** : integrating the health sector and communicating with its various actors
- **Economic compulsions** : setting limits to time, energy as well as to the cost of patient caretaking
- **Social-professional aims** : address the challenges linked to the impact of functional disorders on our societies

Ultimately, this tool should facilitate the study of the conditions for the effectiveness of osteopathic treatment protocols.

In the end, the application of therapeutic test calls for asking oneself three questions in advance :

- 1) Am I legitimate to take care of this patient ?
- 2) Are the therapeutic tools at my disposal potentially dangerous ?
- 3) Are these tools potentially efficient ?

Discussion

The two major difficulties associated with the deterministic reasoning are that :

- 1) It involves costs that are, at times, enormous in terms of time and energy, in the preparation of the diagnosis
- 2) it results in forsaking certain solutions even though they have been proven effective, on the basis that they only have a symptomatic aspect

Osteopaths should therefore consider rethinking the osteopathic diagnostic, in particular the functional part of this diagnostic. **The therapeutic test and the probabilistic approach are likely to call into question the global approach** [8], dear to the osteopathy, but they allow to easily justify the use of this latter approach in the eyes of the other health practitioners, and to define its limits. Changing the mindset in this regard is perhaps part of the next challenges in educative world of osteopathy.



Implications

The implications of our proposal lie in the pedagogical and educative practice, both in research and in the professional practice.

1) Pedagogical implications

a) Teaching a therapeutic act model [9] enabling the student to master his/her acts on the theoretical basis :

- expected clinical effects
- modes of action
- indication/contraindication
- benefits/risks ratios

b) Focusing the diagnostic approach on the adequacy of the treatment [10] in function of :

- the symptoms
- the characterization of functional disorders [11]
- the identification of individual risk factors [12,13,14,15,16]

This implies :

- Judiciously identifying clinical phenomena and individual parameters [17,18,19,20,21]
- Mastering therapeutic acts on the gestural basis [16,22]

c) Upholding considerations related to the effectiveness of the acts [6,7,22] and to the specificity or the reliability of osteopathic tests on regular readings of scientific data and on continued updating clinical knowledge [2,17,18,19].

2) Implication in research

a) The use of the therapeutic test seems to be an appropriate way of validating the effectiveness of a treatment in particular against placebo or gold standard.

b) The conditions of the effectiveness of a given treatment can be studied and it can feed or broaden certain data bases such as PROM and PREOS promoted by the NCOR in Great Britain.

3) Implication in professional practice

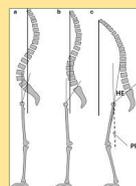
a) The probabilistic approach, on which the therapeutic test is based, requires the consideration of causal elements as risk factors and the carrying out of a regular follow-up of the patient

b) This follow up of the patient allows to make a critical assessment, over time, of the effectiveness of our therapeutic acts and also to communicate more easily with other health practitioners on the limitations of our field of action.

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Selective bibliography

(1) Pinsault N et Monvoisin R, 2014 – (2) Chalmers AF, 1976 – (3) Bannis M, 2008 – (4) Canguilhem G, 2015 – (5) Houdé O, 2014 – (6) Bronfort G, 2010 – (7) Rubinstein S, 2011 – (8) Bachelard G, 1934 – (9) Kuczynski JJ, 2012 – (10) Bossuyt P, 2004 – (11) Wall and Melzack, 2006 – (12) Smeets RJ, 2006 – (13) Mayer T, 1985 – (14) Kojo HD, 2016 – (15) Jones MA, 2005 – (16) Lawrence DJ, 2008 – (17) Potter NA, 1985 – (18) Smedmark V, 2000 – (19) Sommerfeld P, 2004 – (20) Fritz JM, 2001 – (21) Wainner R, 2003 – (22) Coppieters MW, 2003