Feedback by Steven De Coninck, chair European Teaching Group of Orthopaedic Medicine (ETGOM)

I enjoy having scientific discussions among colleagues during “live” courses. Normally I prefer not to have such discussions on social media platforms, but for once I am happy to make an exception.

I would like to thank the authors for the effort they took to publish this article, since nowadays that particular topic is not that popular in the scientific world.

Nevertheless, with all respect, I would like to share some specific feedback. In order to do this I will follow the specific chapter structure the authors used in their article and add my feedback on certain topics.

1. Introduction

The authors mention the “Lack of standardization of the DFM protocol” and “technical faults of the instructions proposed by Cyriax” : it is a pity that the authors refer to a book / instructional texts from 40 years ago ! This doesn’t reflect the actual views on friction massage in modern orthopaedic medicine as described in e.g. the actual ETGOM course hand outs. May I also suggest the reader to have a look at the book “System of Orthopaedic Medicine, third edition, 2013, p40-49, 84-91”

Although the authors refer to the book of Atkins et al 2016, allow me to give further feedback about standardization and modernization at the bottom of this text.

2. Terminology

In this chapter the authors mainly refer to old texts published in 1982, and by doing so they missed some more actual input. Although I agree that they state following : “...setting specific terms might influence clinical results”. But, ...in this article I don’t see any new “specific terms” they could have suggested ? This is a missed opportunity.

The authors also establish a discussion on the terminology : should the procedure be called “DFM”, “TFM” or “GTM” ? Honestly, for me this is a non-issue, a non-discussion. I really don’t see the point. We (ETGOM) use the “TFM” terminology, as suggested by the authors, already since 30 years...

Adding or not “deep” to the definition is also quite irrelevant : indeed, “deep” is very subjective and of course difficult to standardize, but, that’s not the point. The friction massage should be deep enough in order to be able to mobilize in an efficient way the underlying ligament, tendon or muscle belly. It is obvious that for more superficial lesions, not much “depth” is needed.

Furthermore the authors also mention some outdated principles such as “...only six sweeps should be performed on the target tissue” (although it is published in 2016 by Atkins et al.). The basis for this particular statement is a mystery to me ?

In fact, in certain acute lesions (e.g. ligamentous lesions of the foot/knee) we describe a progressive friction massage strategy, according to the irritability of the lesion.

The authors also state to use 10’ of friction massage in chronic lesions, whereas, according to our opinion 10’ is rather an absolute minimum and we prefer to give about 20’ in those circumstances.

3. Interval between the sessions
The authors correctly state that “…a comparison of different intervals between TFM sessions does not exist…”. This could be indeed an interesting topic to be examined in the future.

There is one thing in this article which, in all modesty, could have an added value for me: more specifically the theoretical hypothetical background on determining the interval. But, again, this is rather old news for me either, because since about 20 years we also spread the message that in case of chronic lesions the tendency goes more towards max. 2 sessions of friction massage per week. Indeed, the theoretical background as described by the authors is interesting.

4. Self-treatment

The authors seem to refer to another outdated statement: “…as proposed by Cyriax does not include the element of self treatment”. Treatment of ligamentous, tendinous or muscular lesions of course is not just about friction massage. Self treatment exercises and longitudinal stress exercises always belong to the treatment protocol, as we already teach since many years.

The authors also suggest that the patient should be taught to do some kind of “auto-friction” to “control their pain…” This is a nice, but unfortunately very often, quite unpractical idea. In many situations a patient can’t do that in an efficient and practical way, because of specific technical problems.

5. Mill’s manipulation for lateral elbow tendinopathy

The authors state that this is “…wrong and restrictive for the results of the method”.

May I kindly draw the reader’s attention to a publication by Troisier O. in 1991 in which 131 cases were analyzed in which good and excellent results were achieved in 63% of the cases by using the combination of friction massage and Mill’s manipulation.

I believe there is no “gold standard” treatment procedure for tennis elbow, and that different treatment options could have some interesting value. The problem is that, at present time, there is no real good clinical predictor of success or non-success. Of course, the combined use of those techniques is nowadays still empirical and further studies should be undertaken.

6. Tendon position

The authors correctly state that “…tendons should be placed in a stretched position”. Again, with all respect, this is old news. Since more than 30 years we teach our colleagues that tendons are always put on the stretch while frictioning, as well as ligaments. Muscle bellies are frictioned from a shortened position. The purpose of those specific positions is have a more optimal contact on this structure so that the fibres can be mobilized in a more efficient way.

7. Other parameters
About the effects of friction massage I would like to add some extra input.

It has been demonstrated that during the inflammation, repair and remodeling phase friction massage results in a better alignment of fibres and tensile strength as well as other beneficial effects on collagen (e.g. Davidson et al. 1997, Roush et al 1998, Gehlsen et al 1998, Christie W. et al 2012)

I would also like to draw attention to the article of Joseph Michael F et al from 2012, stating that “much of the original rationale for the use of DFM remains valid in light of a complete shift in understanding of the pathogenesis of tendinopathy”.

The authors state that “...and so we disagree with Cyriax that TFM combined with manual therapy can efficiently rehabilitate...”

I just have one question in that perspective : what exactly are you talking about, which “manual therapy”, which techniques, which procedures ? It’s a pitty the authors didn’t provide this information.

Further they state that “…it needs modernization and further investigation...”.

I couldn’t agree more, but, for what is concerned “modernization” again it is a pitty that they didn’t refer to more relevant publications. Since many years, within ETGOM, we focus on standardization and modernization of techniques and procedures also related to patient and therapist comfort. I refer to our numerous film productions on those topics.

8. Conclusions

It is obvious that, for the time being, we mainly disagree with the conclusion as formulated by the authors in this particular article.

I would like to add an extra comment on standardization and modernization :

In our clinical and teaching experience we are far too often confronted with so-called “self-proclaimed-would-be” Cyriax teachers. Unfortunately we often see major practical mistakes in different articles and books which are published. I am not talking about minor differences in interpretation but about really major mistakes e.g. some “teachers/authors” write an article about friction massage on the supraspinatus, but in fact, according to their illustrations, they friction the anterior border of the acromion instead ?! Similar errors when it comes to tennis elbow procedures : there is no good contact on the anterior aspect of the lateral epicondyle (type II) but they friction somewhere in the neighbourhood ; similar mistakes when it comes to infraspinatus etc. ?

On top that we have encountered several “would-be” teachers in different countries, who teach so-called Cyriax courses in a rather unprofessional and incorrect way.

When colleagues/students use this kind of material to apply this knowledge into practice, then, of course, failure is a certainty.

Furthermore we also see that in many publications (also more recent ones!) practical procedures such as friction massage are illustrated in quite an unpractical way for the patient as well as for the therapist.
Taking into consideration those remarks then it is logical that on a world wide level we encounter a problem of standardization and modernization. This is exactly one of the missions of the ETGOM team to optimize and modernize practical procedures.

Yes, we totally agree, there is need for more qualitative studies on those topics. We are very happy to assist anyone who want to set up an interesting project.

When it comes to studies it is also important to consider following remarks, as also described by Joseph Michael F et al in 2012:

“The analysis of articles revealed evidence for the incorporation of DTM in the treatment of tendinopathy. Comparison of studies was made difficult by the varied location of tendinopathies, confounding cotreatments in comparison groups, and varied outcome measures used.”

“Future randomized comparison studies are necessary that incorporate true control groups and compare DFM in isolation with other modes of treatment.”

“Studies such as these are very difficult to undertake, as they inherently deny treatment to a group of participants.”

There is one more important message to keep in mind: the legacy of Dr Cyriax is not in first line the friction massage techniques, but, much more important are the objective, relevant clinical reasoning procedures in order to reach a useful relevant diagnosis in a more optimal way. This should be basic knowledge for every therapist involved in musculoskeletal medicine. May I hereby refer to the free download of the ebook on Clinical reasoning which we offer online.

Finally I would like to thank the authors for their contribution and initiative to make people think in a more objective and critical way so that patients and therapists can benefit from this knowledge.

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