A MALPRACTICE CASE IN TEMPOROMANDIBULAR DISORDERS

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ABSTRACT
A short analysis of contentious procedures about Temporomandibular Disorders (TMD) is the preface to the description of an emblematic clinical case of professional responsibility, marked by a superficial behaviour when diagnosing and a wrong therapeutic choice. As the doctor’s decisions on the matter did not have any scientific reference or an objective crosscheck in the clinical practice, they have inevitably brought to the non-solution of the present pathology.

It is absolutely necessary that a diagnosis of gnathologic matter be made referring to most standardized investigation criteria, slightly operator-dependent and widely known among the scientific community, aiming at identifying the current pathology in line with the most updated classifications on TMD.

The same considerations can be recalled about what is concerned with the choice of a therapeutic strategy: it will have to be respectful of the Evidence-Based Medicine principles (Dentistry) and follow the parameters of a clinical behaviour recognized valid and with predictable results. The therapeutic iter will be monitored by a survey of clinical objectivities referring, as well as for the diagnosis, to standardized semiotic-clinical criteria.

KEY WORDS: Temporomandibular Disorders (TMD), Dental Malpractice, Evidence-Based Medicine (EBD)

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INTRODUCTION

In the last decade we have seen an outstanding growth of odontological evaluation advice requests and medical legal reports on temporomandibular articulation problems (TMA). They are aimed at emphasizing the presence of TMD referable to traumas or to iatrogenic mistakes that allow to distinguish real malpractice pathologies. (1-5)

Different clinical approaches to the dysfunctional patient, and their consequent medical legal evaluation effects, are due to the aetiopathogenetic complexity and the great number of symptoms and signs on patients suffering from TMD, and the absence so far of a therapeutic and diagnostic protocol to refer to. It should also be borne in mind that a shortage of literature and guide-lines on the matter make TMD patients evaluation extremely difficult according to the EBM criteria (Dentistry). (6)

The beginning of gnathologic modern age is commonly dated back to 1934, when J.B. Costen considered a seeming ontological concern syndrome as an odontostomatological matter. (7)

During the following decades the peculiar anatomic-functional complexity of TMA has been revealed thanks to the evolution of imaging techniques. They have allowed, at the same time of the interpretation of neuromuscular correlation of dental occlusion, to formulate more and more accurate diagnoses of dysfunctional sections and to set the rational bases for possible therapeutic approaches. (8-10)
The most updated definition of TMD includes a great variety of heterogenous pathologies which distress the TMA, the masticator muscles or both. (11)

Two ways of classification are being used nowadays as reference standards for both clinical practice and scientific research. Both of them have a strong clinical orientation and are mainly based on symptoms like pain in the preauricular area and/or at the masticator muscles; mandibular movement anomalies; articular sounds as clicking and/or crepitations during the excursions. The diagnostic reference classifications are: the one defined by the American Academy of Orofacial Pain (AAOP) together with the International Headache Society, and the one outlined by the Research Diagnostic Criteria for TMD (RCD/TMD).

The last one is the classification most used by researchers: it focuses on TMD from a clinical and psychological point of view and refers to the least possible operator-dependent investigation criteria, and therefore to standardized objectivities. (12-15)

In spite of the continuous progress, the scientific information transfer process from the academic community to the professional one is far from being finished, as frequent malpractice cases testify.

Furthermore, without a single etiology on TMD, a medical legal matter arises about how can be identified the role of the factors which greatly or minimally contribute to the causal nexus. (2-16)
The great amount of signs or symptoms of this pathology in healthy people, their growth closely proportionate to ages and the short number of subjects who require gnathological therapy, are all factors which create a double problem. On the one hand they suggest that TMD with limited symptomatology do not always show a pathology but rather paraphisiological variations of normality, on the other hand they make difficult to distinguish “pretestata” and preexistences from refundable lesions. (3-5-8-12)

A CLINICAL CASE

It is here reported a clinical case considered emblematic of dental malpractice because of the evident little attention in the phase of investigation/diagnostic definition, and a clear mistake of treatment. Medical legal cases followed after a claim of damages. A 61-year-old patient suffering from disorders characterized by a diffuse pain in the masticatory muscles and cephalae, after a radiographic check turned to a dentist’s surgery for an odontoiatric examination. The orthopantomography showed the presence of a prosthetic handwork at the first (12< >18 with pillar teeth 1.2, 1.3, 1.5, 1.8) and at the second quadrant (24< >26 with pillar teeth 2.4, 2.5, 3.6). (Fig. 1)
In consequence of a diagnostic examination performed by an odontologist working as an expert at the surgery where the patient applied, a treatment plan suggesting various surgical and prosthetic operations was given in order to rehabilitate a painful occlusion. Some reports from the diagnostic documentation are here quoted.

Extra oral examination: “The masticator muscles palpation points out tenderness at the expense of the internal and external pterygoid muscle, on both sides. The examination of mandibular functionality highlights a slight reduction of all excursion movements …”. Diagnosis: “Bilateral temporomandibular disorder …”
In addition to the surgical operations it was suggested: “... temporary occlusal therapy and final occlusal rehabilitation, preceded by a complete and accurate reassessment of the interarcus relationship, at vertical, sagittal and transversal dimensions respectively”.

No further paper documents are provided about the following operations performed to make a rehabilitating fixed prosthesis for almost the entire upper and lower arcs.

Our patient has also got a TMA stratigraphy, made once completed the rehabilitation treatment, suggested by the doctor in charge because of persistent algetic-dysfunctional disorders which convinced the patient to accept the course of treatment. (Fig.2)

Figure 2 : TMA stratigraphy XR
The orthopantomography useful to evaluate the real situation, compared to the previous one and the therapy carried out, shows the substitution of the teeth 15 and 18 with implants and the presence of another implant in the area 37. It is also very clear that the existing lateral bridges at the lower arc have been removed and temporarily substituted with resinous ones. (Fig. 3)

Figure 3: OPT XR

MEDICAL LEGAL IMPLICATIONS

The patient finds no solution to the problems reported at the beginning with the treatment carried out; therefore, unsatisfied, he starts a legal claim in order to be acknowledged damages due to the incautious and inefficient cure of TMD made directly
with a prosthetic group. Such treatment was onerous, hard and long; and it required an
unuseful prosthesis of some upper and lower teeth without achieving any better
symptomatological result: pain and muscular functionality change of the TMA became
even worse. In order to recover damges is also quoted the insufficient osteo-integration
of the implant positioned at 3.7, whose radiological examination shows a display of a lot
of coils, and the inadequate treatment of the canal at 2.2.

REMARKS

The fact we want to dwell on is the absence of an adequate diagnostic procedure for
doctors to deal with the TMA pathology according to standards nowadays accepted by
the scientific community. The correspondence of generic pathological indications is
common (as in this case: “TMA algetic-dysfunctional syndrome”), without defining such
pathology in more precise details according to a reference classification.

What kind of diagnosis should we have to consider against a report of “stomach algetic-
dysfunctional syndrome”? Is it a gastritis, an ulcer or a neoplastic lesion?

The classification of Temporomandibular Disorders (this is the current correct definition
!) allows to assign precise diagnoses to the pathology such as, for instance, Disk
dislocation, Phlogo-degenerative disorders, and so on. (12-15)

The diagnosis is based on semiotics and can be supported and/or explained through
instrumental tests, a Magnetic Resonance performed with different irradiation first of
all. It is also appropriate to remind that the scientific community agrees to attribute a multifactor etiology to the TMD and that the role of occlusion factor was widely reduced. (6-16-18)

Without an appropriate diagnosis there will be inevitably a therapeutic mistake. The ironical comparison between hypothetical lack of diagnosis for a gastric pathology and for TMD let us also understand how a generic bite, often used as a therapy for a TMD patient, can be considered as providing an antacid to a gastropathic.

Applying a complete occlusal rehabilitation, that is an irreversible treatment, without an adequate TMD diagnosis and a related appropriate therapy, represents even more so a mistake to be regarded as malpractice matter.

The case mentioned showed that all TMD symptoms were related to a not specified occlusal alteration, so the dentist was wrongly convinced that a fixed prosthesis for both arcs should have solved the unlucky patient’s problems.

DEBATE

There are nowadays so many scientific works showing that the applied therapy is not valid and that even a simple examination of the literature should be, therefore, sufficient to prevent serious disorders to patients and bothersome legal effects to the doctor in charge. It would have been plainly so for the case in discussion.
With a view of teaching it is useful to underline that a correct procedure to get to a thorough diagnostic outline and to the following definition of a correct treatment plan could be marked, as orientation, by the steps suggested in Research Diagnostic Criteria for TMD (TMD/RDC) already mentioned. (14-15)

Such fundamental diagnostic criteria provide for filling in two detailed questionnaires, an anamnestic one and one related to the mandibular function; an accurate clinical examination and, if present, any articular noise recording followed by its careful evaluation. Obviously, intra and extra oral, muscular and articular, palpation is necessary.

A particular attention should be given to chronic pain (to be assessed in the period of last six months) and how it has conditioned everyday activities: social, family, personal, leisure and work.

Any features of psychological interest like depressive anxiety and somatization should also be noted. (19)

It is a common opinion in the available literature that for most cases the only clinical evaluation is sufficient to determine a TMD diagnosis. As regards the use of instruments to help diagnostic examination, the MR represents nowadays the reference gold standard when imaging techniques are thought necessary. (9)
The therapy should be basically aimed at reducing the pain, improving the functional limitation and slowing down the disorder progress. It should be always borne in mind that, as many other skeletal-muscular disorders, TMD signs and symptoms can be transitional and self-limiting. In case of pain and functional limitation is therefore preferred a conservative, not invasive and reversible therapy which results able to improve the conditions of a great number of patients (80-90%). (16)

Some cases require a multidisciplinary approach, particularly careful to the psychogenous factor, in order to control anxiety and depression, often related to and supported by such syndromes.

The conservative therapy can include routine changes, orofacial pain medicine, physical therapy, removable intraoral devices. (20)

Irreversible treatment as orthodontia, selective grinding, prosthesis or surgery should be very carefully evaluated according to the specific circumstances and we should recourse to it only when the TMD pathology is over, to conclude the therapy.

**CONCLUSION**

Studies about occlusion and its relationship with the chewing apparatus have been for years an extremely interesting dentistry topic. This relation seems to be quite complex, the great interest on it with the need of an exhaustive knowledge have stimulated a lot of
concepts, theories, cure methods which have caused, in a way, even more confusion on a matter already complicated in itself.

Professionals have to formulate own therapeutic choices on account of updated scientific knowledge, careful in analyzing constantly the new acquisition from the research world (EBD). This is obviously a hard work, but we should never forget that ideas not confirmed by evidence must be considered opinions to scientifically investigate on, in order to be able to accept or refuse them.

According to the important scientific development on TMD matured in the last decades, professionals are obliged to give adequate answers, suited to the diagnostic and therapeutic changes best reflecting new discoveries.

As regards medical legal effects, average care and prudence compel professionals to choose a diagnostic approach and a therapeutic strategy as much objective and standardized as possible. They should operate within the parameters of a professional conduct recognized valid and predictable, that is respectful of the Evidence Based Medicine (EBM), in spite of the mentioned difficulties to update and adjust the operative protocols to the continuous flow of new scientific knowledge.

Therefore it will be possible to reduce gross mistakes in the management of TMD patients and to avoid incapacitating evolution of case histories potentially reversible,
whose main causal or at least contributing element is a wrong diagnosis and/or an incorrect therapeutic conduct.

REFERENCES


