A follow-up study of a group of female patients with myofascial pain-dysfunction syndrome

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The report is a follow-up study of 108 female patients with myofascial pain-dysfunction (MPD) syndrome who had previously been examined by a multiprofessional team consisting of a dentist, a psychiatrist and physiotherapists. After 1½ year the patients were interviewed concerning possible improvement, present symptoms and perceived gain from the treatment.

It was hypothesized that patients with a severely disturbed capacity for interpersonal contact would be the least likely to gain from treatment, regardless of type. This hypothesis was confirmed by the present findings. In addition, another subgroup of patients with apparently good capacity for interpersonal contact also tended to report lack of improvement. These were characterized by stress denial, a mere somatic orientation regarding etiology of symptoms, a manner of giving oral history indicating a distanced relationship to their body, and an expressed disapproval of the psychiatric part of the examination.

Key-words: etiology perception; treatment response

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In principle, there are two possible approaches to the assessment of patient treatment, namely the «subjective», based on information given by the patient concerning the perceived effect of treatment, and the professional, «objective», based on clinical evaluation. The aim of this study was to collect information from a group of patients with a myofascial pain-dysfunction syndrome (MPD) about the subjectively assessed degree of treatment success, and to relate responses to clinical findings previously made.

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MATERIAL AND METHODS

The data obtained from 113 female patients with an MPD who were examined by a team consisting of a dentist, a psychiatrist and two physiotherapists were available (10). The team had mutually agreed that treatment should generally be conservative, i.e. based upon principles of reassurance, explanation and sympathetic understanding (20). Irreversible tissue changes and medicamentation should, within ethical limits, be avoided.

A treatment plan was derived for each patient by the multiprofessional team

considering the therapeutic service available in the patient's residential area. Five patients were pregnant at the time of examination. These were given instruction of exercises (2) and were recommended to join courses in child birth education including gymnastics and exercises with special emphasis on relaxation. Ten patients were offered short-time psychiatric treatment by the psychiatrist (8), but none accepted. However, two of them called back twice for informal talks with the psychiatrist. Another six patients received prescriptions for psychotropic drugs (8). The rest of the patients were given dental treatment or were referred for physiotherapy. Thus, a carefully taken history of symptoms (5) and a sympathetic attitude comprised the standard procedure toward all patients. Table 1 shows the additional treatment provided in relation to the chief complaint.

Table 1. *Study group according to chief complaint and the treatment provided*

	Treatment provided						
Chief complaint	Excercises	Soft splint	Slight grinding of fillings	Bite corr. by gnathologist	Referred for treat-therapy	Psychiatric ment	Total
Clicking	12	–	–	1	–	–	13
Limitation	14	9	–	–	8	3	34
Fear/jaw out of joint	2	–	–	–	1	–	3
Fatigue of mast.muscles	–	4	–	–	–	1	5
Pain on function	8	10	7	–	14	3	42
Constant, dull ache	3	1	–	1	1	1	7
Feeling of occl. instability	–	1	–	2	1	–	4
	39	25	7	4	25	8	108

One patient had died, and four were not available for an interview, leaving 108 patients (96 per cent) of the total group at the time of the follow-up study. A structured interview was performed 1½ year after treatment provision, containing three questions pertaining to:

a) The patient's present condition, whether she had totally improved, partially improved, had not changed, or felt worse,
b) the patient's opinion of the treatment provided, whether it had been of help, possibly of help, or of no help, and
c) possible symptoms at present.

Possible differences in the reported degree of improvement were related to the CIC (10), to the Dysfunction index (9) and to self-perceived cause of complaint, and thereafter evaluated by means of the chi-square test. (Tables 3–5).

RESULTS

Forty-two per cent of all the patients reported total improvement, 39 per cent partial improvement, 14 per cent no change and five per cent reported that they felt worse. In Tables 2–5, reviews are given of the relationship between, on the one hand, the reported degree of improvement, and on the other, the types of chief complaints, the scores in Dysfunction index (Di) (9), the assessed capacity for interpersonal contact (CIC) (10) and the perception of cause of symptoms. Forty-six per cent out of those who regar-

ded themselves totally improved, still had symptoms. The main part of these had an apparently good CIC and considered that their symptoms were due to their own behaviour.

Forty-three per cent of the total group reported that treatment had undoubtedly helped, 26 per cent meant it had possibly helped, while 31 per cent reported that the treatment had been of no help.

Twenty-two per cent of those with an apparently good CIC reported that their present condition was caused by other circumstances than the treatment provided by the research team regardless of their condition had improved or not. These patients told mainly of changes in their life situation (e.g. moving from childhood home, changes in working situation, birth of a child etc.). Ten of those 16 patients with a severely disturbed CIC, who reported improvement, underlined that the improvement was due to treatment given by other physicians, dentists, or inorthodox health caretakers, although the interview did not comprise any question on this point.

DISCUSSION

The proportion of patients reporting no improvement (19 per cent) agrees well with data derived from long term evaluation of conservative treatment for MPD (1,4,7). A previous observation stating that the therapy resistant patients are married women of upper social class (17) could not be verified. On the contrary, most of the therapy resistant persons in the present study were unmarried or divorced, and came from all social classes, and with personality traits agreeing well with those recently described (15, 18). Scores on the D_i made seemingly

Table 2. *Study group according to chief complaint and reported degree of improvement after treatment*

	Improved		Not improved		
Chief Complaint	Totally	Partially	No change	Worse	Total
Clicking	1	6	6	–	13
Limitation	20	10	3	1	34
Fear/jaw out of joint	–	2	1	–	3
Fatigue/mast.m.	4	–	1	–	5
Pain on function	20	20	2	–	42
Constant ache	–	2	2	3	7
Feel. of instability	1	–	1	2	4
	46	40	16	6	108

Table 3. *Scores on Dysfunction index at the time of examination according to reported degree improvement after treatment expressed as percentages*

		Improved		Not improved	
		Totally	Partially	No change	Worse
D_iI	(n = 21)	38	48	14	–
D_iII	(n = 45)	40	33	18	9
D_iIII	(n = 42)	47	36	12	5

$X^2 = 3.31$ DF = 6
N.S.

little, if any, impact upon the treatment result (Table 3) in contrast to the types of symptoms (Table 2). Degree of disturbance of the CIC had some influence (Table 4), and the perception of the cause of symptoms apparently had a definite influence on the subjective assessment of treatment effect (Table 5).

Briefly, those who reported that their condition was worse had, as a rule, one or more of the following characteristics:

a) They meant that their symptoms derived from a somatic disorder, which in turn was caused by other people's fault, incompetence or neglect,
b) they had a severely disturbed CIC (11),
c) and a feeling of «occlusal homelessness» and instability,
d) they expressed themselves in the oral symptom history as if they regarded their body as a mechanical contrivance which they looked upon from a distance, or
e) they expected or demanded surgical treatment.

One might speculate whether the injury *per se* or the perception of other people being guilty of the symptoms be the reason why postinjury MPD is hard to treat (3).

The patients reporting no change were likely to have the following characteristics:

a) They meant that their symptoms were derived from a somatic disorder or weakness,
b) they either had an apparently good or severely disturbed CIC,

Table 4. *Psychiatrically assessed capacity of interpersonal contact (CIC) according to reported degree of improvement expressed as percentages*

	Improved		Not improved	
	Totally	Partially	No change	Worse
Apparently good CIC (n = 42)	50	31	19	–
Mildly disturbed CIC (n = 40)	48	42	2	8
Severly disturbed CIC (n = 26)	23	38	27	12

$X^2 = 14.90$ DF = 6 $p < .05$

Table 5. *Perceived cause of complaint according to reported degree of improvement expressed as percentages*

		Improved		Not improved	
		Totally	Partially	No change	Worse
Own behaviour	(n = 40)	55	45	–	–
Somatic disorder	(n = 56)	38	36	21	5
Others' fault	(n = 12)	25	17	33	25

$X^2 = 23.75$ DF = 6
$p < .001$

c) their main complaints were clicking (13) or constant, dull ache,
d) they denied being stressed (14), or
e) they rejected the pertinence of psychiatric examination (16).

The psychosomatic personality tends to deny and repress emotional conflicts and expresses him-/herself through socially acceptable physical illness (14, 18). Constant, dull ache may thus act as a mediator of discomfort providing secondary gain (14). It might be questioned why young patients in this study with clicking as chief complaint and apparently good CIC did not improve. One possible explanation may be that they got mandibular exercises as the only treatment. However, other patients improved, although their only treatment was exercises. One way of explaining this deviating pattern by means of the available data is conceivably by pointing at the somatic orientation and the stress denial among the non-improved patients, which are contrasting to the improved characteristics of those who improved. These latter patients were mainly characterized by an apparently good or only mildly disturbed CIC and they suggested that their symptoms were due to a mix-up of own behaviour and somatic disorder. Some of these patients indicated specific life changes as the real cause of improvement. Besides, many expressed gratitude to the team for having made them think of possible psychological and social causes for their trouble.

One patient told that she at the time of examination was pregnant in the first trimester. One year previously she had, 33 years old, been pregnant for the first time, but had a «dreadful» spontaneous abortion. Her MPD-symptoms had started a couple of weeks before she actually knew she was pregnant the second time, and had lasted till the eight month, despite mandibular exercises. Thereafter, however, they decreased. She delivered a daughter when the time came, and had not thought of MPD-problems until exposed to the questionnaire. She definitely related her MPD to situational anxiety. Her interpretation appears reasonable. It should, however, be considered that MPD-symptoms tend to fluctuate over time (12).

Everty other MPD-patient found to have a severely disturbed CIC reported improvement. However, all patients in this subgroup emphasized that the treatment provided by the team had been of no help to them. They believed that their improvement was due to either their own efforts or to aid from other health caretakers.

It might be questioned which is the most important component of treatment; the placebo effect combined with a good doctor/patient relationship (6, 13), or the accompanying active treatment. The explanatory, reassuring therapeutic style will probably not work out satisfactorily in patients with a severely disturbed CIC, perhaps an authoritative procedure may be preferable.

A key problem is to distinguish between those patients who are likely to gain from one particular therapeutic procedure and those who are not. Experiences gained from a previous pilot study (8), substantiated by the psychiatrist's diagnostic findings and the findings from this study, suggest that patients with a feeling of occlusal instability most often are difficult to cure. Others, though performing withdrawn or hostile, might gain from an authoritative attitude by the therapist and a «strong placebo effect» (19). The remaining majority of patients are likely to profit from reassurance combined with relearning of function, either provided solely by the dentist, or in cooperation with a physiotherapist, and from the use of reversible treatment devices like occlusal splints.

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