

Comorbid Conditions in Temporomandibular Disorders Myalgia and Myofascial Pain with Referral

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CONCLUSION

Patients with temporomandibular disorders had higher levels of comorbidity compared to pain-free participants. Patients with myofascial pain had higher prevalence of comorbidities compared to myalgia and the number of comorbidities were positively correlated to widespread pain. These results indicate that myofascial pain may be a more severe condition than myalgia and could have different underlying mechanisms.

INTRODUCTION

Temporomandibular disorders (TMD) can be sub-diagnosed into myalgia (MYA) and myofascial pain with referral (MFP), but it is not clear if this is relevant from a mechanistic point.

AIM

This study aimed to investigate the presence of comorbidities in MYA and MFP and their relationship to pain.

MATERIALS AND METHODS

Seventy patients with MYA (45 ± 29 yr), 70 with MFP (43 ± 21 yr) and 70 pain-free participants (CTR) (34 ± 25 yr) were included in the study (57 females and 13 males in each group).

All participants completed an extended Diagnostic Criteria for TMD (DC/TMD) axis II containing validated scales for pain intensity, depression, anxiety, stress, insomnia, somatization, pain catastrophizing, IBS and widespread pain index.

The presence of comorbidities were retrieved from these scales using validated cut-off points and compared between the groups and correlated to pain

RESULTS

Table 1. Comorbidity scores of the study participants

	MYA	MFS	CTR	P value
Depression (0-36)	4 (10)	11 (9)	1 (3)	<0.001 ^{a,b}
Anxiety (0-28)	3 (9)	7 (11)	1 (3)	<0.001 ^{a,b}
Somatization (0-30)	8 (5)	13 (9)	3 (5)	<0.001 ^a <0.005 ^b
Pain catastrophizing (0-56)	14 (21)	22 (26)	0 (5)	<0.001 ^a 0.077 ^b
Stress (0-40)	14 (13)	21 (13)	9 (13)	<0.005 ^{a,b}
Insomnia (0-28)	9.5 (11)	15 (11)	5 (11)	<0.001 ^a <0.05 ^b
Quality of life (0-20)	6 (8)	10 (7)	0 (0.3)	<0.001 ^a <0.005 ^b

Data is presented as median (IQR)

^aMYA vs CTR and MFS vs CTR, ^bMYA vs MFS

RESULTS (cont.)

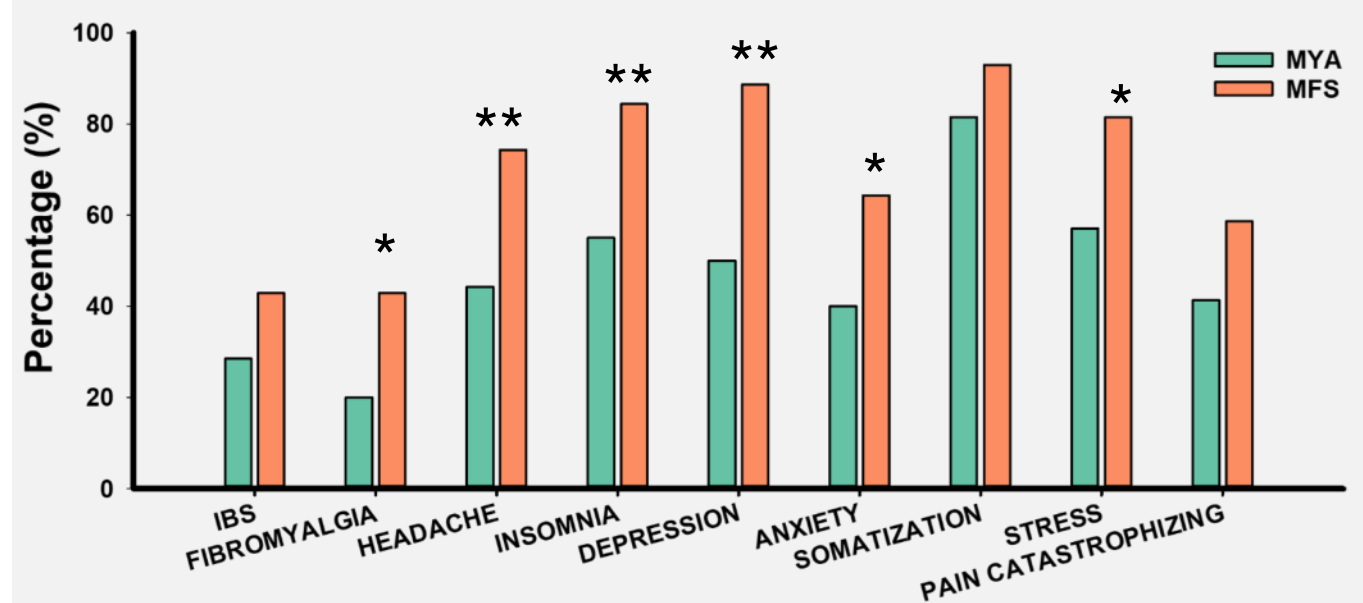


Figure 1. Grouped bar charts showing the percentage of patients with MFS and MYA with comorbidities * $p < 0.05$ and ** $p < 0.001$

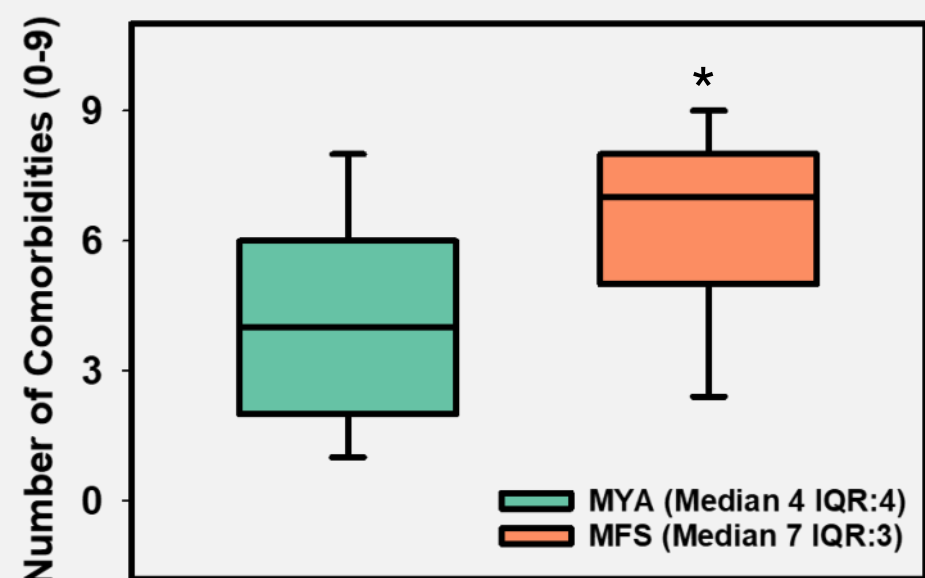


Figure 2. Boxplots showing the median and IQR of the total number of comorbidities (0-9) in patients with MFS and MYA. * $p < 0.001$

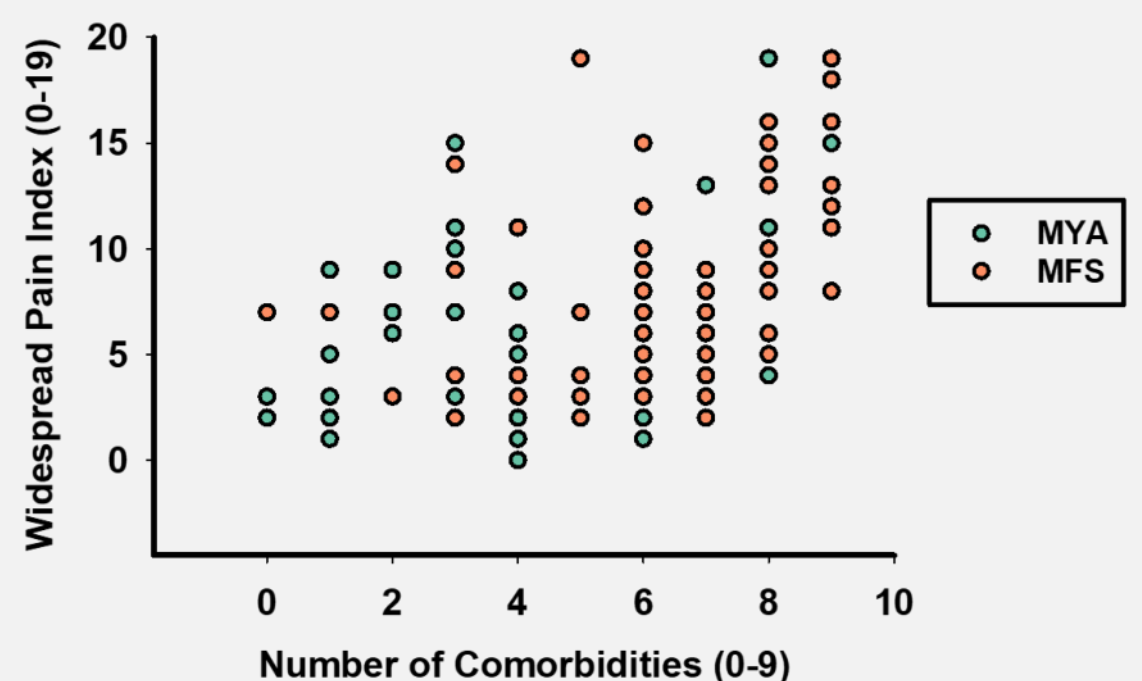
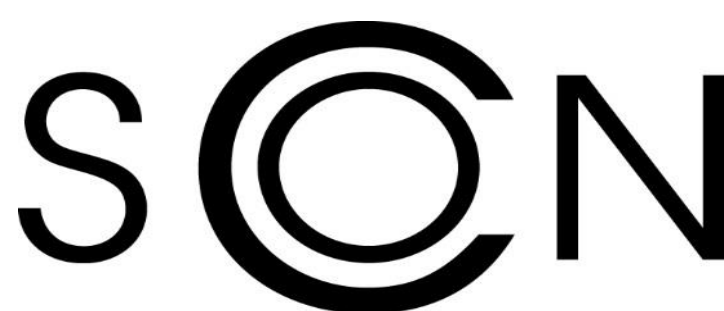


Figure 3. Scatterplot showing the number of comorbidities in correlation to widespread pain in MYA and MFS, $r = 0.567$ $p < 0.00001$

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