

CORRELATION BETWEEN THE QUESTIONNAIRE TO EVALUATE TEMPOROMANDIBULAR JOINT DYSFUNCTIONS IN RHEUMATOID ARTHRITIS (CEDATAR) AND THE HEALTH ASSESSMENT QUESTIONNAIRE (HAQ)

Karen Vanesa Rhys

Carla Gobbi

Beatriz Busamia

Eduardo Albiero

Paula Alba

All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).



Abstract: *Introduction:* The Questionnaire to Assess Temporomandibular Joint Dysfunctions in Rheumatoid Arthritis (CEDATAR), validated in 2021^{1,2,3,4,5,6} serves to evaluate functionality of the temporomandibular joints and the Health Assessment Questionnaire (HAQ)^{7,8,9} It is used to evaluate functionality of the body in general. Both in patients with rheumatoid arthritis^{10,11}. *Objective:* To describe the correlation of the Questionnaire to Assess Temporomandibular Joint Dysfunctions in Rheumatoid Arthritis (CEDATAR) with the Health Assessment Questionnaire (HAQ). *Material and Methods:* Seventy-two consecutive patients who attended the consultation of the Rheumatology Service of Hospital Córdoba were prospectively analyzed. Project approved

by CIEIS. *Results:* A statistically significant ($p < 0.001$) and positive correlation of moderate magnitude ($R = 0.513$) was identified between both instruments used. *Conclusion:* This correlation invigorates the need to consider health holistically and perform effective and efficient diagnoses and therapies that interrelate oral health as an integral part of systemic health.

INTRODUCTION

The Questionnaire to Assess Temporomandibular Joint Dysfunctions in Rheumatoid Arthritis (CEDATAR)^{1,2,3,4,5,6}. It has twenty dichotomous response questions and serves to guide professionals on whether or not a patient needs to be referred to another health professional.

	Yes	No
1. When yawning, do you feel pain in your face on the right side?		
2. When yawning, do you feel pain in your face on the left side?		
3. When yawning, do you feel pain in your neck on the right side?		
4. When yawning, do you feel pain in your neck on the left side?		
5. Do you feel noises on the right side when you open your mouth?		
6. Do you feel noises on the left side when you open your mouth?		
7. Do you feel noises on the right side when you close your mouth?		
8. Do you feel noises on the left side when you close your mouth?		
9. Do you feel ringing in your right ear?		
10. Do you have ringing in your left ear?		
11. Do you have headaches on your sides?		
12. Can you bite into hard or semi-hard foods like nuts or toast in the morning?		
13. Can you bite into hard or semi-hard foods like nuts or toast in the afternoon?		
14. Can you chew on the right side as well as on the left side?		
15. Do you feel that when you chew for more than two minutes at a time you get tired and find it difficult to continue chewing?		
16. When you move your jaw to the right, do you feel discomfort?		
17. When you move your jaw to the left, do you feel discomfort?		
18. When you move your jaw forward, do you feel discomfort?		
19. When you spend a long time without moving your mouth, eating, or speaking, do you feel discomfort?		
20. Do you feel pain if you clench your teeth hard, biting against each other?		

The Health Assessment Questionnaire assesses physical function and is one of the

most important tools that correlates well with long-term prognosis in rheumatoid arthritis.

	During the last week, have you been able to...	Without difficulty	With some difficulty	With great difficulty	Unable to do it
Vertise and alloy	1) To Dress yourself, including buttoning and tying shoelaces?				
	2) To Lather your head?				
Get up	3) To Get up from a chair without arms?				
	4) To Get in and out of bed?				
Eat	5) To Cut a steak?				
	6) To Open a new milk carton?				
	7) To Serve the drink?				
Walk	8) To Walk outside the house on level ground?				
	9) To Climb five steps?				
Hygiene	10) To Wash and dry your entire body?				
	11) To Sit on and get up from the toilet?				
	12) To Get a shower?				
Reach	13) To Pick up a 1kg packet of sugar from a shelf above your head?				
	14) To Bend over and pick up clothes off the floor?				
Grip	15) Open a car door?				
	16) Open closed jars that had already been opened before?				
	17) Open and close the taps?				
Others	18) To Run errands and shopping?				
	19) To Get in and out of a car?				
	20) Do housework like sweeping or washing dishes?				

OBJECTIVE

To describe the correlation of the Temporomandibular Joint Dysfunctions in Rheumatoid Arthritis Questionnaire (CEDATAR) with the Health Assessment Questionnaire (HAQ).

MATERIAL AND METHODS

Seventy-two consecutive patients who attended the consultation of the Rheumatology Service of Hospital Córdoba were prospectively analyzed. The patients were duly instructed about the study and signed the Informed Consent for this Work approved by the Institutional Committee for Ethics in Adult Health Research (CIEIS) of Hospital Córdoba. All patients had rheumatoid arthritis diagnosed by a rheumatologist according to American College of Rheumatology 2010 criteria. 12 All patients completed the CEDATAR and the HAQ.

RESULTS

When correlating the results of the Questionnaire to Evaluate Temporomandibular Joint Dysfunctions in Rheumatoid Arthritis (CEDATAR) with the Health Assessment Questionnaire (HAQ), a statistically significant ($p < 0.001$) and positive correlation of moderate magnitude ($R = 0.513$) was identified. between both instruments used. This finding suggests an association between the severity of symptoms related to the temporomandibular joints, as measured by the CEDATAR, and the individual's general perception of health and physical functioning as assessed by the HAQ. This type of correlation reinforces the importance of considering oral health and mandibular function in the comprehensive evaluation of patients with rheumatoid arthritis, since these can influence the quality of life and functional capacity of patients affected by this pathology.

CONCLUSION

This correlation invigorates the need to consider health holistically and perform effective and efficient diagnoses and therapies

that interrelate oral health as an integral part of systemic health. Interdisciplinary work for the functional improvement of all joints together will guarantee a better quality of life for patients with rheumatoid arthritis.

	Health Assessment Quizz	Exact TMJ Functional Capacity
Health Assessment Quizz	Pearson correlation 1	,513**
	Sig. (bilateral)	<0,001
	N	72
Functional capacity of the A.T.M. exact	Pearson correlation	,513**
	Sig. (bilateral)	<0,001
	N	72

** . The correlation is significant at the level: 0.01 (bilateral)

Table: Correlations between HAQ and CEDATAR

REFERENCES

- 1- Rhys K, Gobbi C, Busamia B, Albiero E, Alba P, Lagnarini L. Validación del cuestionario: CEDATAR (cuestionario para evaluar las disfuncionalidades de las articulaciones temporomandibulares en artritis reumatoide). Rev. Ocronos. Vol. IV. Núm. 7 (Julio 2021) - Pág. Inicial: 66. ISSN: 2603-8358. <https://revistamedica.com/validacion-cuestionario-cedatar>.
- 2- Rhys K, Gobbi C, Busamia B, Albiero E, Lagnarini L, Alba P. Benefits of using the Questionnaire to Assess Temporomandibular Joint Dysfunctionalities in Rheumatoid Arthritis (CEDATAR). South Florida Journal of Health, Miami, v.2, n.4, p.514-519, oct./dec. 2021. ISSN 2675-5467. DOI: 10.46981/sfjhv2n4-009.
- 3- Rhys K, Gobbi C, Busamia B, Albiero E, Lagnarini L, Alba P. Libro de Resúmenes. LIV Reunión Científica Anual SAIO. Questionnaire to evaluate the dysfuncionalities of the temperomandibular joints in rheumatoid arthritis. 113 ID 3643235. ISBN 978-987-46399-4-3.
- 4- Rhys K, Gobbi C, Busamia B, Albiero E, Alba P, Lagnarini L, Yorio M. Cuestionario para evaluar las disfuncionalidades de las articulaciones temporomandibulares en artritis reumatoide (CEDATAR). Suplemento 1-(2021) Rev Fac Odont –VIII JICO. Pág.10-13. ISSN 2545-7594 (en línea/on line).
- 5- Rhys K, Gobbi C, Busamia B, Castrillón ME, Paulazo C, Morón M, Albiero E, Alba P. Ciências Socialmente Aplicáveis: Integrando Saberes e Abrindo Caminhos Vol. IV. Editora Artemis. Capítulo 13: Importancia de la valoración holística de las articulaciones temporomandibulares en pacientes con artritis reumatoide. Pág. 157-166. 2022. ISBN 978-65-87396-59-0. DOI 10.37572/EdArt_290522590.
- 6- Rhys K, Gobbi C, Busamia B, Albiero E, Alba P. Libro de Resúmenes Congreso de Ciencia y Género 2022. Cedatar: paliativo en la vulnerabilidad de género en la salud. Pág. 10-11. ISBN 978-987-47203-2-0.
- 7- Pincus T, Callahan LE, Vaughn WK. Questionnaire, walking time and button test measures of functional capacity as predictive markers for mortality in rheumatoid arthritis. J Rheumatol 1987; 14:240-51.
- 8- Pincus T, Callahan L F. Rheumatology function test: grip strength, walking time, button test and questionnaires document and predict long term morbidity and mortality in rheumatoid arthritis. J Rheumatol 1992; 19:1051-7
- 9- Fries J F, Spitz P, Kraines G, Holman HR. Mesurement of patient outcome in arthritis. Arthritis Rheum 1980; 23:137-45.
- 10- Harrison Principios de Medicina Interna. Mc Graw Hill Education. Biblioteca Médica virtual. 20º Edición. Volumen 2. e-book ISBN 978-1-259-64402-3; MHID 1-259-64402-2. 2018.
- 11- Firestein GS. Evolving concepts of rheumatoid arthritis. Nature. 2003 May 15;423(6937):356-61. doi: 10.1038/nature01661. PMID: 12748655.
- 12- Aletaha D, Neogi T, Silman AJ, Funovits J, Felson DT, Bingham CO 3rd, et al. 2010 Rheumatoid arthritis classification criteria: an American College of Rheumatology/European League Against Rheumatism collaborative initiative. Arthritis Rheum. 2010; 62 (9):2569-81.