

## 2<sup>nd</sup> ANNUAL DENTISTRY AND DENTAL SCIENCES CONGRESS

January 10, 2022 | Webinar

### Mouth opening, jaw disability, neck disability, pressure pain thresholds and myofascial trigger points in patients with disc displacement with reduction

**Armando Campos Lopez**

University of Zaragoza, Mexico

**Objective:** To assess jaw and neck function, pressure pain threshold (PPT) and the presence of trigger points (TrPs) in disc displacement with reduction (DDWR) subjects compared to healthy subjects. Methods: One hundred DDWR subjects and 100 matched controls were studied. Clinical evaluations included demographic data, range of motion, jaw and neck disability, PPT and muscle TrPs.

**Results:** DDWR subjects have limited pain-free opening limitation ( $p < 0.001$ ), jaw and neck disability limitation ( $p < 0.001$ ) and higher presence of active and latent TrPs limitation ( $p < 0.001$ ) compared to healthy subjects.

**Conclusion:** DDWR subjects present a limited pain-free mouth opening, higher jaw and neck disability, lower PPT and major presence of active and latent TrPs compared to healthy subjects. Cervical spine and TMJ evaluation and treatment should be considered in DDWR patients.

**Table 1.** Demographic and clinical data of both groups.

	DDWR (n = 100)	Healthy Controls (n = 100)	p-value
Gender (male/female)	21 (21)/79 (79)	41 (41)/59 (59)	0.23
Age	29.5 ± 12.33	27.68 ± 11.95	0.36
BMI	25.71 ± 5.13	25.8 ± 5.7	0.97
Noises during opening	86 (86)	0 (0)	0.001*
Pain-free opening	4.30 ± 3.89	5.13 ± 0.73	0.001*
Jaw Mobility			
Maximal jaw opening	5.20 ± 3.09	5.13 ± 0.73	0.06
Assisted opening	5.28 ± 0.61	5.2 ± 0.84	0.77
Right lateral	1.20 ± 0.30	1.17 ± 0.39	0.10
Left lateral	1.11 ± 0.29	1.12 ± 1.2	0.45
Protrusion	0.66 ± 0.22	0.66 ± .24	0.83
JFLS – Global	36.78 ± 29.03	2.53 ± 7.1	0.001*
JFLS – Mastication	12.65 ± 10.03	1.27 ± 4	0.001*
JFLS – Mobility	14.42 ± 10.50	0.86 ± 2.45	0.001*
JFLS – Verbal	9.81 ± 13.10	0.41 ± 1.5	0.001*
NDI Total	8.72 ± 5.72	1.94 ± 2.51	0.001*

Values are expressed as mean ± standard deviation. Gender, noises during opening, and NDI are expressed as n (%). DDWR: Disc displacement with reduction; BMI: Body Mass Index; NDI: Neck disability index; JFLC: Jaw functional limitation.

**Table 5.** Total number of TrPs in masticatory and neck muscles in patients with DDWR and healthy control subjects.

	DDWR (n = 100)	Healthy controls (n = 100)	p-value
Total TrPs on neck	6.81 ± 2.04	0.79 ± 1.27	0.01*
Total number of latent TrPs on neck	2.56 ± 2.31	0.54 ± 1.04	0.01*
Total number of active TrPs on neck	4.23 ± 2.59	0.25 ± .557	0.01*
Total TrPs on TMJ	6.84 ± 2.18	0.39 ± 1.71	0.01*
Total number of latent TrPs on TMJ	2.30 ± 2.54	0.39 ± 1.17	0.01*
Total number of active TrPs on TMJ	4.54 ± 2.82	0 ± 0	0.01*

TrPs: Trigger points; TMJ: Temporomandibular joint; DDWR: Disc displacement with reduction.

#### Biography

Armando Campos is a physical therapist with 10 years of experience in clinical field. Currently he is finishing his Ph.D. in universidad de zaragoza, spain, waiting to submit his doctoral thesis titled: "Effectiveness of orthopedic manual therapy in subjects with disc displacement with reduction". Dr has his expertise in temporomandibular disorders and neck disfunctions. He has been a professor in several universities in mexico and abroad as well as a speaker in different postgraduate physical therapy courses.

armandoc12189@gmail.com