AB0851 CAROTID ULTRASOUND IN PSORIATIC ARTHRITIS: A CASE-CONTROL STUDY

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AB0851 CAROTID ULTRASOUND IN PSORIATIC ARTHRITIS: A CASE-CONTROL STUDY

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Background: Patients with psoriatic arthritis (PsA) have an increased risk of cardiovascular disease (CVD). The carotid ultrasound, which measures both carotid intima-media thickness (cIMT) and carotid plaque (CP), is a non-invasive tool useful in the detection of subclinical atherosclerosis[1]. However, carotid ultrasound differences between PsA patients and general population have not yet been well described.
Objectives: This study aimed to compare the carotid ultrasound characteristics in PsA patients with controls.
Methods: This cross-sectional study included 70 PsA patients that fulfilled the CASPAR (Classification Criteria for Psoriatic Arthritis) criteria and 70 controls subjects matched by age and comorbidities. Patients with a history of previous atherosclerotic CVD (ischemic heart disease, cerebrovascular accident or peripheral arterial disease) and pregnancy were excluded. A clinical history and blood tests were performed. Carotid B-mode ultrasonography was used for measurements of cIMT and the presence of plaques. *Increased cIMT was defined as ≥0.9 mm to 1.1 mm. CP was defined* as a *focal narrowing ≥0.5 mm of the surrounding* lumen or a *cIMT ≥1.2 mm.* Descriptive analysis was done with frequencies (%), mean (±SD) and median (q25-q75), and comparisons with Chi square, Student´s t and Mann-Whitney U tests.
Results: A total of 138 subjects were included. Clinical and demographic characteristics are shown in Table 1. Increased cIMT and right carotid plaque were significantly more prevalent in PsA patients compared to controls *(p*=0.017 and p=0.049, respectively). No significant differences were found in the prevalence of carotid plaque and in the intima-media thickness between the PsA patients and the control group.

Table 1. Clinical and demographic characteristics.

Variable	PsA (n=69)	Controls (n=69)	*P*
Age(mean±SD)	53.58±10.946	53.86±7.313	NS
Women, n (%)	38(55.1)	59(85.5)	**<0.001**
Obese, n (%)	26(37.7)	28(40.6)	NS
Type 2 Diabetes, n (%)	14(20.3)	9(13)	NS
Hypertension, n (%)	27(39.1)	19(27.5)	NS
Dyslipidemia, n (%)	29(42)	24(34.8)	NS
Active smoker, n(%)	15(21.7)	12(17.4)	NS
Disease duration, median (q25-q75)	5(2.5-8)	-	-
Methotrexate, n (%)	46(66.7)	-	-
Biologics, n (%)	23(33.3)	-	-
DAS28-ESR, (mean±SD)	3.74±1.477	-	-
DAS28-CRP, (mean±SD)	2.43±1.088	-	-
DAPSA, median (q25-q75)	35(27.5-58.5)	-	-

Conclusion: Patients with psoriatic arthritis have a higher cardiovascular risk, as proven by the increased cIMT found on carotid ultrasound results. Therefore, it is advisable to perform a carotid ultrasound in patients with PsA to achieve an optimal management of the disease. The rheumatologist must be aware of the importance of performing a complete cardiovascular evaluation to provide a correct treatment in order to lower possible cardiac events.

References:

[1] Lucke, M., Messner, W., Kim, E.S.H. *et al.* The impact of identifying carotid plaque on addressing cardiovascular risk in psoriatic arthritis. Arthritis Research & Therapy 18, 178 (2016). https://doi.org/10.1186/s13075-016-1074-2

Table 2. Carotid ultrasound findings.

Variable	PsA (n=69)	Controls (n=69)	*P*
Any carotid plaque, n (%)	27(39.1)	17(24.6)	NS
Right carotid plaque, n (%)	18(26.1)	8(11.6)	**0.049**
Left carotid plaque, n (%)	19(27.5)	15(21.7)	NS
Increased cIMT, n (%)	9(13)	1(1.4)	**0.017**
Right cIMT, median (q25-q75)	0.58(0.46-0.76)	0.6(0.51-0.69)	NS
Left cIMT, median (q25-q75)	0.58(0.5-0.73)	0.61(0.54-0.78)	NS

Disclosure of Interests: None declared
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AB0852 LONG TERM FOLLOW UP OF VISCOSUPPLEMENTATION WITH DIFFERENT TYPES OF INTRA-ARTICULAR HYALURONIC ACID IN OSTEOARTHRITIS OF THE KNEES

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Background: Knee osteoarthritis (OA) is a progressive degenerative condition resulting in functional loss besides pain and discomfort.[1] The aim of treatment as of today should be joint preservation in order to prevent surgery, alleviation of symptoms and improvement of functions.
Viscosupplementation (VES) with Intra-articular hyaluronic acid (IAHA) injections has been shown to have protective physiochemical functions and may confer disease-modifying, long term effects on the articular cartilage. [2][3] However conflicting guidelines, availability of multiple varieties, and absence of good studies or any treatment protocol has resulted in lack of confidence of the results of IAHA.
Objectives: To determine the Long term effectiveness of VES with various types IAHA in OA in maintaining functional improvement of the knees and evaluate the duration of effect of first and repeat injections of VES.
Methods: From the 15 year retrospective longitudinal study of data of VES with different types of IAHA in our Centre, we evaluated the following outcomes:

1. The WOMAC scores were regularly done on each visit of the study group. Those with maintained improvement in the WOMAC total score were followed and reinjected when the scores started decreasing.
2. All patients who were given Non Animal Source Hyaluronic acid (NASHA) were included in the study. Patients with repeat IAHA were further evaluated for Type of NASHA used and were categorized into 2 groups accordingly:

a. Those with High Molecular weight Hyaluronic acid (HMW-HA) 6-8mg/ml – 6 ml single injections
b. Those with Very High Molecular weight, Cross linked Hyaluronic acid (VHMW-HA) 20- mg/ml – 3 ml injections.

Results: The total number of patients treated over the last 15 years was 1206 with 689 having Kellgren and Lawrence (KL) Grade III OA, and 517 KL Grade IV OA. The data showing distribution of type of IAHA used in the group, the average Gap between the injections with the Range in years for the least gap and the longest gap between the injections, along with the follow up to giving the 3rd injection was given is summarized in Chart 1: Time gap between repeat IAHL injections in OA knees.

Chart 1. Time gap between repeat IAHL injections in OA knees

OA GRADE &	I INJ		II INJ			III INJ	
VISCOUS TYPE	N = 1206	Gap 1	Range	N =782	Gap 2	Range	N = 578
KL GRADE III OA	N = 689		N = 442			N = 314	
Group A:HMW-HA	237	0.92	0.8 -1.6	144	0.87	0.6-1.1	105
Group B:VHMW-HA	452	2.54	1.8-3.4	298	2.43	1.7-2.8	209
KL GRADE IV OA	N = 517		N = 340			N = 340	
Group A:HMW-HA	154	1.02	0.6-1.2	96	0.95	0.5-1.1	75
Group B:VHMW-HA	363	2.01	1.4-2.3	244	1.89	1.4-2.2	189

Gap 1 - Average Time between I & II inj.in years, Gap 2 - Average Time between II & III inj. in years
Range - Being the time in years for the least & the longest Gap between the injections
HMW-HA - High Molecular weight Hyaluronic acid
VHMW-HA - Very High Molecular weight, Cross linked Hyaluronic acid