

**Table 1. Multivariable logistic regression comparing clinical outcomes across races\***

	Caucasian			Hispanic		
	OR	95% CI	P-value	OR	95% CI	P-value
ACS	2.72	0.6-12.4	0.2	2.72	0.4-17.4	0.291
CVA	1.04	0.6-1.7	0.87	0.8	0.4-1.7	0.567
TAA	NA			NA		
Infection	1.55	0.9-2.6	0.11	2.74	1.4-5.5	0.004

\*AA are taken as reference

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### POS0820 PREDICTIVE VALUE OF OBJECTIVE EXAMINATION OF TA ON POSITIVITY OF TAB IN GIANT CELL ARTERITIS

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**Background:** Previous studies have reported the utility of temporal artery examination for the diagnosis of GCA but no data are available on the correlation between clinical examination and the subsequent temporal artery biopsy (TAB) results of the biopsied vessel.

**Objectives:** Evaluate the predictive value of temporal artery (TA) examination in patients with suspected GCA on the results of TAB of the same vessel.

**Methods:** 97 pts consecutively seen at our center because of suspected cranial arteritis between 01.01.2015 to 31.12.2021 were enrolled in the study. All patients had complete clinical examination, laboratory investigations (included ESR and CRP determination), clinical examination of the temporal arteries and their frontal and parietal branches for tenderness (P), reduced or absent pulse (R) and thickening (T). All patients underwent arterial ultrasound (US) followed by a TAB of the most US involved frontal branches. The presence of inflammatory infiltrate of the vessel wall or the inflammation of the perivascular blood vessel were considered positive for the presence of arteritis. The clinical features of the biopsied vessel were compared with the histological results by chi square test and the correspondent OR with 95%CI. Sensitivity, specificity, negative and positive PV, negative and positive LR were calculated for every singular objective abnormalities.

**Results:** 97 pts entered the study (F 56 (58%), mean age 73 ± 8, biopsy positive 56 (57%). At clinical examination of the biopsied vessel P was reported in 26 cases (27%) of TAB + and 10 (24.4%) in TAB- group (p=0.646, OR 1.24), R in 15 (15.5%) vs 2 (4.9%) (p=0.021, OR 5.69) and T in 16 (28.6%) vs 2 (4.9%) (p=0.003, OR 7.80), anyone (T or P or R) 30 (54.5% vs 11 (26.8%)) (p=0.007, OR 3.27), presence of T or R 23 (41.8%) vs 4 (9.8%) (p=0.001, OR 6.65). Sensitivity, specificity, PPV, NPV, PLR, and NLR of any singular objective data and of US examination are reported in Table 1

**Table 1. SENS, SPEC, PPV, NPV, PLR, NLR, PRETEST probability, POST TEST probability of clinical objective examination and US results FOR TAB POSITIVITY**

	SENS	SPEC	PPV	NPV	PLR	NLR	PRE	POST
TA EXAMINATION								
TENDERNESS (P)	0.286	0.756	0.615	0.437	1.17	0.94	0.57	0.61
REDUCED/ ABSENT PULSE (R)	0.232	0.951	0.867	0.476	4.76	0.80	0.58	0.87
THICKENING (T)	0.286	0.951	0.889	0.494	5.86	0.75	0.57	0.89
ANYONE (P or R or T)	0.545	0.732	0.732	0.545	2.03	0.55	0.57	0.73
R or T	0.418	0.902	0.851	0.536	4.28	0.65	0.57	0.85
US								
HALO	0.875	0.643	0.636	0.878	2.45	0.19	0.42	0.64
CT+	0.878	0.654	0.654	0.878	2.54	0.19	0.43	0.65

**Conclusion:** Clinical examination (in particular reduced pulse and arterial thickening) of the temporal arteries is predictive of histological positivity of the TAB.

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### POS0821 CORONARY ARTERIAL INVOLVEMENT CAN BE OBSERVED IN A SIGNIFICANT SUBSET OF TAKAYASU'S ARTERITIS PATIENTS BY CORONARY CT-ANGIOGRAPHY

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**Background:** Besides the aorta and its main branches, coronary arterial involvement is also seen at a substantial rate in patients with Takayasu's arteritis (TAK). Computerized tomography (CT)-angiography, as a non-invasive assessment tool, has started to be used instead of conventional angiography in the evaluation of coronary arteries. However limited data is available for its role in TAK patients.

**Objectives:** In this study, we aimed to assess the coronary arterial involvement by coronary CT-angiography in TAK patients with or without symptoms and to compare clinical characteristics of patients with or without coronary arterial involvement.

**Methods:** Patients with TAK (n=49, F/M: 40/9, mean age: 42.61±9.95 years) followed in Marmara University Vasculitis Clinic and underwent coronary CT-angiography with or without cardiac symptoms were evaluated retrospectively. Data of four patients who were not suitable for coronary CT-angiography but underwent conventional angiography were also included. CT angiography findings in the coronary arteries were defined as ostial stenosis, stenosis, calcific plaque and aneurysm and patients were categorized into two groups as those with or without coronary artery pathology. Demographic data, cardiac symptoms, clinical findings, BMIs, angiographic Hata and Goel classifications, treatments received for TAK, acute phase reactants and lipid levels were compared.

**Results:** Coronary artery pathology was detected in 14 patients (28.7%). Only 9 patients had a history of angina and 6 had cardiac symptoms in this group. Calcific plaque was present in 11 (22.5%), coronary artery stenosis in eight (16.3%) and aneurysm, ostial stenosis and occlusion in one patient each (2.0%). RCA was involved in 20.4%, LAD in 28.6%, LMCA in 22.4%, CX in 26.6% and more than one coronary arterial involvement in 26.5% of patients. In patients with coronary artery involvement, age (p=0.02), age at TAK diagnosis (p=0.004) and number of anti-hypertensive drugs (p=0.011) were significantly higher than those without coronary artery involvement. History of angina (p=0.004) and statin use (p=0.001) were also significantly higher in patients with coronary artery abnormalities, whereas HDL levels were significantly lower (p=0.037). No significant differences were observed between the groups when gender, smoking history, diabetes, BMI, ITAS2010 scores, biological therapy use, angiographic classifications, aortic involvement, presence of cardiac symptoms, CRP, ESR, total cholesterol and LDL levels were compared (Table 1).

**Table 1. Comparison of patient groups with and without coronary artery involvement (BMI: Body Mass Index, SD: Standard Deviation, ITAS: Indian Takayasu Activity Score, LDL: Low Density Lipoprotein, HDL: High Density Lipoprotein)**

	Presence of Coronary Arterial Involvement (n=14)	Absence of Coronary Arterial Involvement (n=35)	p value
Age	49.29 (8.23)	39.94 (9.39)	p=0.02
Gender (F/M)	10/4	30/5	p=0.254
Disease duration, years	7.43 (6.42)	8.46 (6.25)	p=0.608
Age at TAK diagnosis	41.21 (12.58)	31.37 (9.18)	p=0.004
Diabetes mellitus	3/14	1/35	p=0.065
Family history	4/14	7/35	p=0.706
Smoking history	8/14	25/35	p=0.122
BMI (kg/m <sup>2</sup> )	25.08 (2.53)	25.17 (4.68)	p=0.930
Biological therapy	4/14	15/34	p=0.317
CRP (mg/L) mean (SD)	4.45 (3.4)	8.68 (24.08)	p=0.642
ITAS2010 mean (SD)	0.57 (0.94)	0.51 (1.15)	p=0.869
LDL (mg/dL) mean (SD)	102 (41.96)	112.44 (35.79)	p=0.398
HDL (mg/dL) mean (SD)	46.23 (12.78)	55.12 (12.62)	p=0.037
Cardiac Symptom	6/14	2/35	p=0.159
Aorta involvement	8/14	18/35	p=0.717
Statin use	10/14	6/34	p=0.001
Number of antihypertensives	1.79 (0.89)	0.85 (1.18)	p=0.011
Acetylsalicylic acid use	10/14	24/34	p=1
Angina history	9/14	6/35	p=0.004

**Conclusion:** Coronary artery involvement which is an important cause of morbidity and mortality can be detected non-invasively by coronary CT-angiography in up to 1/3 of patients with Takayasu's arteritis, also in patients without angina and cardiac symptoms. Traditional cardiac risk factors are present more commonly in this group.

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