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Letter to the Editor

Monckeberg's medial sclerosis in temporal artery mimicking giant cell arteritis

Esclerosis medial de Monckeberg de la arteria temporal simulando arteritis de células gigantes

Dear Editor:

Monckeberg's medial sclerosis (MMS) is a non-inflammatory degenerative condition affecting primarily the arteries of extremities and visceral organs. MMS in temporal artery is rare and may present some clinical similarities with giant cell arteritis (GCA). We aimed to draw attention to this pathology by sharing our case with MMS in temporal artery (TA) mimicking GCA.

A 72-year-old female patient was referred to our clinic due to severe headache without any pathological finding in cranial computerized tomography and magnetic resonance imaging. She had a two-week history of headache with severe tenderness on right temporal area. Clinical and laboratory evaluations were unremarkable except the tenderness on right temporal area, high erythrocyte sedimentation rate (ESR 37 mm/h) and mild anemia. There was no "halo sign" in color Doppler ultrasonography (USG). Oral methylprednisolone was started and temporal artery biopsy (TAB) was performed to confirm GCA. Her complaints were responded to glucocorticoid and resolved in three weeks. In the histopathological evaluation TAB, there were MMS characteristics with degeneration and calcification in the internal elastic lamina in tunica media and obliteration in lumen of medium-large-sized vessel (Fig. 1). GCA was excluded and medication was gradually stopped.

MMS is a non-inflammatory degenerative condition affecting primarily the tunica media of arteries resulting in their calcification.[1] As a mimicker of GCTA, it may be considered as a non-giant cell temporal arteritis pathology. It is frequently, but not exclusively, associated with aging, type 2 diabetes mellitus, chronic kidney diseases, hormonal disorders and vitamin deficiencies and it may lead to hemodynamic changes in the microcirculation and with its progress, it may cause decreased organ perfusion.[2] It occurs predominantly in femoral, tibial, radial, coronary, cerebral and visceral vessels with generally no symptoms. However, acute vascular complications including ischemic changes have also been reported.[3]

MMS in TA has only rarely been reported previously and due to shared features with GCA, it may become a diagnostic challenge for the clinician.[1–3] Symptoms indistinguishable from GCA such as headache, facial pain, tenderness in the temporal area, temporal artery hardening and acute vision loss have been reported in patients with MMS in TA.[1,2] Also the pain due to MMS in TA was reported to be managed with glucocorticoids.[1] Although high ESR is expected in GCA, normal values do not exclude the diagnosis. The "halo sign" in Doppler USG is important in GCA however, it is not seen in all patients. Several imaging findings in plain radiographs, CT and USG have also been reported for MMS in the head and neck region.[1]

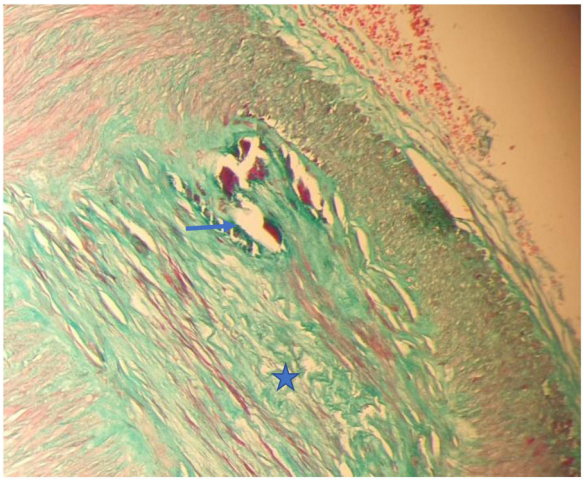

Fig. 1. Masson Trichrome, 200×. The histopathological evaluation of temporal artery biopsy specimen; Monckeberg's medial sclerosis characteristics with degeneration (star) and calcification (arrow) in the internal elastic lamina in tunica media and obliteration in lumen of medium-large-sized vessel.

TAB remains the gold standard for the diagnosis of GCA. However, besides the possibility of false-negative biopsy result due to the skip lesions in GCA, other vasculopathy possibilities (atherosclerosis in the majority and MMS in the minority of the cases) should also be kept in mind. Histopathologically, besides an intact intima, degenerations and calcification in the internal elastic lamina in tunica media and obliteration in lumen of medium–large-sized vessel can be seen in MMS. However, endothelial structural disorganization, repair and thickening of the intima, as well as deformity of the arterial wall can be identified in atherosclerosis. Indeed, in a large series in suspected GCA cases, MMS was described in 6% of the TAB specimens.[4]

In conclusion, MMS in TA can mimic GCA due to the similarities of clinical features. It may become a diagnostic challenge for the clinician and an increased awareness of the disease may contribute to diagnosis.

Conflict of interest

The authors declare that they have no conflict of interest.

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Mortalidad de la tuberculosis osteoarticular en España entre 1997 y 2018

Osteoarticular tuberculosis mortality in Spain between 1997 and 2018

Sr. Editor:

La tuberculosis (TBC) es un problema de salud pública a nivel mundial. La forma osteoarticular representa el 3-5% de sus manifestaciones, pero existen pocos datos en la literatura sobre su mortalidad[1]. Como ampliación del estudio publicado recientemente sobre la incidencia y la evolución temporal[2], hemos analizado la mortalidad de la TBC osteoarticular en España, desde la perspectiva hospitalaria, entre los años 1997 y 2018.

Se estimó la mortalidad y letalidad, durante 22 años, de la TBC osteoarticular (TBC-OA) en un estudio observacional y retrospectivo mediante los datos recogidos en el conjunto mínimo básico de datos al alta hospitalaria de los pacientes con diagnóstico principal o secundario (según el CIE-9 y CIE-10) de TBC-OA en España durante los años 1997-2018. Se produjeron 336 fallecimientos en 5.710 pacientes.

La mortalidad media anual de los pacientes con TBC-OA fue de 0,35 casos por millón de habitantes (IC del 95% 0,31-0,38). La Organización Mundial de la Salud ha detectado una tendencia descendente en las tasas estimadas de mortalidad por TBC en todas las regiones desde el año 2000[3]. En el estudio, existió una diferencia significativa entre la mortalidad media anual por millón de habitantes en el primer periodo (1997-2007) de 0,12 fallecimiento y la del segundo (2008-2018) de 0,07 fallecimiento ($p < 0{,}001$).

Llama la atención que la mortalidad fue nula en 31 lactantes y 133 niños de entre 1 y 14 años con TBC-OA cuando la tasa promedio de letalidad por TBC en niños a nivel mundial es de alrededor del 24% y que la TBC es una de las 10 principales causas de muerte en niños en todo el mundo[4]. No obstante, se puede explicar por el hecho de que más del 96% de todas las muertes por TBC ocurren en niños que no reciben tratamiento contra la TBC[5].

Por otra parte, los mayores de 75 años presentaron una mayor incidencia y mortalidad (0,25 fallecimiento por millón). La letalidad global fue del 5,9% (IC del 95% 5,3-6,53). La letalidad de los pacientes con TBC-OA

Tabla 1
Análisis bivariante y multivariante de factores de riesgo y comorbilidades para el fallecimiento

Análisis bivariante y multivariante de los factores de riesgo asociados a mortalidad						
Variables	Fallecimiento hospitalario con TBC osteoarticular (n = 336)					
	Sí	No	Análisis bivariado		Análisis multivariado	
	N (%)	N (%)	Valor p	OR (IC 95%)	Valor p	OR (IC 95%)
Déficit neurológico						
Sí	23 (11,4%)	179 (88,6%)	0,001	2,133 (1,361-3,341)	0,001	2,403 (1,446-3,994)
No	313 (5,7%)	5195 (94,3%)		Grupo de referencia		Grupo de referencia
Enfermedad cerebrovascular						
Sí	28 (24,1%)	88 (75,9%)	< 0,001	5,461 (3,515- 8,483)	< 0,001	3,385 (2,044-5,608)
No	308 (5,5%)	5286 (94,5%)		Grupo de referencia		Grupo de referencia
Diabetes mellitus						
Sí	57 (9,2%)	564 (90,8%)	< 0,001	1,742 (1,293-2,347)	0,529	0,896 (0,637-1,261)
No	279 (5,5%)	4.810 (94,1%)		Grupo de referencia		Grupo de referencia
Neoplasia maligna						
Sí	38 (24,8%)	115 (75,2%)	< 0,001	5,831 (3,969-8,569)	< 0,001	6,229 (4.025-9,639)
No	298 (5,4%)	5.259 (94,6%)		Grupo de referencia		Grupo de referencia
Enfermedad hepática crónica						
Sí	22 (17,7%)	102 (82,3%)	< 0,001	3,621 (2,253-5,821)	< 0,001	3,503 (1,923- 6,381)
No	314 (5,6%)	5.272 (94,4%)		Grupo de referencia		Grupo de referencia
Enfermedad renal crónica						
Sí	43 (16,5%)	217 (83,5%)	< 0,001	3,488 (2,463 – 4,938)	0,027	1,626 (1,057-2,501)
No	293 (5,4%)	5.157 (94,6%)		Grupo de referencia		Grupo de referencia
Malnutrición						
Sí	11 (15,1%)	62 (84,9%)	0,001	2,9 (1,512-5,56)	0,180	1,698 (0,782-3,687)
No	325 (5,8%)	5.312 (94,2%)		Grupo de referencia		Grupo de referencia
Insuficiencia respiratoria aguda						
Sí	85 (25,5%)	248 (74,5%)	< 0,001	7 (5,306-9,234	< 0,001	5,285 (3,861- 7,234)
No	251 (4,7%)	5.126 (95,3%)		Grupo de referencia		Grupo de referencia