to recognise new aspects of one's own illness and they can be used to give support to people in different stages of their illness. Participants felt that forming groups and increasing cooperation between trained coaches and local associations need to be supported by the umbrella organisation, Finnish Rheumatism Association. Tools for Mind have successfully been used in a Fibromyalgia group and in senior groups for veterans (who did not have any RMDs).

Conclusion: The Finnish Rheumatism Association is creating new activities to endorse mental wellbeing. The training in 2018 will be used as a model for training coaches in mental wellbeing and it will be introduced in member organisations in 2019. Four training sessions will be arranged around Finland in the spring 2019. The programme will follow the pilot project programme. Training includes learning how to use the tools for mental wellbeing, going through the elements of mental wellbeing, solution-focused practices, organising peer support groups for old people with chronic illnesses and ethical principles. If possible, it is always good to have a trained Coach in the training, to tell about his/her experiences of using the Tools for Mind, how people have reacted to using the tools, and what kind of challenges and good moments the coach has experienced in group work. In 2019, the tools are utilised for example in monthly tasks concerning mental wellbeing and the Senior Mind Pack of 52 cards are being used in the member organisation visits to start conversation.

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Diagnostic challenges in vasculitis

OP0210

FALSE POSITIVES OF ULTRASOUND IN GIANT CELL ARTERITIS. SOME DISEASES CAN ALSO HAVE HALO SIGN

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Background: Giant cell arteritis (GCA) is the most common systemic vasculitis in the elderly. The halo sign has been shown as an accepted valid test in the diagnosis of GCA in trained units¹⁻². However, to further improve the specificity, the sonographer should know some pathologies that can mimic halo signs since they also produce a hypoechoic increase of the arterial wall thickness.

Objectives: The aim of our study was to identify the causes and diseases that could be associated with the false positive diagnoses of GCA made by color Doppler ultrasound (CDUS).

Methods: Observational study of 305 patients with temporal artery CDUS findings compatible with GCA. The medical histories of these patients were reviewed and demographic, physical examination, clinical and analytical data were collected. The clinical diagnosis based on the long term follow-up of the patient was established as the definitive true diagnosis.

Results: 13 of the 305 cases included (4.3%) were false positives. The characteristics of these 13 patients and their final diagnoses are shown in table 1. 69.2% were women, while 30.8% were men. The mean age was 73.3 ± 8.0 years. Analytically, the mean ESR was 64.8 ± 42.3 mm/h, CRP 50.8 ± 60.0 mg/L and hemoglobin 12.6 ± 2.0 g/dL. Five patients (38.5%) fulfilled the ACR GCA classification criteria and eight did not (61.5%). A temporal artery biopsy was performed in 8 of the 13 patients (61.5%), with negative results in all of them. Eleven patients had CDUS involvement of superficial temporal arteries. Five had 1 branch involved (38.5%), three 2 branches (23.1%), one 3 branches (7.7%) and two 4 branches (15.4%). In addition, two patients (15.4%) had isolated halo sign in the axillary arteries, one unilateral and the other bilateral. Regarding the definitive diagnosis, four patients were polymyalgia rheumatica (30.8%), three atherosclerosis (23.1%), and there was one case of non-Hodgkin's Lymphoma type T, osteomyelitis of the skull base, primary amyloidosis associated with multiple myeloma, granulomatosis with polyangiitis, urinary sepsis and narrow-angle glaucoma. Some of these cases were false positives probably due to exam errors. However, others were due to diseases that increase the arterial wall thickness probably caused by cell infiltration and related edema (as Hodgkin's Lymphoma type T and ANCA-associated vasculitis) or by hypoechoic material deposit (as atherosclerosis and primary amyloidosis/multiple myeloma).

Table 1. Final diagnoses for false positive halo signs and associated ultrasound findings

Patient	Definitive diagnosis	Biopsy result	Artery involved	Number of arterial branches
1	Non-Hodgkin's T lymphoma	Negative	Temporal	3
2	Narrow-angle glaucoma	No done	Temporal	1
3	Osteomyelitis of the skull base	No done	Temporal	4
4	Polymyalgia rheumatica	Negative	Temporal	2
5	Urinary sepsis	Negative	Temporal	1
6	Polymyalgia rheumatica	Negative	Temporal	1
7	Polymyalgia rheumatica	Negative	Temporal	1
8	Amyloidosis due to multiple myeloma	Negative (deposit of amyloid material)	Temporal	4
9	Atherosclerosis	No done	Axilar	
10	Atherosclerosis	No done	Axilar	
11	Polymyalgia rheumatica	Negative	Temporal	1
12	Atherosclerosis	Negative	Temporal	2
13	ANCA-associated vasculitis	No done	Temporal	2

Conclusion: The percentage of false positives in the CDUS for the diagnosis of GCA is low. Nevertheless, some other diseases can also produce halo sign and the clinician should be aware of this to improve the accuracy of the ultrasound test.

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OP0211

ULTRASONOGRAPHY CAN POTENTIALLY BE THE FIRST CHOICE OF IMAGING IN SUSPECTED EXTRA-CRANIAL GCA

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Background: Color duplex ultrasonography (CDU) is recommended as first line of imaging in patients suspected for cranial GCA [1]. However, extra-cranial involvement without temporal artery involvement is found in up to 40% of GCA patients [2]. CDU is very suitable to also assess extra-cranial artery inflammation, of which the axillary artery is relatively easy to assess. However, data on the value of CDU in extra-cranial GCA is limited [3].

Objectives: We aimed to (1) evaluate the performance of axillary artery CDU in patients with extra-cranial GCA by comparing CDU findings with [18F]-FDG PET/CT findings. Furthermore, to (2) compare the sensitivity and specificity of adding assessment of axillary arteries to temporal artery CDU, over temporal artery CDU only.

Methods: Consecutive patients suspected of GCA who underwent CDU examination of the temporal and axillary arteries between 2013 and 2017 were