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Comment on "Classification Criteria for Vogt-Koyanagi-Harada Disease"

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Dear Editor,

We read with interest the article by the Standardization of Uveitis Nomenclature (SUN) working group regarding classification criteria for Vogt-Koyanagi-Harada (VKH) disease.[1] The SUN group has made a remarkable effort to provide several insights into the classification of uveitic entities. They used machine learning algorithms to define classification criteria in order to standardize the classification of inflammatory diseases for research purposes. As it is clearly stated by the authors, these criteria are classification criteria and they are not intended to be diagnostic criteria. In that sense we can differentiate between diagnostic criteria (the signs and symptoms used by clinicians to diagnose a patient's condition) and classification criteria (the standardized definitions of a condition mainly used to create a uniform group of patients, e.g. for clinical research). This implies that even when a patient has been diagnosed of VKH, he/she may not meet the classification criteria for VKH.[2] In classification criteria specificity should be prioritized over sensitivity.[2]

The authors have done well to provide aids towards the classification of this difficult entity for research purposes.[1] However in the particular case of VKH some caveats should be taken into account.

The dataset of diseases against which the algorithm was trained included: Behçet's disease uveitis, sympathetic ophthalmia, sarcoidosis-associated panuveitis, syphilitic panuveitis and tubercular panuveitis.[1] However, among these diseases, only sympathetic ophthalmia is associated with the presence of subretinal fluid as the key finding. With this background, the authors concluded that in the absence of a positive syphilis serology, evidence of sarcoidosis or history of ocular trauma or vitreoretinal surgery, presence of a serous retinal detachment with either a multiloculated appearance on fluorescein angiography or septae on optical coherence tomography (OCT) is sufficient to classify the findings as early stage VKH.[1]

The authors will agree that these criteria, contrarily to what was intended, are non-specific, because several conditions with serous retinal detachment and the presence of septae on OCT will classify as VKH using these criteria. For instance, other causes of exudative retinal detachment including cases of acute posterior multifocal placoid pigment epitheliopathy,[3] posterior scleritis, lupus choroidopathy or IgA nephropathy[4] would be incorrectly classified as VKH. Equally, and of greater concern, other non-inflammatory diseases such as hypertensive retinopathy,[5] myeloma associated retinopathy or multifocal central serous chorioretinopathy (CSC)[6] could be erroneously classified as VKH.

We understand that the SUN working group focused on 25 diseases, and it is impossible to include every disease in the training dataset. The SUN working group acknowledged that further experience may result in refinement of the criteria. Therefore, given the phenotype of the presence of subretinal fluid of VKH, we suggest that the training dataset should include inflammatory diseases with similar phenotype such as the ones mentioned above; and in addition to inflammatory conditions,

importance should also be given to non-inflammatory conditions such as CSC which may closely mimic VKH leading to classification challenges. Consequently, other important features as the presence of choroidal folds, choroid enlargement on OCT, or the absence of flow deficit in the OCT-angiography or indocyanine green (ICG) angiography should be considered.

REFERENCES:

1. Standardization of Uveitis Nomenclature Working G. Classification Criteria for Vogt-Koyanagi-Harada Disease. Am J Ophthalmol 2021;228:205-11.
2. Aggarwal R, Ringold S, Khanna D, et al. Distinctions between diagnostic and classification criteria? Arthritis Care Res (Hoboken) 2015;67(7):891-7.
3. Kitamura Y, Oshitari T, Kitahashi M, et al. Acute Posterior Multifocal Placoid Pigment Epitheliopathy Sharing Characteristic OCT Findings of Vogt-Koyanagi-Harada Disease. Case Rep Ophthalmol Med 2019;2019:9217656.
4. Andion-Fernandez M, Dorado-Fernandez T, Juarez-Casado MA, Santamarina-Pernas R. Bilateral serous retinal detachments associated with IgA nephropathy. Arch Soc Esp Oftalmol 2015;90(11):531-5.
5. Lee CS, Choi EY, Lee M, et al. Serous retinal detachment in preeclampsia and malignant hypertension. Eye (Lond) 2019;33(11):1707-14.
6. Aggarwal K, Agarwal A, Deokar A, et al. Distinguishing features of acute Vogt-Koyanagi-Harada disease and acute central serous chorioretinopathy on optical coherence tomography angiography and en face optical coherence tomography imaging. J Ophthalmic Inflamm Infect 2017;7(1):3.