Commentary

Wilson's disease (WD) is an autosomal recessive disorder of copper accumulation and toxicity. The unusual characteristic of WD among genetic diseases is the possibility of effective treatment. The responsible gene (ATP7B) codes for a copper-binding protein, which is expressed primarily in the liver. This protein dysfunction leads to copper accumulation and toxic effects. Toxic disturbances can affect many organs and tissues, but the more studied are the liver and the central nervous system (CNS).

Comparing WD with other neurological illnesses, the critical point is the age of people committed. WD can be devastating even in childhood, especially when diagnosis is made only after serious damages in the CNS. Most symptoms first appear in the second and third decades of life.[1] Unfortunately, clear signs of WD are not apparent in early stages, when the treatment could avoid permanent lesions.

Given the rarity of WD and the costs required, the systematic genetic testing for all the mutations in the ATP7B gene is not feasible, even in countries with advanced systems of public health. Being so, clinicians all around the world are looking for diagnostic clues that could be useful to facilitate the early diagnosis.

In patients whom the liver is the most impaired organ, the liver disease can present with recurrent hepatitis, cirrhosis, or liver failure.[2] The liver disease can be fatal; however, if the patient survives it can give to the clinicians an important clue before the movement disorders caused by CNS lesions. Patients who first present with neurological or psychiatric signs tend to be older than those with hepatic features alone, and most patients with CNS involvement are believed to have liver disease at the time of presentation but they are often not symptomatic from their liver disease.[1] They can already have movement disorders, with dysarthria, dysphagia, incoordination, gait disturbances, insomnia,

tremors, dystonia seizures, pseudobulbar palsy or.[1,2] In these patients WD can cause Parkinsonism, athetosis, chorea, or choreoathetosis. Other clinical findings in WD are hemolisys, Kayser-Fleischer rings, sunflower cataracts, depression, neuroses, psychosis, personality changes, aminoaciduria, and nephrolithiasis.[1] Finally, some children and young patients are diagnosed only after advanced liver disease and neurological manifestations, but even these patients can achieve good results after liver transplantation.[3] Until now, in many countries the neurological diseases are not considered a priority that affects the liver transplant list.[4]

All of these findings can be useful to place the WD as a possible diagnosis, particularly when two or more of them are found in the same patient, but many of these manifestations of WD are easily overlooked. In this article, the authors report a well-documented case of a child with WD and generalized skin hyperpigmentation.[5] Of interest, this skin manifestation was found before the signs of neurological disease became evident. The authors still present a review of the skin findings associated with WD. This association of WD with skin alterations is still considered uncommon, but the article sends a clear message to dermatologists, hepatologists, and neurologists: We need to look for skin alterations in patients with WD. If we do it, we could document better these skin manifestations, which can be a clue for the correct diagnosis in many patients before the worst lesions appear. In the future, we can see more patients in which the movement's disorders or the liver failure were avoided, but the only way is to be aware of unclear signs and do not overlook clues as hemolisys, psychiatric signs, altered hepatic tests, or skin manifestations compatible with WD.

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