



## Correspondence

**ATAD3A variants manifest multisystematically in the brain, nerves, eyes, heart, liver, and skin**

## ARTICLE INFO

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In a recent article, Peralta et al. reported about 4 siblings from consanguineous parents with neonatal cerebellar hypoplasia, seizures, axial hypotonia, hypertrophic cardiomyopathy, hepatomegaly, congenital cataract, and facial dysmorphism due to the novel, homozygous missense variant c.1217T > G (p.Leu406Arg) in *ATAD3A* [1]. The study evokes the following concerns.

We do not agree with the notion that hypertrophic cardiomyopathy and hepatomegaly “expand the phenotypic spectrum commonly associated with pathogenic *ATAD3A* variants” [1]. At least hypertrophic cardiomyopathy has been reported previously in 2 of 8 unrelated individuals carrying the variant c.1582C > T in *ATAD3A* [2]. One of the 8 individuals also presented with right ventricular hypertrophy. Hypertrophic cardiomyopathy has been also reported in one of 6 patients carrying deletions of the *ATAD3A* and *ATAD3B* gene respectively [3]. The only phenotypic features which have not been reported previously are hepatomegaly and low plasma cholesterol [1],

The presence of hepatomegaly in all four siblings is not surprising given the fact that all four had cardiomyopathy. Assuming that all four had heart failure from cardiomyopathy, enlargement of the liver due to congestion is not unusual. We thus should know if the four siblings presented with other clinical features of heart failure (edema, neck vein distension), if systolic function was reduced, and if proBNP values were increased. In case hepatomegaly was not attributable to heart failure, we should know if there was steatosis or accumulation of other material on autopsy, or liver toxicity from drugs.

Features which have been previously reported but not in the present study include fetal distress [2,3], feeding difficulties [2], optic atrophy [2], peripheral spasticity [2,4], and axonal neuropathy [2,4]. We should know what is meant with “peripheral spasticity” and if these features were truly absent or if the authors not systematically looked for them,

This interesting study may profit from addressing the points mentioned above.

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**Author contribution**

JF: design, literature search, discussion, first draft, critical comments.

**Declaration of Competing Interest**

There are no conflicts of interest.

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