Pediatric Nephrology (2019) 34:1635
https://doi.org/10.1007/s00467-019-04278-8

LETTER TO THE EDITORS

Comments on Taşdemir et al.: A rare cause of AA amyloidosis and end-stage kidney failure

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Received: 23 April 2019 / Revised: 23 April 2019 / Accepted: 14 May 2019 / Published online: 27 May 2019

Dear Editors,

In the recently published article entitled "A rare cause of AA amyloidosis and end-stage kidney failure," Taşdemir et al. present a case of AA amyloidosis attributed to hypergammaglobulinemia D syndrome (HIDS), renamed mevalonate kinase deficiency (MKD) [1], in a 14-year-old girl with an unusual clinical presentation. The authors concluded to the diagnosis of MKD based on clinical findings, persistently elevated serum IgD level, and the presence of a single heterozygous mutation in the mevalonate kinase (*MVK*) gene. However, we wonder if a diagnosis of MKD can be retained in this case.

Indeed, MKD is a rare autosomal recessive autoinflammatory disease associated with homozygous or double heterozygous pathogenic mutations in the *MVK* gene, yet the patient here carries only one *MVK* variant, whose pathogenicity has not been reported in the literature according to the Infevers registry. Furthermore, the authors did not specify the gene sequencing technique used, namely next-generation (NGS) or Sanger sequencing, which can influence the results of the genetic analysis.

Biologically, elevated serum IgD levels are not specific to MKD. It has previously been described in other hereditary autoinflammatory disorders like familial Mediterranean fever (FMF), tumor necrosis factor receptor–associated periodic syndrome (TRAPS), and cryopyrin-associated periodic syndrome (CAPS). Conversely, serum IgD level can be normal in MKD [2]. The urinary mevalonic acid level was not reported by the authors; an elevation of this marker would have been an additional argument for a diagnosis of MKD.

Finally, the clinical features of the patient in this paper are unusual for MKD. This disease usually causes recurrent febrile attacks with abdominal pain, arthralgia, lymphadenopathy, and various skin lesions starting before the first year of life. It rarely leads to AA amyloidosis; when it does, the latter develops in adulthood after several years of evolution of a chronic inflammatory syndrome [3].

Altogether, it seems unlikely that this patient was suffering from MKD. The spectacular efficacy of anti-IL-1β antibodies is in favor of an inflammasomopathy, but not specifically of MKD. We believe that an analysis by NGS of the main genes involved in monogenic autoinflammatory diseases would allow to refine the final diagnosis.

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