

Review of: "[Commentary] Recognising the Rheumatological Needs of Neurodivergent Females"

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Potential competing interests: No potential competing interests to declare.

In the sentence "A minority of patients are at risk of vascular complications associated with more severe forms of EDS and may need to be referred to a Clinical Geneticist for further investigation.", please omit "and may need to be referred to a Clinical Geneticist for further investigation." Consider that the clinical geneticist defines the mode of inheritance, while a specialist in Vascular Medicine defines how to prevent or treat complex vascular problems.

Please, instead of "and there is often also a family history of autism, ADHD and fibromyalgia" use "and there maybe also a family history of autism, ADHD or fibromyalgia".

The paper induces the reader to deduce that autism is mostly inherited. According to More et al. (Identifying rare genetic variants in 21 highly multiplex autism families: the role of diagnosis and autistic traits. *Molecular Psychiatry*. 2023 Jan 26;1-0.) autism presenting in many generations is a rare occurrence. Consider that exposure of either sperm DNA or embryo DNA to high-glucose or high-fat diets increases the risk of epigenetic alterations. In turn, single nucleotide polymorphisms may result in chaotic neuronal migration and dysconnectivity, two of the hallmarks of autism. You may refer to Donkin & Barrès (Sperm epigenetics and influence of environmental factors. *Molecular metabolism*. 2018 Aug 1;14:1-1.) and to Hoirisch-Clapauch & Nardi (Autism spectrum disorders: let's talk about glucose? *Translational psychiatry*. 2019 Jan 31;9(1):51.) The latter discusses the mechanisms by which rheumatoid arthritis may increase the risk of autism spectrum. Chronic inflammatory conditions, such as lupus and rheumatoid arthritis, or corticosteroid use may increase maternal glucose levels, exposing the embryo and the fetus to high-glucose concentrations. Intrauterine hyperglycemia, hyperinsulinemia or both may affect neurogenesis.

Depression may be associated with a sense of isolation or abandonment, as well as with fatigue and despair. I suggest you to discuss the fact that neurodivergence is a risk factor for anxiety and depression and that antidepressants can improve the quality of life of some subjects with neurodivergence. You may refer to Liang et al. (Therapeutic effects of antidepressants for global improvement and subdomain symptoms of autism spectrum disorder: a systematic review and meta-analysis. *Journal of Psychiatry and Neuroscience*. 2022 Aug 10;47(4):E299-31.) and Verbeeck et al. (Antidepressants in the treatment of adult attention-deficit hyperactivity disorder: a systematic review. *Advances in therapy*. 2009 Feb;26:170-84.)

