Reviewer’s report

Title: Graves' disease in monozygotic twins - a case report

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Reviewer: Malgorzata M. Wasniewska

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The Authors, Rust et al, reported the rare condition that hyperthyroidism was found in the mother of twins and both of her twin children. The monozygotic female twins developed consecutively Graves' disease (GD) within five years in the young adult age. One year before the diagnosis of GD was established in the first twin, the mother developed a toxic thyroid nodule with hyperthyroidism and after 6 years presented also rheumatoid arthritis.

It is known that DG had a heritable components and the aggregation of thyroid autoantibodies seemed to be genetically determined.

Also both the twins and the mother were cigarette smoking, so the impact of environmental triggers such a cigarette smoking in the pathogenesis of GD had been discussed.

The results of the study are interesting and support the hypothesis that a genetic factor might be of great importance in etiology of GD.

The design and the methods of the study have been well described.

The presentation of the results with graphic and tables is clear. The literature references are proper.

In my opinion that Case Report made a contribution to medical knowledge and have education value and fulfilled the Editorial criteria for Case Report in BMC Endocrine Disorders.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.