

POSTER PRESENTATION

Open Access

Adverse events related with propylthiouracil therapy of Graves' Disease in children at Cipto Mangunkusumo Hospital Jakarta

Novina Andriana^{1,2*}, Aman B Pulungan², Bambang Tridjaja²

From 7th APPES Biennial Scientific Meeting Nusa Dua, Bali. 14-17 November 2012

Despite propylthiouracil (PTU) and methimazole (MMI) having been used for more than a half century to treat hyperthyroidism caused by Graves' disease, controversy still exists in antithyroid drug (ATD) therapy because of their significant side effects. Reports of adverse events involving cutaneous reactions, vasculitis, agranulocytosis and hepatotoxicity have appeared. In Indonesia, PTU was still included in National Essential Drugs List to treat Graves' disease in children. The aim of our study was to provide insights into adverse events that can be associated with ATD use. We reviewed adverse events associated with ATD therapy in pediatric patients with Graves' disease from September 2009 to June 2012 at outpatient clinic, Cipto Mangunkusumo Hospital, Jakarta. We found 21 patients with Graves' disease aged 3-to16 yr old, 5 male and 16 female. During this periode, 9 patients (43%) treated with an average daily dose of PTU, the rest with MMI (57%). Adverse events attributed to PTU use were seen in 2 patients. Liver dysfunction was observed in 1 patient, alanine aminotransferase, aspartate aminotransferase and blood bilirubin were increased. The second one, developed epistaxis and had 2 times relaps episodes of thyrotoxicosis and suggested to perform thyroidectomy procedure. Four of the patients treated with PTU switched to MMI because of increased ALT/AST. None of them required hospitalization. One patient treated with PTU had full remission after 5 years of therapy. There was no adverse event observed in patients treated with MMI. Our results suggested that PTU use in children need routine biochemical monitoring to prevent severe adverse events.

Authors' details

¹Division of Pediatric Endocrinology, Department of Pediatrics, Faculty of Medicine, Padjadjaran University, Bandung, Indonesia. ²Division of Pediatric Endocrinology, Department of Pediatrics, Faculty of Medicine, University of Indonesia, Jakarta, Indonesia.

Published: 3 October 2013

doi:10.1186/1687-9856-2013-S1-P139

Cite this article as: Andriana et al.: Adverse events related with propylthiouracil therapy of Graves' Disease in children at Cipto Mangunkusumo Hospital Jakarta. International Journal of Pediatric Endocrinology 2013 2013

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at www.biomedcentral.com/submit



¹Division of Pediatric Endocrinology, Department of Pediatrics, Faculty of Medicine, Padjadjaran University, Bandung, Indonesia Full list of author information is available at the end of the article

