Carbimazole - resistant thyrotoxicosis

Sir,

We read with interest the report of two cases of thyrotoxicosis apparently resistant to high doses of carbimazole.1 In searching for the cause of a poor therapeutic response to antithyroid drugs, several possibilities must be considered. As pointed out by Cooper,1 iodine does affect the response of the thyroid to antithyroid drugs, directly by altering the intrathyroidal metabolism of the drug and indirectly by increasing the thyroid stores of pro-thyroid hormones. Thus, we carefully delayed the response to treatment.2 Such mechanisms are involved in the resistance to antithyroid drugs of amiodarone- or iodine-induced thyrotoxicosis which may persist for months. One other possible factor, unreported by Judge et al., is that a large proportion of uncontrolled patients partially or totally resistant to antithyroid drugs may show a dramatic response to glucocorticoids,3 as the two cases reported here show. Therefore, we think that an unsuspected iodine contamination may have played a role in the unresponsiveness of these two patients to high doses of carbimazole and should have been discussed.

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3. Li H, Obay stroke, Akasaka T, Mor T. A hyperthyroid patient with Graves' disease who was strongly resistant to methimazole: investigation on possible mechanisms of resistance. Endocrinology 1995; 42: 697–704.


Gastrointestinal disorders in Parkinson's disease

Sir,

Gastrointestinal disorders are common in Parkinson's disease. Although the underlying pathophysiology remains largely unknown, enteric nervous dysfunction and subsequent pathophysiology of small bowel bacterial overgrowth with malabsorption is an attractive hypothesis. Davies et al4 recently used the lactulose hydrogen breath test to study whether increased oro-caecal transit time and small bowel bacterial overgrowth could explain weight loss in Parkinson's disease. None of their 15 patients showed an early rise in breath hydrogen, which led the authors to conclude that bacterial overgrowth is absent. We object to this conclusion for several reasons. First, the lactulose hydrogen breath test is a questionable tool to diagnose small bowel bacterial overgrowth.5 The conditio sine qua non for this test is the presence of a hydrogen-producing flora, but in 15–20% of tested subjects the gut flora will not meet this condition.6 Therefore, the fact that none of the patients studied by Davies et al4 had an early rise of breath hydrogen excretion does not exclude small bowel bacterial overgrowth. Furthermore, the authors cite the study by Metz et al6 as evidence that the lactulose hydrogen breath test has a rather poor sensitivity (approximately 67%).6 Preferentially, the authors should have followed the recommendation of Metz et al6 to use a combination of breath tests to screen for small bowel bacterial overgrowth. Alternatively, the authors could have used the more invasive method of quantitative measuring of duodenal or jejunal aspirates, which remains the most accurate diagnostic tool to demonstrate small bowel bacterial overgrowth, especially when gastrointestinal motility disorders are suspected.7,8

Second, one would have expected to find small bowel bacterial overgrowth since oro-caecal transit time was increased in 10 of the 15 patients with Parkinson's disease. Dis- turbance of small bowel motility is a well-recognized risk factor for small bowel bacterial overgrowth.9 Histological observations suggest that impaired gastrointestinal motility might be related to impairment of the gastrointestinal myenteric plexus, which appears to be affected in Parkinson's disease.1

Third, Davies et al4 found high lactulose/mannitol ratios in their patients, suggesting a reduction in the absorptive surface area of the small intestine. This might indicate the existence of small bowel bacterial overgrowth, since it is a well known cause of intestinal mucus injury, loss of brush border enzymes activity and resultant malabsorption.4 In conclusion, the study of Davies et al4 does not exclude the possibility that small bowel bacterial overgrowth, due to disturbed small bowel motility, may at least partially explain weight loss, malabsorption and other gastrointestinal disorders in Parkinson's disease.

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Oxidative haemolysis after spironolactone

Sir,

I report a case of spironolactone-induced acute haemolysis in a glucose-6-phosphate dehydrogenase (G6PD)-deficient patient confirmed by rechallenge.

A 48-year-old woman was hospitalised with complaints of malaise, weakness, abdominal and lumbar pain 24 h after initiation of treatment with oral spironolactone (1 g bid) for fever and symptoms of an upper respiratory tract infection. Eight years prior, she had been diagnosed as having G6PD deficiency. A-deficiency was diagnosed, when she suffered from several sulfonamide- and acetanilidine-induced haemolytic episodes requiring blood transfusions. The laboratory data were: haemoglobin 7.7 g/dl, haematocrit 22.4%, reticulocyte count 4.5%, whole blood count 12.4×10⁹/l, platelet count 224×10⁹/l. The lactate dehydrogenase concentration was markedly elevated (1823 U/l; normal <300). Three days after the spironolactone therapy, she was afebrile but nauseated, icteric, and passing dark urine. The liver was 3 cm below the right costal margin and the spleen was not palpable. Serum total bilirubin was 2.9 mg/dl (normal <1.0 mg/dl) with preponderantly unconjugated bilirubin fraction (2.8 mg/

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