Are patients aware of the risk of agranulocytosis when taking antithyroid drugs?

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Introduction
Hyperthyroidism affects 1.3% of the population. The antithyroid drugs (ATD), carbimazole and propylthiouracil, can induce agranulocytosis, a rare but potentially life threatening side-effect with a prevalence of 0.10-0.15%. We assessed the adequacy of our patient’s knowledge of this side-effect.

Methods
Patients on ATD completed a questionnaire before attending clinic. The questionnaire consisted of 9 questions detailing information they had received and knowledge of how they should respond if they become unwell on ATD. Data were collected over a 3 week period.

Results
39 patients completed the questionnaire. 30 patients (77%) said they received information regarding side-effects when ATD were commenced; 8 patients (21%) said they did not; and 1 patient (3%) was unsure. Most information was given verbally (32), and others include letters (11), cards (9) and leaflets (1). Only 19 patients (49%) said the information given was understandable (Fig.1). Most patients had not experienced side-effects (18). The most common side-effects reported were sore throat (8), lethargy, and malaise (6). When asked what they would do in the event of a sore throat, most patients (62%) said they will see their GP or attend A+E. Only 7 patients (18%) knew that they needed a blood test. Most patients said they would obtain medical input immediately (36%) or same day (36%). Only 20 patients (51%) said they would stop ATD in the event of a sore throat (Fig.2), and 18 patients (46%) knew to restart ATD if blood test was normal.

Conclusion
This audit shows inadequate patient awareness of the potential life threatening side-effect of ATD. We have since introduced a credit card sized ATD information card (Fig.3) for patients commencing ATD. It provides instructions for patients and healthcare professionals to follow when infections occur. We aim to re-audit 12 months after introduction of this new card to assess the impact.

If you received written information was it understandable?

- Yes: 49%
- No: 38%
- NA: 13%

Figure 1: Patients’ understanding of written information given.

What would you do with your ATD if you developed a severe sore throat?

- Stop: 20%
- Continue: 3%
- Medical advise: 18%
- Endocrine advise: 3%
- Not sure: 3%
- NA: 51%

Figure 2: Patients’ actions if severe sore throat develops.

Figure 3: Front and back of the new ATD information card for patients.