

# TRANSIENT POLYARTHRITIS WITH CARBIMAZOLE TREATMENT

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- Carbimazole forms the mainstay of medical management of hyperthyroidism in children.
- Development of arthralgia or arthritis after starting antithyroid medication can be a disabling side effect.

## CASE PRESENTATION

- An active and sporty 10 year old girl with background of asthma
- Presented with clinical and biochemical features of primary hyperthyroidism and positive thyroid antibodies.
- She was started on Carbimazole at a starting dose of 10 mg BD.
- Within 10 days of treatment she started experiencing significant multiple joint pains unresponsive to NSAIDS making her wheelchair-bound over the next few weeks.
- Her auto-antibody screen, including anti-neutrophil cytoplasmic antibody (ANCA) was negative.
- Her symptoms settled down within 4 weeks of stopping Carbimazole.
- Her hyperthyroidism is currently being managed using propylthiouracil and she is waiting to undergo definitive treatment.

## DISCUSSION

Arthralgia after commencing thionamides (propylthio-uracil or carbimazole) is a side effect seen in 1- 5% of patients.

It can progress into antithyroid arthritis syndrome or could be a part of ANCA positive vasculitis.

## CONCLUSIONS

- Development of arthralgia on antithyroid medication should warrant stopping the medication and immediate investigation to rule out ANCA positive vasculitis.
- Symptoms of transient migratory polyarthritis or antithyroid arthritis syndrome usually subside on discontinuation of treatment.
- More definitive treatment options should be discussed with family, while maintaining the patient on alternative antithyroid medication as a temporary measure

## REFERENCES

R.S.Bahn *et al.* Hyperthyroidism and Other Causes of Thyrotoxicosis: Management Guidelines of the American Thyroid Association and American Association of Clinical Endocrinologists. Thyroid Volume 21, Number 6, 2011

David.S. Cooper. Antithyroid drugs.N Engl J Med 2005;352:905-17 N Engl J Med 2005;352:905-17

