

# GRAVES OPHTHALMOPATHY IN PEDIATRIC AGE: DIFFERENT SEVERITIES, DIFFERENT APPROACHES

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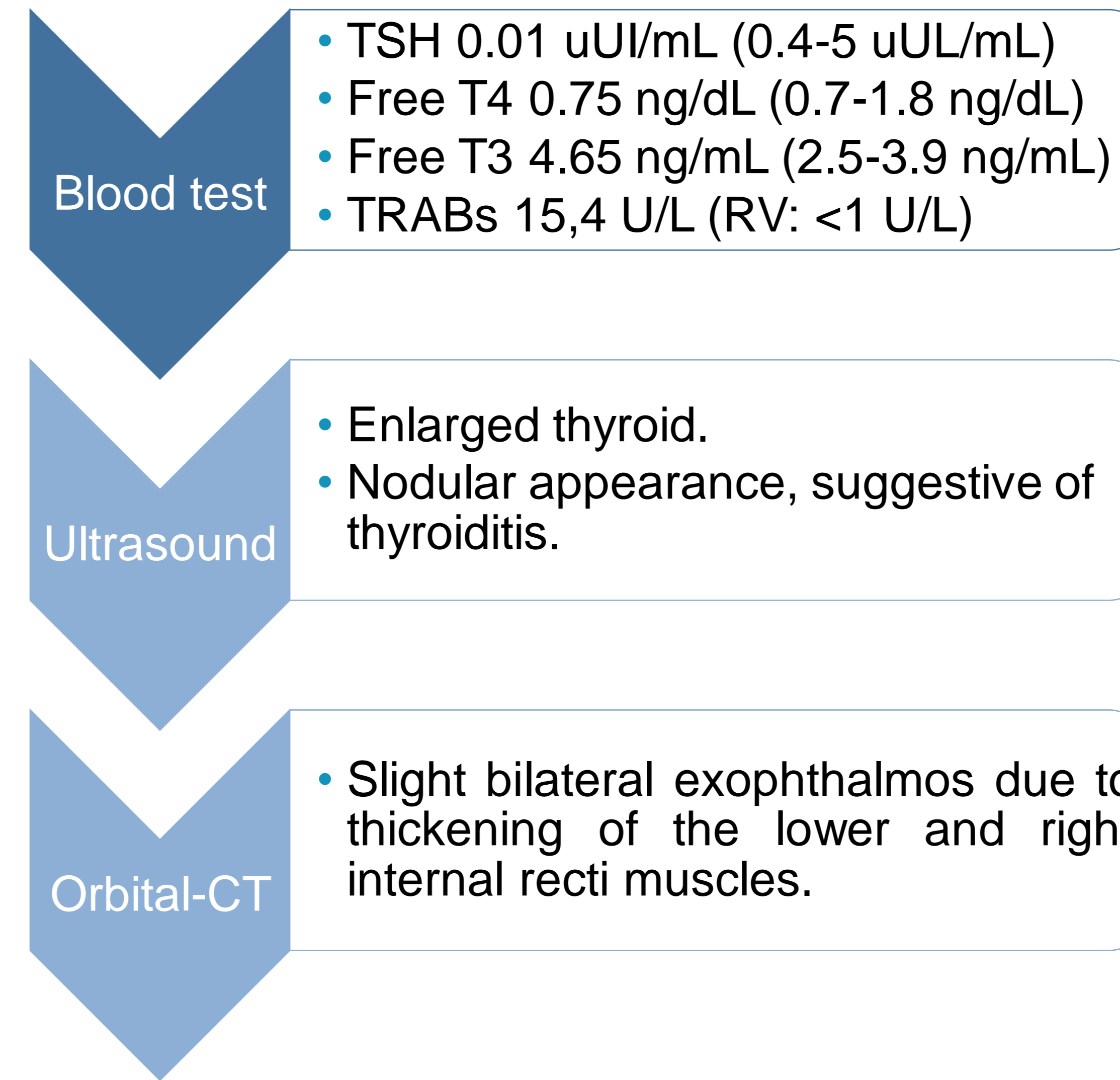
## INTRODUCTION

- Hyperthyroidism represents 10-15% of all pediatric thyroid diseases.<sup>1</sup>
- Grave's disease (GD) is the most common presentation (99%).<sup>2</sup>
- GD European incidence is 0,8/100.000 children/year with female dominance (3-5:1).<sup>2,3</sup>
- Grave's orbitopathy (GO) is present in 30-67% of all patients.<sup>3</sup>
- GO is more frequent in teenagers (68,2% versus 31,8% in less than 11 years old).<sup>3,4</sup>
- Treatment approach is based on clinical activity.<sup>5</sup>
- A wait-and-see policy is the preferred approach.<sup>3,6</sup>

## CASE REPORT 1

- 7-year-old boy.
- Tachycardia, hyperactivity, hyperphagia, hypersudoresis, heat intolerance, weight loss and diarrhea.

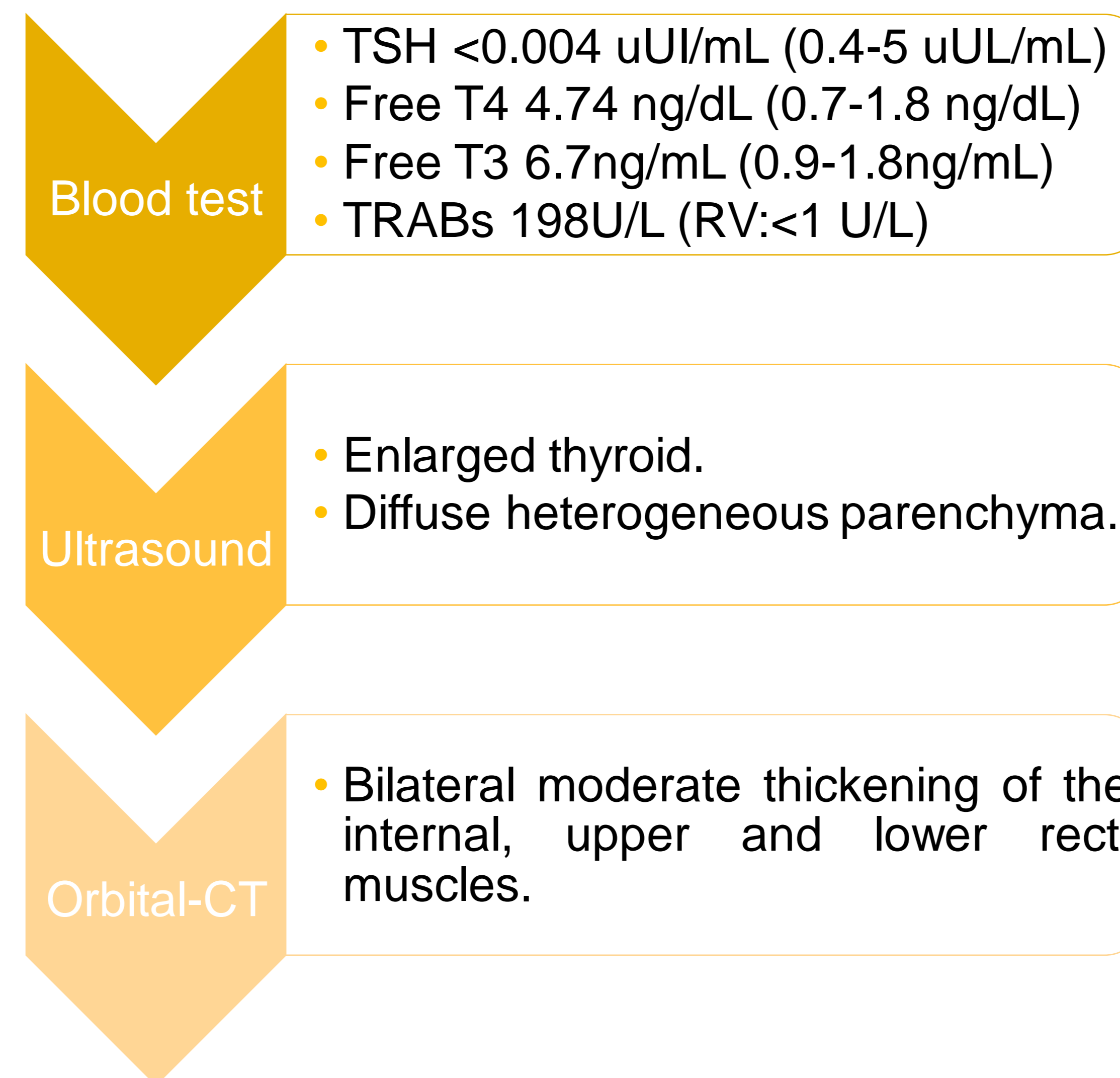
Clinical Activity Score – CAS	Severity – EUGOGO score
Spontaneous retrobulbar pain ✗	Severe
Pain on eye movement ✓	Moderate
Eyelid erythema ✓	Mild:
Conjunctival erythema ✓	• Eyelid retraction < 2mm
Eyelid edema ✗	• Proptosis < 3mm
Cornea inflammation ✗	
Conjunctival edema ✗	



## CASE REPORT 2

- 13-year-old boy.
- Sent by Ophthalmology for control and weaning from corticosteroid therapy (prednisolone 50 mg/day).

Clinical Activity Score – CAS	Severity – EUGOGO score
Spontaneous retrobulbar pain ✗	Severe
Pain on eye movement ✓	Moderate
Eyelid erythema ✓	• Eyelid retraction < 2mm
Conjunctival erythema ✓	• Proptosis < 3mm
Eyelid edema ✓	Mild
Cornea inflammation ✓	
Conjunctival edema ✓	

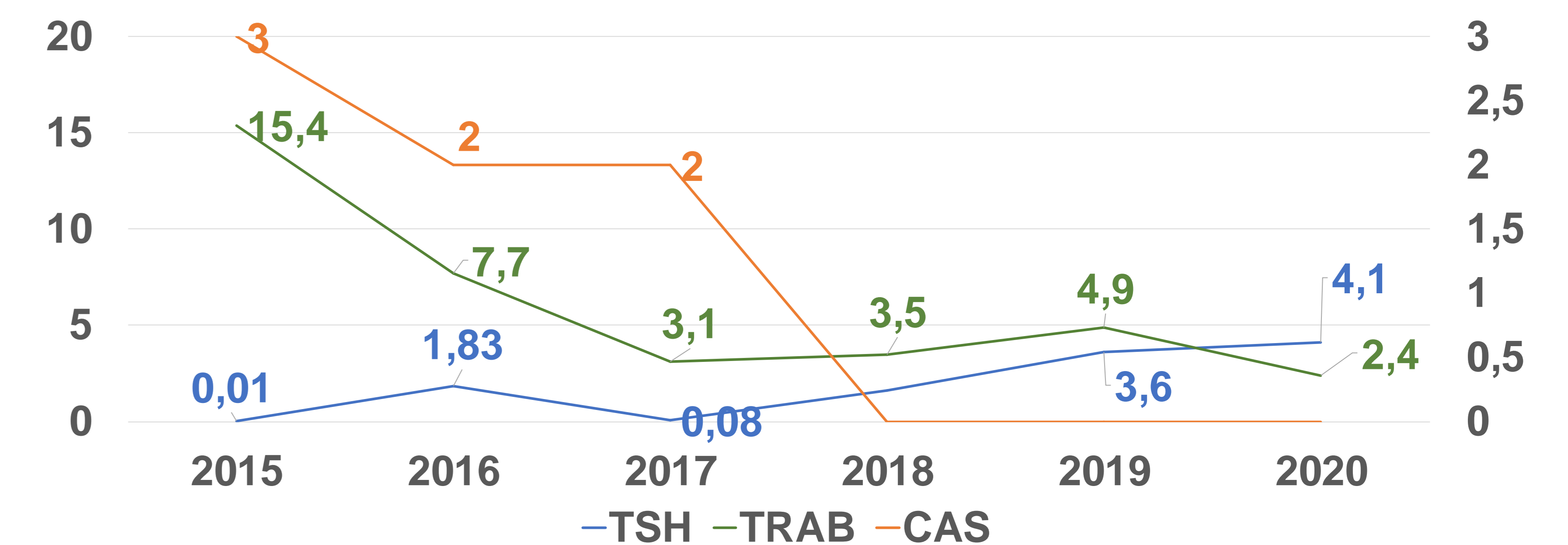


## CONCLUSION

The cases of these boys show that the symptoms of orbitopathy in the pediatric population are generally mild and self-limited. However, proptosis, eyelid retraction and soft tissue involvement can impair quality of life and negatively affect self-confidence. Therefore, in more severe cases, targeted treatments are necessary and so all children with hyperthyroidism must be observed by an ophthalmologist.

## Treatment

- Thiamazole 3.5 mg/day (94.6 ug/kg/day)
- Propranolol 10mg/day
- Lubricating eye drops
- Selenium 100mg/day



## Treatment

- Thiamazole 10mg/day (170.6 ug/kg/day)
- Prednisolone 50mg/day

