A rare association—apraxia and hypothroidism



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Introduction

Apraxia of eyelid opening has been described a non-paralytic motor abnormality resulting in difficulty in initiation of lid elevation after closure. It is associated with blepharospasm.

Case Summary

10 year old presented to ophthalmologist with a six month history of delayed right eye opening after blinking. This is usually more noticeable when she is tired. Her visual acuities are 6/6 in right eye and 6/5 in left eye. She had no lid retraction or Marcus Gunn pupil. Initial work up showed her full blood count, urea and electrolytes and coeliac screen were all within normal limits. Her antinuclear antibody was positive with a titre 1:160. Her acetylcholine receptor antibody was normal.

While under review by the ophthalmologist, she presented 18 months later to the children assessment unit with a diffuse painless neck swelling and tiredness. She had a diffuse, non tender swelling with no palpable cervical lymph nodes. The rest of her clinical examination was normal. Thyroid function tests done on clinical suspicion of hypothyroidism showed TSH was 144 ,T3 4.3 T4 4.7. The thyroid peroxidise antibody was markedly raised at 1400 coeliac screen, full blood count, urea and electrolytes were normal. She was started on thyroxine 50 micrograms once daily. Her thyroid function, goitre size and energy levels improved remarkably following administration of thyroxine.

	Thyroxine	3 months	9 months	13 months
TSH	144	2.2	0.77	5.5
T4	4.7	11.3	12.5	13.4
Т3	4.3	6.3	-	5.5

Conclusion

There is lack of reports in literature linking apraxia of the eyelid and hypothyroidism. This case represents a rare presentation of ataxia which improved with correction of clinical and biochemical hypothyroidism. Apraxia of the eyelid has been linked with extrapyramidal diseases, Parkinson's disease, progressive supranuclear palsy, acanthocytosis, Wilson's disease and motor neuron disease. Majority of cases occur in association with blepharospasm however it can occur in isolation.

Following the case report, it will be useful to check thyroid function in children presenting with disorders of the eyelids