

Don't Forget the Thyroid: The role of Thyroid Disease in a Competency to Stand Trial Evaluation

Jason A. Barrett, MD

Department of Psychiatry and Behavioral Neuroscience: Division of Forensic Psychiatry

Introduction

The capacity for a defendant to participate in their own judicial process is necessary for adjudication.¹ States have specific language defining competency to stand trial, and it is generally comprised of the ability to understand a legal process and work with a defense attorney.² Competency to stand trial is the most common referral question from attorneys.³ Psychosis is the most common reason for a defendant to be found incompetent to stand trial.⁴ This case report will demonstrate how thyroid disease can factor into a competency evaluation.

Case

- A man in his 40s was ordered to have a competency evaluation after a restoration to competency period
- Charges: Operating a Vehicle Under the Influence [M1]; Driving Under the Influence of Intoxicants [M1]; Contempt of Court [ND]
- Diagnosed with schizophrenia for the last 7-8 years and hospitalized four times; most common symptom was auditory hallucinations and he was not on prescribed psychiatric medication at the time of the offense
- He had a diagnosis of Graves' disease and previously took thyroid medication, but stopped before the offense
- Symptoms in jail, his prior evaluation, and upon arrival to hospital included: disorganized speech/behavior, hallucinations, confusion, paranoia, and an unstable mood

Pathogenesis of Graves' Disease



Figure 1⁽⁵⁾

Hyperthyroidism is the most common feature of Graves' disease and is caused by autoantibodies to the thyrotropin receptor (TRAb) that activate the receptor, thereby stimulating thyroid hormone synthesis and secretion as well as thyroid growth (causing a diffuse goiter).⁶ The presence of TRAb in serum and an orbitopathy on clinical examination distinguishes the disorder from other causes of hyperthyroidism.⁶

What We Know

Psychiatric symptoms related to Graves' Disease	
Hallucinations	Poor judgement
Paranoia	Pressured speech
Confusion	Impaired memory
Disorientation	Mood instability

Table 1⁽⁷⁾

- “Defendants diagnosed with psychotic disorder were approximately eight times more likely to be found incompetent than defendants without such a diagnosis.⁴”
- In one study, psychotic offenders were most likely to be prescribed psychiatric medications without a consideration of their thyroid abnormalities.⁷ “Over half of the [offenders] with psychiatric symptoms and previously treated with psychiatric medications had undiagnosed [thyroid disorder].⁷”
- In another study effective management of the underlying endocrine disorder resulted in rapid resolution of psychotic manifestations.⁸”

Plan of Action for Forensic Evaluators

- Discuss the need for a referral with retaining attorney or court³
- Medical referral examination may include laboratory testing³
- Consider if medical findings relate to the psycholegal question³
- Complete evaluation and formulate opinion³

Interventions of the Treating Team

- TSH ~ 6 mIU/L
- Started on levothyroxine
- Started on antipsychotic
- Reported improvement of symptoms
- Attended competency groups
- Competency evaluation completed

Conclusion

As a forensic evaluator, it is important to remember endocrine disorders may be linked to psychiatric symptoms and could be related to the psycholegal issue.²

References

1. Zapf PA & Roesch R. Evaluation of Competence to Stand Trial. New York, NY: Oxford University Press, Inc; 2009
2. Mossman D, Noffsinger SG, Ash P, et al. American Academy of Psychiatry and the Law. AAPL Practice Guideline for the forensic psychiatric evaluation of competence to stand trial. J Am Acad Psychiatry Law. 2007;35(4 Suppl): S3-72
3. Gold LH & Frierson RL. The American Psychiatric Association Publishing textbook of forensic psychiatry: Third edition. Arlington, VA: American Psychiatric Association Publishing; 2018
4. Melton GB, Pettila J, Poythress NG, et al. Psychological evaluations for the courts, fourth edition: a handbook for mental health profession. New York, NY: Guilford Press; 2018
5. Medscape Graves Disease. Varying degrees of manifestation of Graves ophthalmology (media gallery) [Internet]. 2022. Available from: <https://emedicine.medscape.com/article/120619-overview>. Accessed March 19, 2022
6. UpToDate. Pathogenesis of Graves' Disease [Internet]. 2022. Available from: https://www.uptodate.com/contents/pathogenesis-of-graves-disease?search=graves%20disease&source=search_result&selectedTitle=2~150&usage_type=default&display_rank=2. Accessed March 19, 2022
7. Langevin R, Langevin M, Curnoe S, et al. (2009). The prevalence of thyroid disorders among sexual and violent offenders and their co-occurrence with psychological symptoms. International Journal of Prisoner Health, 5(1), 25-38
8. Mahmood A, Ashton AK, Hina FH. Psychotic symptoms with underlying graves disease: a case of Forensic Mental Assessment. New York, NY: Oxford University Press, Inc; 2009report. Prim Care Companion J Clin Psychiatry. 2005;7(6):311-312