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

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Introduction

The capacity for a defendant to participate in their own judicial process is necessary for adjudication. 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. Competency to stand trial is the most common referral question from attorneys. Psychosis is the most common reason for a defendant to be found incompetent to stand trial. 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

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). The presence of TRAb in serum and an orbitopathy on clinical examination distinguishes the disorder from other causes of hyperthyroidism.

What We Know

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<thead>
<tr>
<th>Psychiatric symptoms related to Graves’ Disease</th>
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<tbody>
<tr>
<td>Hallucinations</td>
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<td>Poor judgement</td>
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<td>Paranoia</td>
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<td>Pressured speech</td>
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<td>Confusion</td>
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<td>Impaired memory</td>
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<td>Disorientation</td>
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<td>Mood instability</td>
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- “Defendants diagnosed with psychiatric disorder were approximately eight times more likely to be found incompetent than defendants without such a diagnosis.”
- In one study, psychotic offenders were most likely to be prescribed psychiatric medications without a consideration of their thyroid abnormalities. “Over half of the [offenders] with psychiatric symptoms and previously treated with psychiatric medications had undiagnosed [thyroid disorder].”
- In another study effective management of the underlying endocrine disorder resulted in rapid resolution of psychotic manifestations.

Plan of Action for Forensic Evaluators

- Discuss the need for a referral with retaining attorney or court
- Medical referral examination may include laboratory testing
- Consider if medical findings relate to the psychological question
- Complete evaluation and formulate opinion

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 psychological issue.

References

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC413561/