

Evaluation of a 27yo Female for Appropriateness of Transcranial Magnetic Stimulation

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ABSTRACT

Amira Khalid, a 27-year-old Middle Eastern female, presents with worsening depression and is being evaluated for Transcranial Magnetic Stimulation (TMS) treatment.

Keywords psychiatry; depression; TMS evaluation; PHQ-9

CASE OVERVIEW

Amira Khalid, a 27-year-old Middle Eastern female, presents with worsening depression and is being evaluated for Transcranial Magnetic Stimulation (TMS) treatment.

LEARNING OBJECTIVES

- 1. Evaluate depression severity using the PHQ-9.
- 2. Identify contraindications for TMS.
- 3. Apply clinical reasoning to determine TMS eligibility.
- 4. Understand the impact of psychosocial factors on mental health treatment.
- 5. Recognize the importance of pregnancy status in TMS evaluation.

CLINICAL PRESENTATION

Name	Amira Khalid
Age	27
Sex	Female
Race / ethnicity	Other Non-Hispanic
Height	5ft 6in
Weight	150 lbs

Chief complaint. Worsening depression; here for TMS evaluation.

History of present illness. Amira Khalid presents with worsening depressive symptoms over the past few months. She recently stopped using birth control and is unsure of her last menstrual period. A home pregnancy test was unclear. Her depressive symptoms include low mood, fatigue, and difficulty concentrating, significantly impacting her studies and daily functioning.

Past medical history. Generalized anxiety disorder; history of depressive episodes.

Past surgical history. Appendectomy in 2015.

Past psychiatric history. Diagnosed with anxiety and depression in 2018; treated with SSRIs and therapy.

Social history. Non-smoker, moderate alcohol use, no illicit drug use. Graduate student under financial strain, living with a roommate.

Family history. Mother with anxiety disorder, father with ischemic heart disease.

Medications. - Escitalopram 20mg PO daily

- Trazodone 50mg PO at bedtime

Allergies. - NKDA

SIMULATED CHARACTER

Name. Amira Khalid

Demographics. 27-year-old Middle Eastern female

Personality and mood. Amira is anxious about her depressive symptoms and the potential outcomes of the evaluation. She is open but noticeably worried.

Identity, purpose and background. Amira is aware of her depression and anxiety diagnoses and the impact they have on her life. She is concerned about her financial situation and is unsure about potential pregnancy.

Simulation behaviour. Only reveal the recent home pregnancy test and concerns about finances if asked directly.

Opening line

Hi, I'm Amira. I'm here because my depression is getting worse and I'm considering TMS.

Procedures and actions available to the learner

Action	Result added to the chart	How the character responds
PHQ-9	Score: 19 (moderately severe depression)	This score seems high. Do I need more medication?
Blood Pressure Cuff	BP: 118/74 mmHg (normal)	Is my blood pressure okay? It feels normal.
Pregnancy Test	Result: Inconclusive	Does this mean I'm pregnant or not? I'm worried.
Current Medication Review	Taking Escitalopram 20mg daily and Trazodone 50mg at bedtime.	Are these medications not working well enough for me? Should we change them?

ASSESSMENT ITEMS

Item 1. What is the PHQ-9 score indicative of in Amira's case? *(multiple choice, 1 point)*

- A. Mild depression
- B. Moderate depression
- C. Moderately severe depression
- D. Severe depression

Answer and rubric. Moderately severe depression

Item 2. Pregnancy is a contraindication for TMS. *(true false, 1 point)*

Answer and rubric. True

Item 3. Which of the following is a potential safety concern when considering TMS for Amira? *(multiple choice, 1 point)*

- A. Current hypertension
- B. Unstable mental health condition
- C. Possible pregnancy
- D. History of epilepsy

Answer and rubric. Possible pregnancy

Item 4. What medication is Amira currently taking for her depression? *(free text, 1 point)*

Answer and rubric. Escitalopram 20 mg

DEBRIEFING DIMENSIONS

Clinical Reasoning (narrative)	Evaluate the learner's ability to apply clinical reasoning to determine TMS eligibility.
Assessment Competence (narrative)	Assess the learner's proficiency in using the PHQ-9 and understanding its implications.
Patient Safety Awareness (narrative)	Evaluate the learner's recognition of potential contraindications and safety concerns for TMS.
Communication Skills (narrative)	Assess the learner's ability to engage with the patient empathetically and effectively.

SIMULATION FORMAT

Platform	Figment Clinic
Format	Clinical encounter simulation with a full patient record
Synthesised voice	nova
Case first authored	April 2026

The interactive version of this case runs on the Figment Clinic platform. This article is the archival record of its content at the time of publication.

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