

Development of an Institutional Protocol for Collaborative Care of Pregnant Patients Undergoing Electroconvulsive Therapy

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Introduction

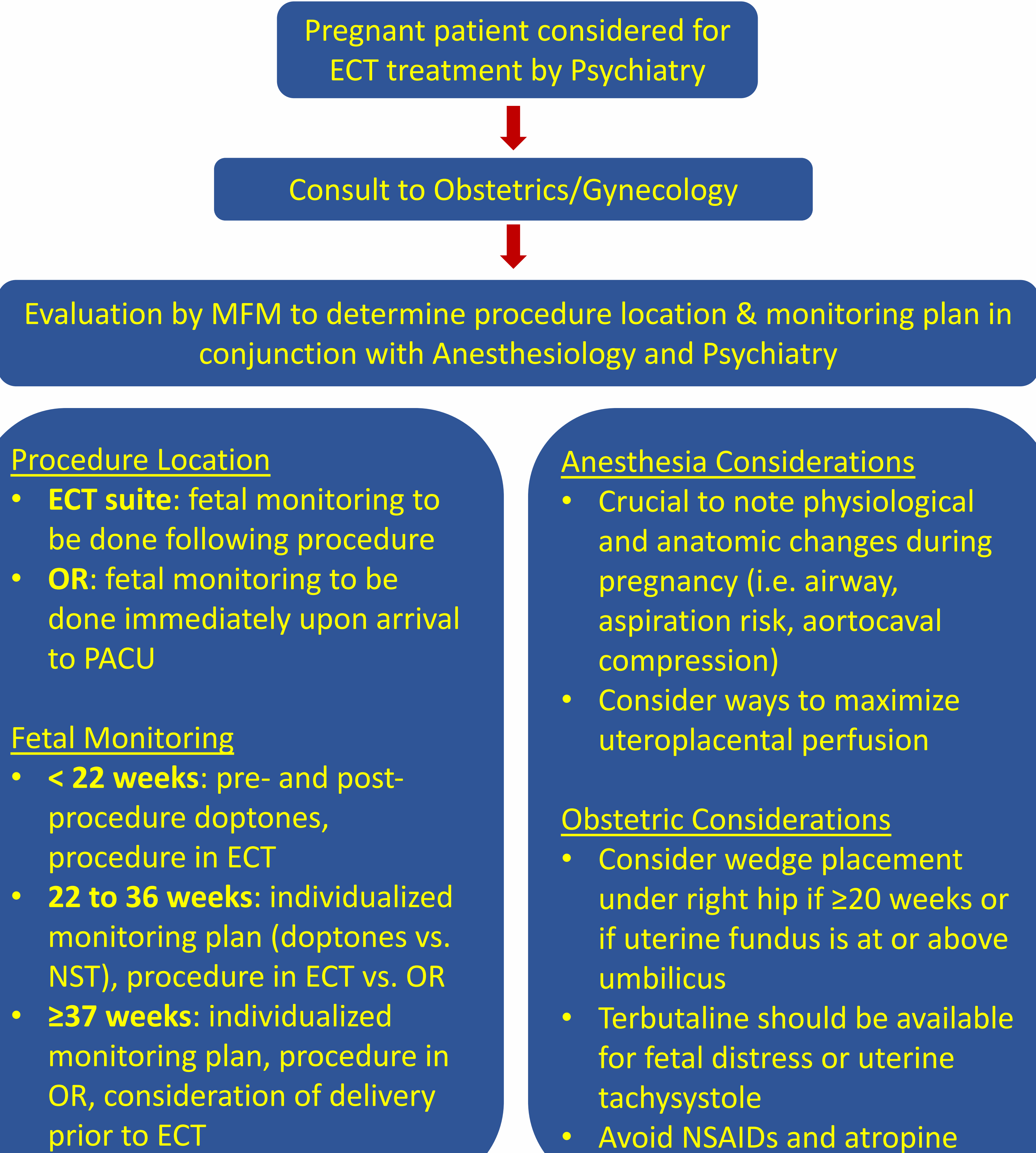
Pregnancy is a period of increased vulnerability to psychiatric disorders with prevalence ranging from 15% to 29%¹. For patients with severe diseases, electroconvulsive therapy (ECT) remains an effective and safe treatment option². Periprocedural management of pregnant patients undergoing ECT is complex and variable. We present two patient cases leading to the development of an institutional protocol for perioperative care of this patient population.

Case Reports

Case 1:
A 38yo G7P2 at 22w3d gestation with schizophrenia and bipolar disorder presented with acute psychosis and agitation. Given treatment-resistant schizophrenia, she underwent 4 sessions of involuntary ECT treatment under general anesthesia in the OR/ECT suites with pre- and post-procedure fetal monitoring.

Case 2:
A 36yo G1P0 at 38wk gestation with no psychiatric history presented with acute bipolar disorder with catatonia following her father's sudden death. She underwent ECT sessions at 39wk with continuous fetal monitoring. An emergent CS was performed during the 2nd session due to maternal seizure resulting in a terminal fetal deceleration. A viable fetus was delivered with APGARs 2 and 7.

ECT Protocol at a Glance



Conclusion

- ECT is primarily used to treat severe psychiatric disorders and considered safe in pregnancy during all trimesters³
- It involves passing a small brief current through the brain to induce a generalized seizure
- Common adverse events include uterine contractions, preterm labor, and transient fetal bradycardia that is typically not associated with adverse perinatal outcomes^{3,5}
- Physiological and anatomic changes during pregnancy are crucial to note when implementing the anesthetic plan
- CV changes associated with ECT must be anticipated and sustained maternal hypertension and/or bradycardia should be treated as appropriate⁴
- Treatment sessions can be performed in the ECT suite only if a nearby OR and OB staff are readily available

References

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3. Obstet Gynecol Surv. 2020;75(3):199-203.
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