

<b>Title</b>	Electroconvulsive Therapy (ECT) in a Patient on Long-Term Anticoagulation
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A Suicidal Patient on Long-term Anticoagulation is Scheduled for Electroconvulsive Therapy (ECT). (How will you proceed?)

#### INTRODUCTION:

A 54-year old man with bipolar affective disorder, currently in a depressive episode refractory to mood stabilizers and antidepressants, was sent to the Stanford Emergency Room by his primary psychiatrist for suicidal ideation. His past medical history was significant for hypercoagulability and deep venous thrombosis related to factor V Leiden blood coagulation disorder for which he had been taking warfarin as an outpatient. He was admitted to the inpatient psychiatry unit and it was felt that he would be a good candidate for ECT given his refractory depression.

#### DISCUSSION/CONCLUSION:

ECT has been shown to be an effective and sometimes necessary treatment for mood depression refractory to pharmacologic therapies. The only strong relative contraindications to ECT are recent myocardial infarction and brain tumor with increased intracranial pressure (1). Previous studies have shown that ECT may lead to CNS bleeding because it produces hypertension (2), vasodilation of cerebral vessels (3), and increased vascular permeability (3). Post-mortem studies of deaths during or after ECT have sometimes shown petechial hemorrhages (4). It is unclear, however, whether ECT increases the risk for hemorrhage in patients taking anticoagulants (5-6).

This case report will outline how the anesthetic for this case was handled and review current anticoagulation protocols. Furthermore, it will discuss strategies to minimize the risk of perioperative hemorrhage in patients currently on long-term anticoagulation and review the literature regarding ECT in patients on long-term anticoagulation.

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