

## Pregnant Patient with Grave's Disease Requiring Total Thyroidectomy

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## **Background:**

- Grave's disease is relatively rare in pregnancy (0.1-0.4 %)
- Antibodies and antithyroid medications cross the placenta
- Surgical thyroidectomy can precipitate hemodynamic instability without guaranteeing immediate remission
- This case is a 21 y.o. G1P0 female, with PMH of cerebral AVM, on maximal medical therapy for Grave's disease without symptom resolution, ultimately requiring thyroidectomy at 30 weeks of gestation.





## The Case:

- PMH: hypothyroidism, pacemaker for symptomatic bradycardia, and cerebral AVM
- Treatment: Methimazole was titrated to 40 mg QD and labetalol to 200 mg BID without clinical improvement, leading to decision to perform a total thyroidectomy.
- Continuous FHR monitoring the morning of surgery showed a 3minute deceleration to the 70s, expediting surgical intervention.
- Uneventful RSI. Patient was discharged on postop day 2 and returned 2 weeks later for delivery via uneventful C-section.

	Tg Ab: <1 TPO Ab: <9 TSH: 113
5/22/20	D24:
5/20/20	024: TSH: <0.005
4/22/20	024: TSH: <0.005 FT4: 7.77
<u>Labs:</u> 2/2023	: TSH: <0.005 FT4: 3.45

## **Learning Points:**

- Grave's disease during pregnancy requiring surgical intervention is rare.
- The timing of surgery is critical, with the second trimester generally being preferred for non-elective surgery given a lower risk of preterm delivery.
- However, our patient was at 30 weeks of gestation, which still posed risks for both the mother and fetus.
- Due to the severity of her symptoms and the need for urgent thyroidectomy, effective preoperative optimization by multiple subspecialties, along with continuous FHT monitoring, preparation for a potential emergency C-section, and careful anesthetic management were crucial to the success of the procedure.

