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# Concurrent Catastrophic Antiphospholipid Syndrome and Heparin-Induced Thrombocytopenia

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# Case Presentation

- 64-year-old female with history of APS on coumadin and remote ischemic stroke secondary to APS presented with worsening encephalopathy.
- On recent prior hospitalization, coumadin was held because of traumatic SAH and SDH. Coumadin was re-started one week later by neurosurgery after CT showed near resolution.
- Initial workup was negative for new intracranial bleeds, but CT abdomen/ pelvis demonstrated bilateral adrenal hemorrhages. Labs showed worsening AKI and elevated transaminases.
- These findings indicated probable CAPS (3 of 4 criteria) and she was subsequently started on plasma exchange.

- Anticoagulation was initially held in the setting of her adrenal hemorrhages.
  Heparin drip was later started on day four of the hospitalization.
- Because of persistent thrombocytopenia and prior exposure to subcutaneous heparin, HAPA was sent and resulted positive. SRA was also positive, confirming HIT. Heparin drip was switched to argatroban.
- Subsequent brain MRI noted numerous acute to subacute infarctions throughout both the cerebral and cerebellar hemispheres consistent with embolic phenomenon. The etiology of these emboli was not discovered. The patient was placed on comfort measures and died shortly thereafter.

# Discussion

- CAPS and HIT are rare thrombotic disorders with high risk for morbidity and mortality.
- It is estimated that CAPS affects 1% of patients diagnosed with APS¹ and HIT occurs in 5% of patients exposed to heparin.²
- The mortality rate is estimated to be 37% for CAPS¹ and 30% for HIT.²
- Both disease processes are driven by autoantibodies and it is possible that this pathogenic similarity may create a rare overlapping presentation.

# Conclusion

- It is unclear whether APS may predispose a patient to HIT. The concurrence of both disease processes is possible and should be considered in patients with either diagnosis who are not improving with treatment.
- The presence of severe thrombocytopenia in CAPS is not common and should raise the suspicion for HIT.



Adrenal Hemorrhage

# References

<sup>1</sup>Espinosa G, Rodriguez-Pinto I, Cervera R. Catastrophic antiphospholipid syndrome: an update. Panminerva Med. 2017 Sep; 59(3):254-268.

<sup>2</sup>Nicolas D, Reed M. Heparin Induced Thrombocytopenia (HIT) [Updated 2018 Oct 27]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2018 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK482330/

<sup>3</sup>Adediran S and Agostino N. Coexistence of Antiphospholipid Syndrome and Heparin-Induced Thrombocytopenia in a Patient with recurrent venous thromboembolism. Case Reports in Hematology. 2017.





