There Is No Such Thing As A Cute Liver: AFL vs HELLP In A Pregnant Patient

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INTRODUCTION

- The etiology of liver disease in pregnancy can be challenging to diagnose.
- Several disorders can cause elevated LFTs during pregnancy including the syndrome of hemolysis, elevated liver tests, and low platelets (HELLP) and acute fatty liver of pregnancy (AFL) [123].

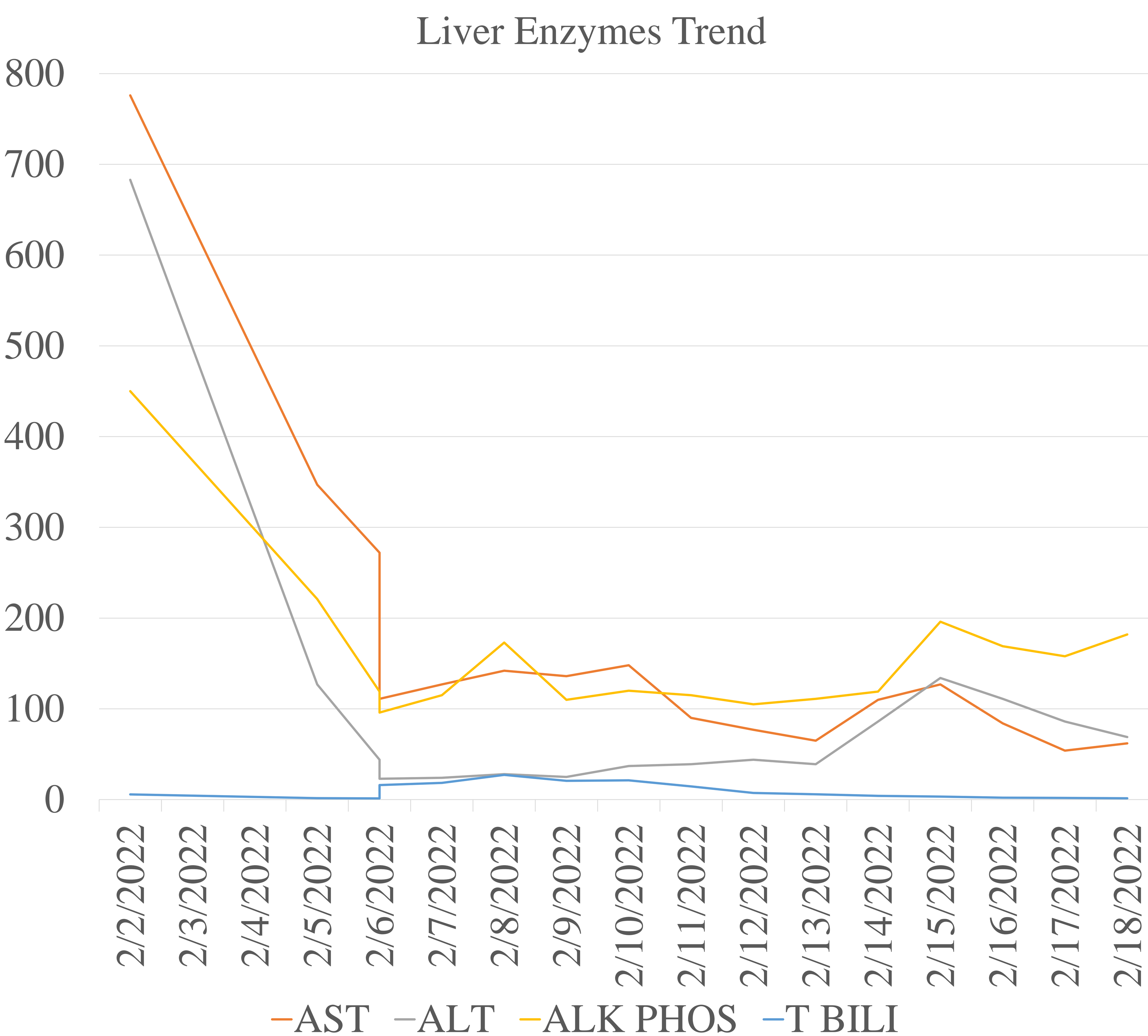

FIGURE 1: Trend of patient's liver enzymes while at tertiary care center

CASE REPORT

- A 34 yo G4P3104 female initially presented with nausea and vomiting.
- She was hypertensive with laboratory workup significant for thrombocytopenia (platelets 178) and elevated liver function tests (LFTs) with total bilirubin 5.7, alkaline phosphatase 450, AST 776, ALT 683, along with AKI and lactic acidosis.
- She was initially suspected to have AFL upon admission. However, due to progressively worsening blood pressures and worsening thrombocytopenia, concern for HELLP grew and she was placed on a nicardipine drip and underwent an emergent C-section.
- Afterwards, she had progressive encephalopathy with seizures three day after presentation requiring intubation for airway protection.
- INR continued to rise to 8, and liver enzymes worsened with progressive oliguric AKI. Given acute liver failure with worsening renal function, she was transferred to higher level of care hospital's MICU for liver transplant evaluation.
- Physical examination at the tertiary center was significant for GCS 3, scleral icterus, and jaundice.
- Comprehensive acute liver failure workup including antimitochondrial antibody, antinuclear antibody, anti-smooth muscle antibody, hepatitis serologies, alpha-1 antitrypsin level and phenotype and ceruloplasmin were unremarkable.
- The MICU stay was complicated by concern for status epilepticus for which patient was given Ativan 2mg x 1 and continuous EEG that was negative for seizures, subarachnoid hemorrhage, brief CRRT for worsening renal function that transitioned to intermittent hemodialysis, aspergillus PNA treated with vancomycin and fluconazole, multiple transfusions, suspected thrombotic thrombocytopenic purpura requiring plasmapheresis with IV methylprednisolone.
- With improved GCS, patient was able to be extubated after 3 days of mechanical ventilation. Patient was then transferred to hepatology service as a transplant candidate, however, her liver enzymes started to improve within days of delivery. She was removed from the liver transplant list nine days after initial presentation.

DISCUSSION

- This case was a difficult initial diagnosis as her presenting symptoms of nausea and vomiting with elevated liver enzymes created a broad differential.
- Given the progressive hypertension and progressive thrombocytopenia, HELLP syndrome became her working diagnosis.
- Despite an initially unclear diagnosis, the patient received the appropriate treatment – prompt delivery, as that remains the treatment for both diagnosis with improvement of symptoms and resolution of elevated liver enzymes.
- It is particularly important for patients to be aware of their diagnosis as these clinical disorders can reoccur in subsequent pregnancies, and in particular AFL which can affect their offspring.

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Disclosures: None