USE OF ULTRASOUND IN DIAGNOSING AND MANAGING OVARIAN HYPERSTIMULATION SYNDROME

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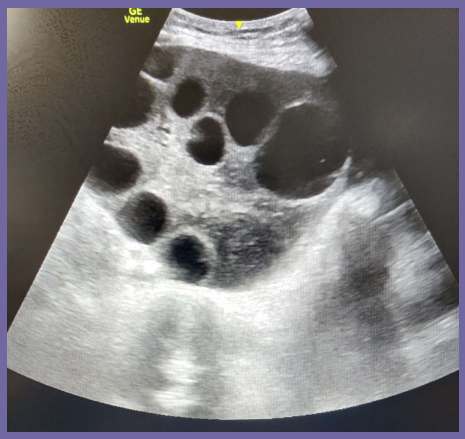
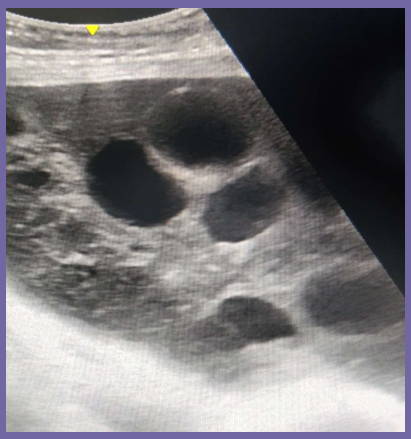
Introduction

Use of ultrasound can help clinicians make important decisions with regards to diagnosing and managing conditions that are not commonly encountered such as Ovarian hyper stimulation syndrome (OHSS) , which has varied clinical presentation and can create a diagnostic and management conundrum for critical care clinician

Case Presentation

A woman in her early 30s , recently undergone In Vitro fertilization (IVF) presenting to hospital with abdominal pain ,bloating ,nausea ,vomiting , speech disturbances ,fluctuating level of consciousness and limb weakness . Initial physical examination suggestive of stroke, had a head CT scan done that revealed a basilar artery stroke, she was intubated and had a thrombectomy done. Echo done to assess for source of clots, noted to have possible mitral valve vegetation and right heart strain. Ultra sound done also revealed bilateral pleural effusion. CTPA done revealed left pulmonary embolism. Beta HCG was raised ,multidisciplinary assessment concluded likely severe OHSS. Abdominal distention was progressive and firm. Concerns about level of ascites, possibility of ectopic pregnancy given rise in B-HCG or bowel obstruction. Bedside ultrasound scan of abdomen /pelvis revealed moderate ascites and markedly enlarged ovaries with left larger than right. Visualizing the enlarged ovaries helped cement diagnosis and guided decision regarding draining of what initially looked to be massive ascites causing abdominal distention, which was actually due to markedly enlarged ovaries + ascites .She had U/S guided ascetic drain insertion .Formal abdominal u/s requested to confirm findings . With diagnosis of OHSS confirmed she has been managed according to recommended guidelines. She has required ventilator support temporarily, fluid resuscitation to correct for hypercoagulable state due to fluid third spacing .Bilateral EVD drains and Posterior decompressive craniectomy due to infarct.





Bilateral enlarged ovaries. Right ovary measuring 15x11x12cm, left 10x5.6x 5.5cm. Ovaries containing multiple enlarged follicles. Uterus appears normal in size

Conclusion

Use of bedside U/S in critical care setting can help with diagnosis less common conditions and aide clinicians in making treatment decisions at the bedside saving on time and reducing chances of patient harm or undergoing unnecessary procedures. Junior clinicians will gain invaluable insight when they use POCUS and correlate with clinical findings; however care must be taken to consult more experienced members of the team, as the enlarged ovaries were initially confused for dilated bowel and needed senior review to ensure correct diagnosis.

references

●Frasure SE, Rempell JS, Noble VE, Liteplo AS. Emergency ultrasound diagnosis of ovarian hyperstimulation syndrome: case report. J Emerg Med. 2012 Aug;43(2):e129-32. doi: 10.1016/j.jemermed.2011.06.148. Epub 2012 Apr 21. PMID: 22525699

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