

Bilateral Internal Jugular Vein Thrombosis

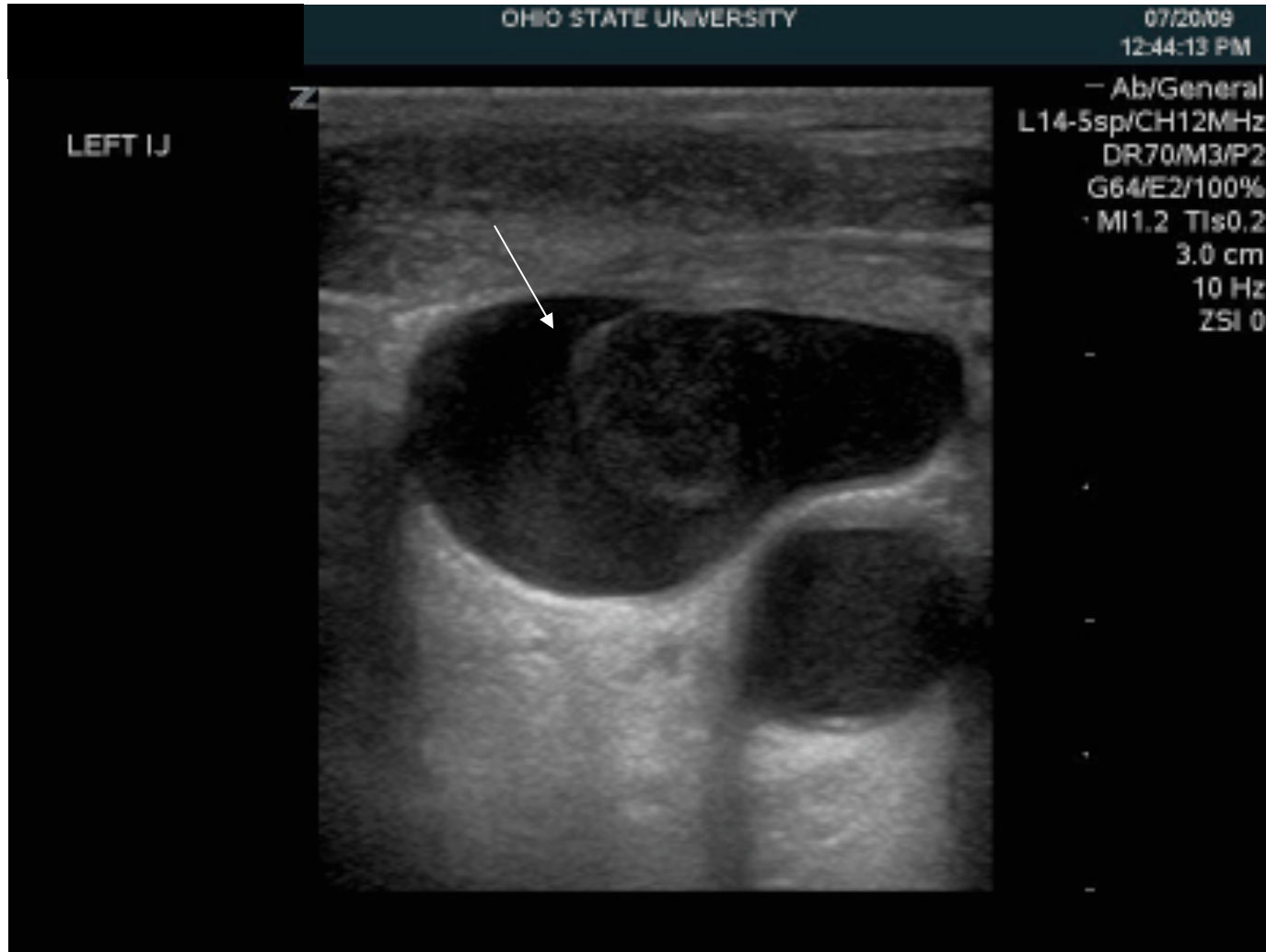
By Nancy Liao

61 year old female with history of ESRD s/p living kidney transplant, diabetes, recurrent thromboembolic disease, short gut syndrome secondary to partial colectomy due to mesenteric ischemia, presents as a transfer to the ED after a few days of altered mental status and general lethargy.

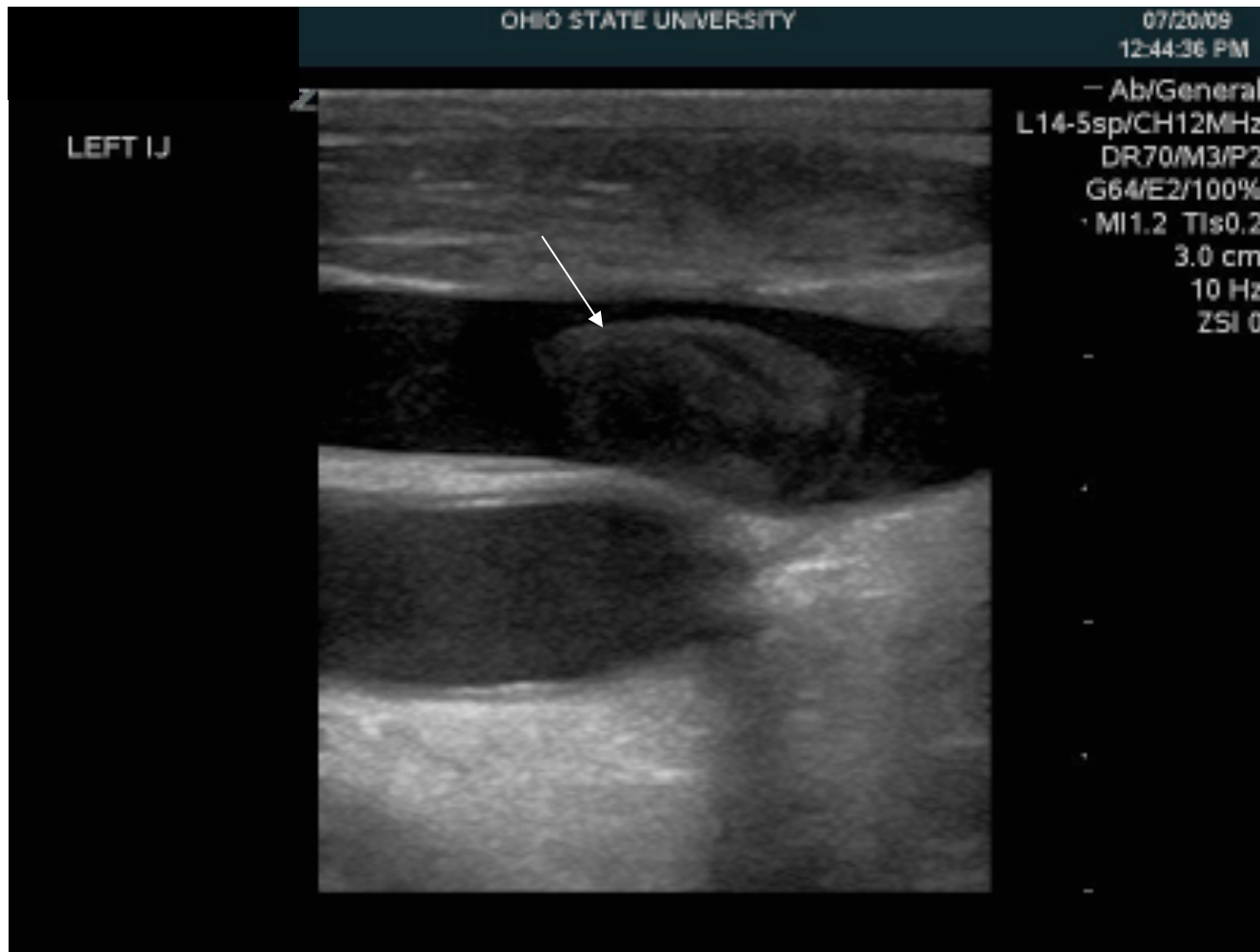
At the patient's long term care facility, blood cultures grew E. coli and Staph epi.

An ultrasound was performed prior central line placement attempt and revealed bilateral internal jugular blood clots.

Cross sectional view of Left Internal Jugular Vein



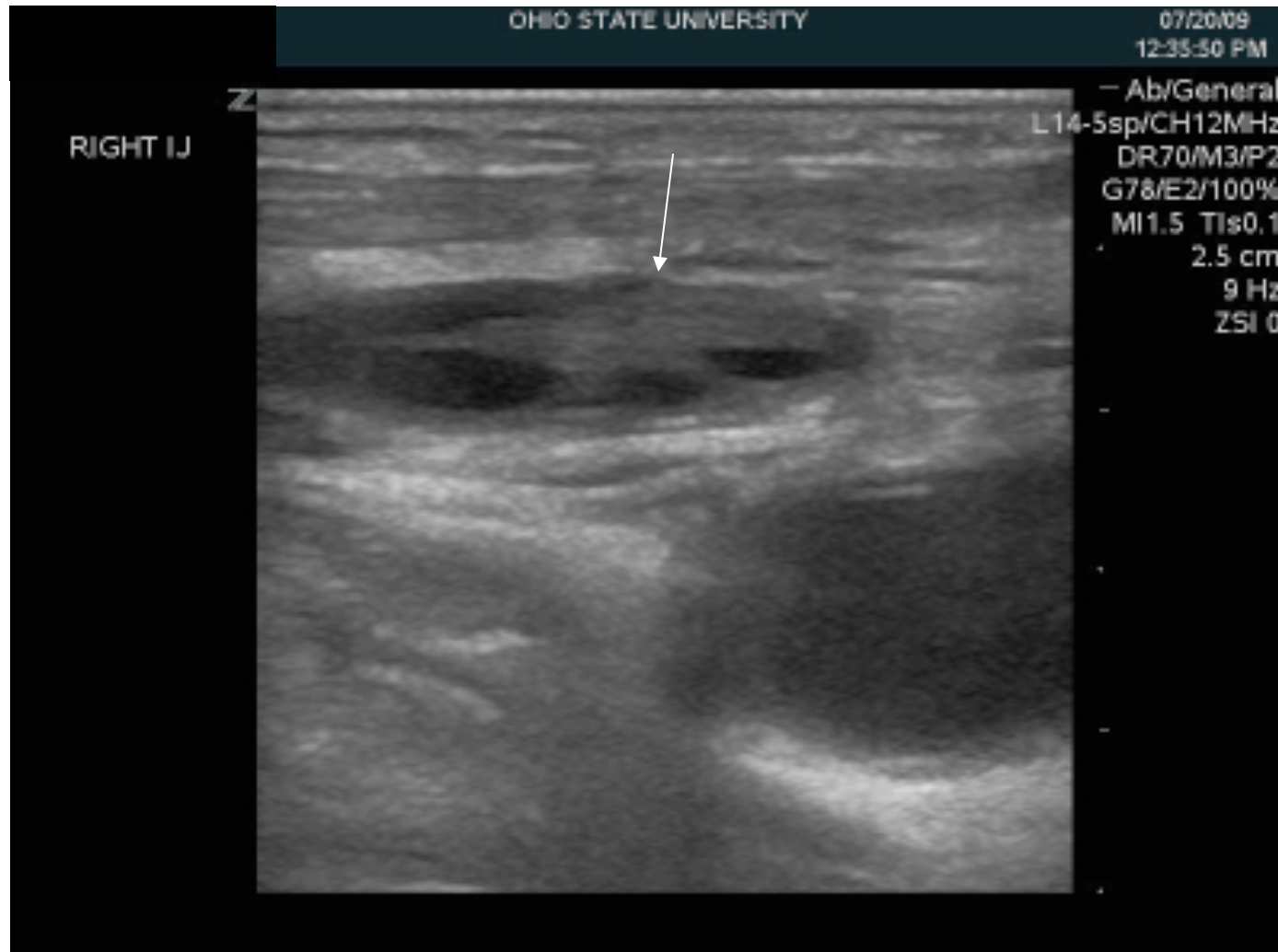
Longitudinal view of Left IJ



Cross sectional view of Right IJ



Longitudinal view of Right IJ



Overview of Treatment of Acute Venous Thromboembolic Disease

- Initiate treatment with LMW heparin, fondaparinux unfractionated intravenous heparin, or subcutaneous heparin for at least 5 days.
 - Unfractionated heparin dose should be sufficient to prolong aPTT 1.5 to 2.5 times the baseline or the upper limit of the normal range.
 - When using heparin, monitor platelet count regularly for thrombocytopenia. Discontinue use if sustained decrease in the platelet count, or a platelet count <100,000/microL
- Initiate Warfarin therapy at same time as heparin. Initial dose of 5 mg/day PO and titrate up.
 - prolong the INR to a target of 2.5 (range 2.0 to 3.0).

Duration of Treatment

- First thromboembolic event should be treated for at least three months
 - First proximal DVT with concern for recurrent venous thrombotic events and in a patient with lower risk for complications of long-term anticoagulation therapy, treatment should be continued indefinitely.
 - First distal DVT does not require therapy for greater than three months

Kearon, C, Kahn, SR, Agnelli, G, et al. Antithrombotic therapy for venous thromboembolic disease: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines (8th Edition). Chest 2008; 133:454S.

IVC filter

- Inferior vena cava filter should be used in a patient with
 - Contraindication to anticoagulation therapy
 - Failure of anticoagulation therapy
 - High risk for proximal vein thrombosis or PE.
- Inferior vena cava filter is recommended in a patient with
 - Recurrent thromboembolism despite adequate anticoagulation
 - Chronic recurrent embolism with pulmonary hypertension
 - Surgical pulmonary embolectomy or pulmonary thromboendarterectomy

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Patient's hospital course

- Bacteremia/Pneumonia/UTI: Patient had multiple sites of infections on admission and was treated with appropriate antibiotic therapy. A PICC line was placed for infusion of antibiotics. At time of discharge, antibiotics were discontinued.
- Renal transplant: Patient presented on immunosuppression medications. During hospitalization, patient developed acute renal failure secondary to rejection. Towards end of hospitalization, immunosuppressants were also discontinued.
- Deep venous thrombi: Patient was initially on warfarin therapy but during hospitalization, anticoagulation was withdrawn.
- Comfort Care: Patient's family decided to focus on comfort care measures only. Patient was set up for inpatient hospice and medications for pain and anxiety were added to her regimen.