53. **RECTUS SHEATH HEMATOMA FOLLOWING SUBCUTANEOUS ENOXAPARIN APPLICATION: A CASE REPORT**

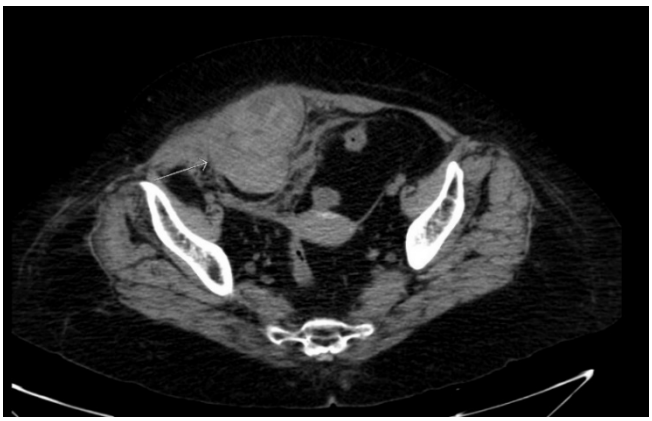
Naomi Joanne Graham[1], Felix Antonio Villanueva Ledesma[2].

[1] B.S. Fourth-year Medical Student. Universidad Autonoma de Guadalajara School of Medicine, Guadalajara, Mexico.

[2] M.D. Internal Medicine Resident. Universidad de Guadalajara, Guadalajara, Mexico.

BACKGROUND: Thromboprophylaxis for prevention of venous thromboembolism has significantly decreased morbidity and mortality for post-operative patients over the previous decades. However, patients on anticoagulants are at risk for several major bleeding events, such as rectus sheath hematoma. Rectus sheath hematoma is an uncommon, potentially life-threatening complication that can be difficult to diagnose and easily confused with other abdominal pathologies. It most commonly occurs in patients on current prophylactic or therapeutic anticoagulants and can be spontaneous or provoked. Inadvertent damage to the rectus abdominis muscle or epigastric arteries during subcutaneous enoxaparin injection in the abdomen has been identified as a rare cause of this complication. **THE CASE**: A 68-year-old hospitalized female presented acute abdominal pain in the right lumbar and iliac region accompanied by hypotension and tachycardia eight days after uncomplicated total knee arthroplasty. She was found to have severe anemia on laboratory exam and a right rectus sheath hematoma on abdominal CT scan with a volume of 300cc. After the patient was stabilized via fluid resuscitation and blood transfusion, the hematoma was surgically drained. The surgeons involved noted possible inadvertent puncture of the right inferior epigastric artery during one of the patient's bi-daily subcutaneous enoxaparin injections. **CONCLUSION**: This case report emphasizes the importance of recognizing rectus sheath hematoma as a potential complication of subcutaneous enoxaparin injection and the knowledge of its risk-factors and clinical presentation to make an early diagnosis and give adequate treatment.

Figure. Coronal CT Scan of the Abdomen Following Acute-Onset Abdominal Pain.



Legend: Arrow shows a large (73 x 67 x 112 mm), well-defined cystic mass of approximately 300mL of volume occupying the right, infra-umbilical, anterior abdominal wall confined to the rectus sheath without extension across the midline. The intralesional density is diffusely increased with some hypoechoic foci.

Key words: Rectus Abdominis; Hematoma; Enoxaparin; Case Report; Anticoagulants (Source: MeSH-NLM).