

Abdominal Compartment Syndrome as a complication of Atraumatic Spontaneous Kidney Rupture: A Case Report on Wunderlich Syndrome

Introduction

- Wunderlich Syndrome is a rare phenomenon involving the spontaneous development of a perirenal hematoma in the absence of trauma.
- It has been classically associated with symptoms of flank pain, palpable flank mass, and hypovolemic shock, known as “Lenks Triad”
- Here we present a rare case of abdominal compartment syndrome in the setting of delayed diagnosis of Wunderlich Syndrome in a man with quadriplegia.

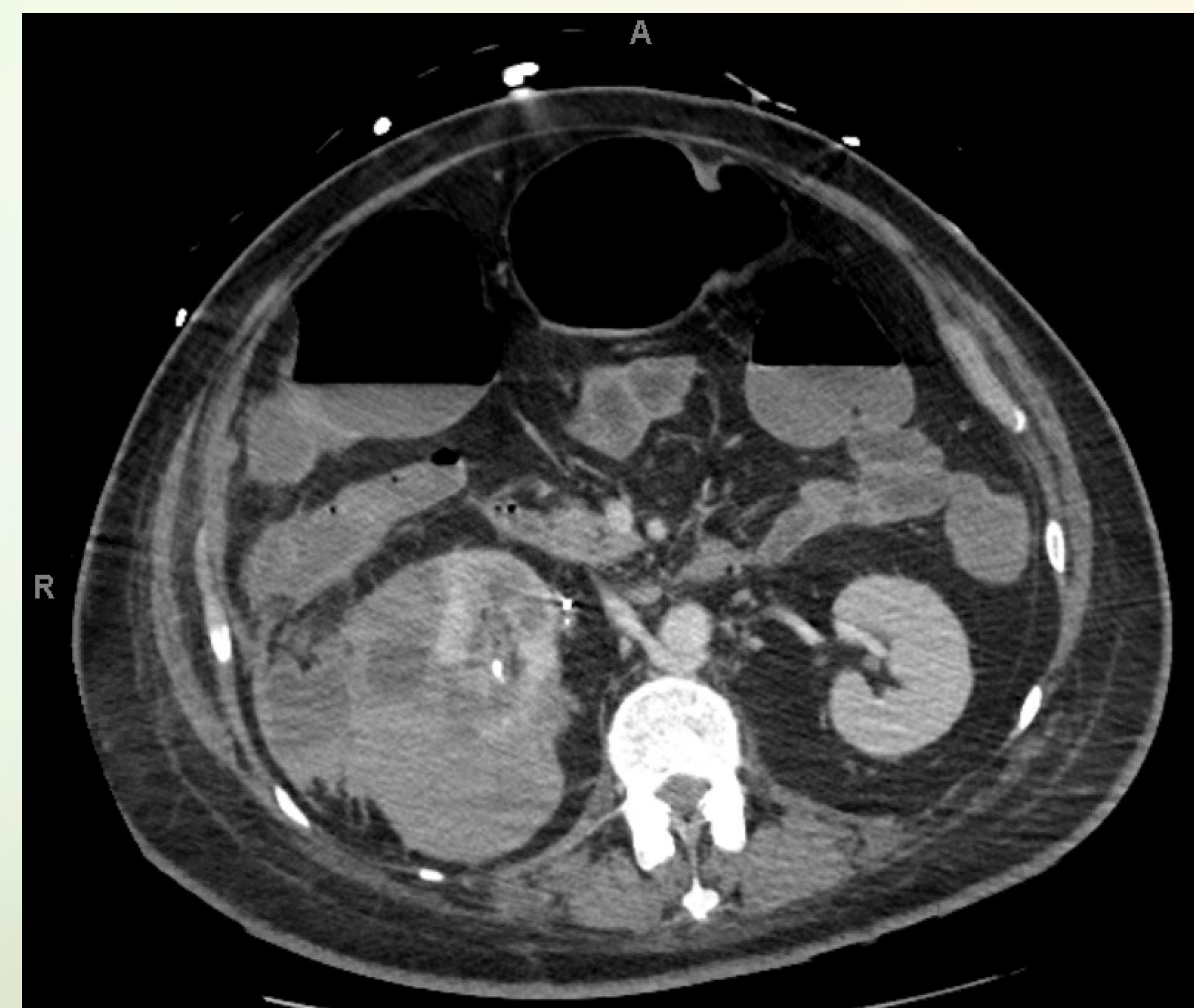
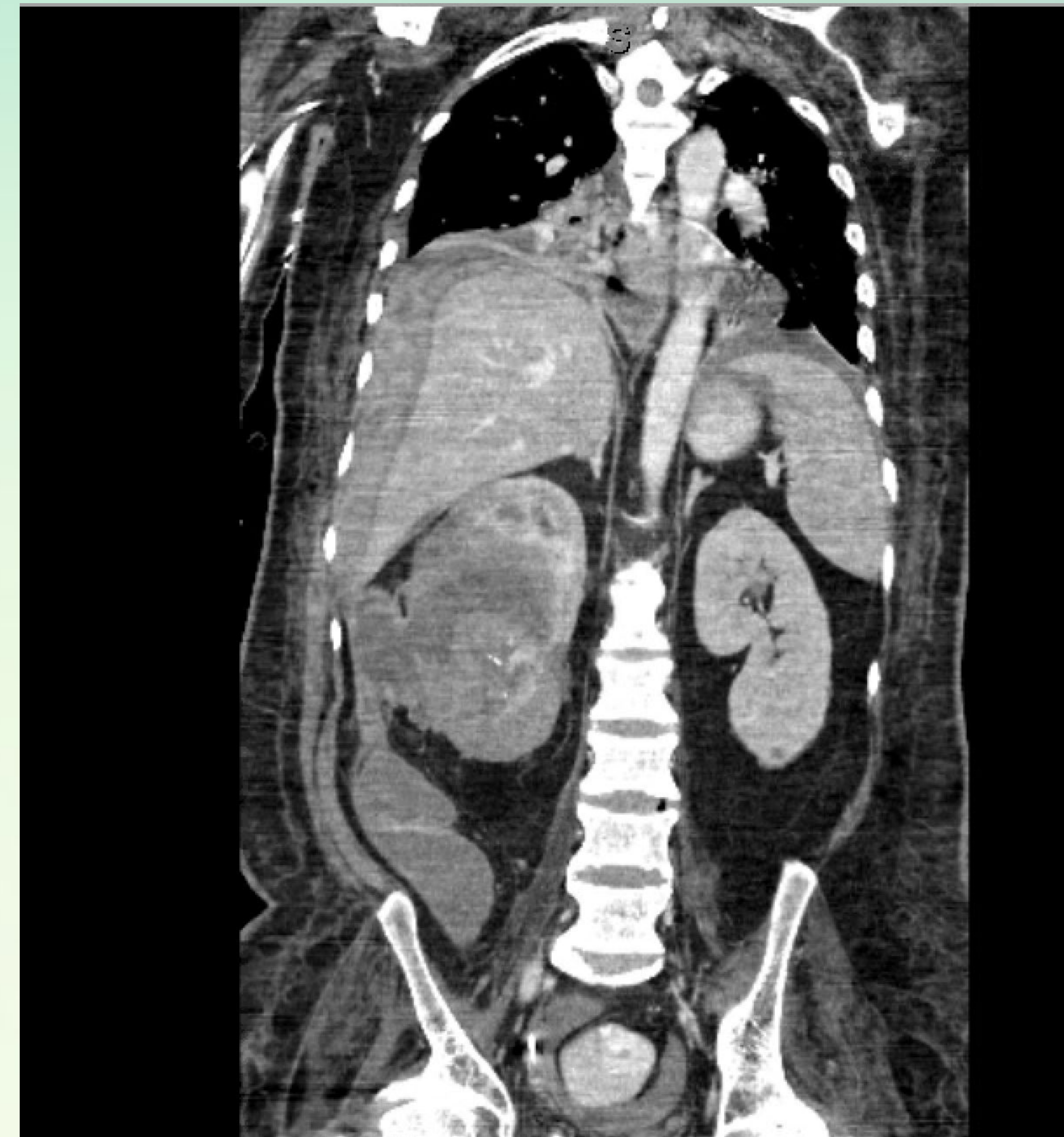
Case

- 37 year old male with a history of quadriplegia secondary to a GSW, chronic tracheostomy and percutaneous endoscopic gastrostomy tube, who presented with urosepsis requiring vasopressors .
- He underwent right renal stent placement for right hydronephrosis with purulent drainage and a bladder cystolitholapaxy on hospital day 2.
- His hemoglobin slowly trended down to 7.3 over his admission (baseline 11) but was without hemodynamic changes or clear source.
- Hospital day 7, vasopressor requirements increased while other vitals remained unchanged. That morning, CBC came back with a Hbg of 5.1.

REFERENCES

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Case Continued

- Bedside examination showed extensive abdominal distention. A STAT CTAP showed a new large subcapsular and perinephric hematoma of the right kidney, large perihepatic hematoma, and hemoperitoneum (Figures 1 and 2).
- Respiratory Therapy reported increased Peak Inspiratory and Plateau pressures, raising concern for abdominal compartment syndrome.
- General Surgery was consulted who then obtained a bladder pressure, which was elevated at 25. He was then emergently taken to the OR for exploratory surgery with two liters of blood removed.

Discussion

- Wunderlich Syndrome and Atraumatic Spontaneous Kidney Rupture are severe processes and can quickly become life threatening if not identified.
- It is most often seen in patients with underlying renal carcinomas or renal arterial venous malformations but can be seen in patients with renal infections.
- Worsening anemia can be seen in critically ill patients, however bleeding should always be ruled out when paired with hemodynamic instability.
- Special attention should be paid to patients with quadriplegia as their sensory deficits may delay diagnosis and subsequent intervention.