

SPONTANEOUS SPLENIC RUPTURE CAUSING HEMORRHAGIC SHOCK IN AN ANTICOAGULATED ELDERLY PATIENT: A CASE REPORT AND REVIEW OF MANAGEMENT CHALLENGES

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INTRODUCTION

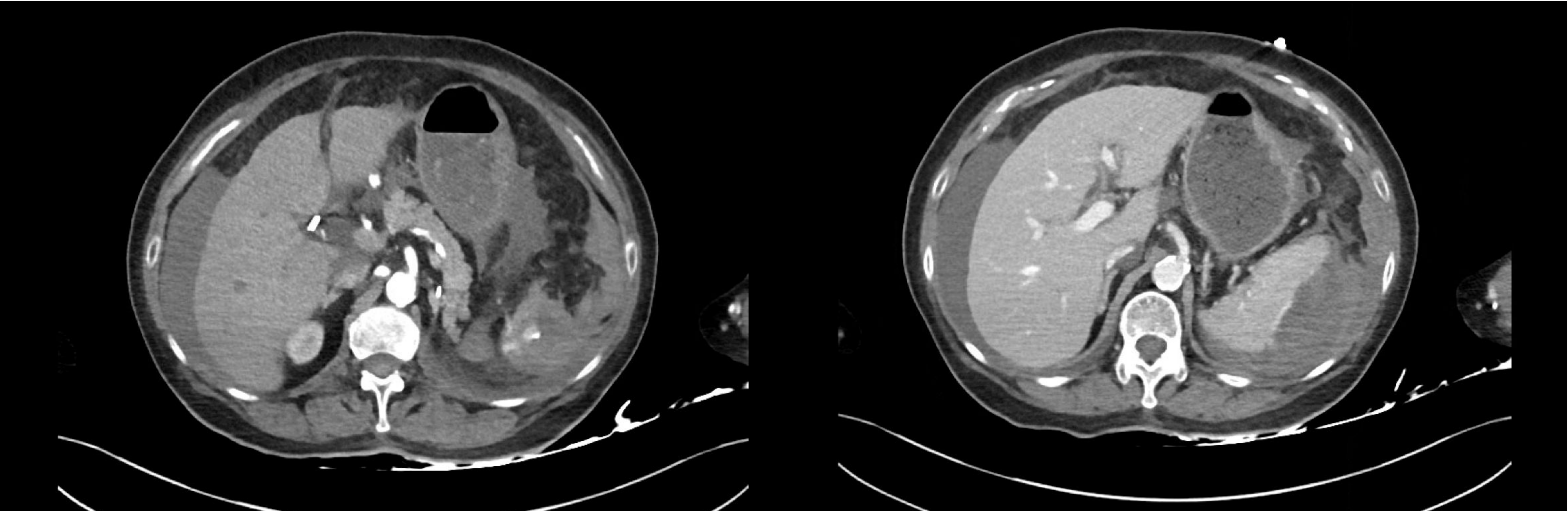
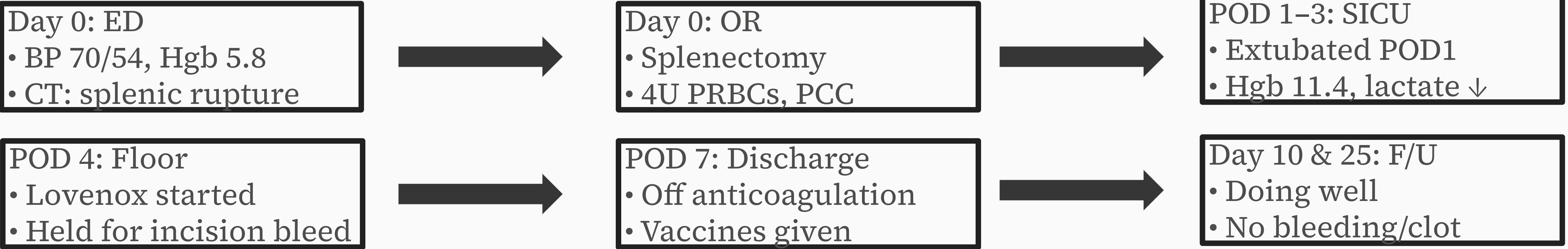
- Spontaneous splenic rupture (SSR) is a rare but life-threatening cause of intra-abdominal hemorrhage, distinct from traumatic splenic injury.
- Anticoagulation with DOACs, especially in elderly patients with renal dysfunction and polypharmacy, increases the risk of major visceral bleeding.
- This case highlights SSR causing hemorrhagic shock in a 74-year-old on apixaban and the challenges of balancing thrombotic and bleeding risks.

CASE PRESENTATION

- 74-year-old woman with atrial fibrillation on apixaban, CAD, CKD, diabetes, hemolytic anemia, and hypertension.
- Presented with 1 day of worsening abdominal pain, near-syncope, home BP 70/54, no trauma history.
- ED: hypotension, hemoglobin 5.8 g/dL, lactate 5.9 mmol/L, acute kidney injury.
- CT abdomen/pelvis: lower-pole splenic laceration with active contrast extravasation, large subcapsular hematoma, and hemoperitoneum.

CASE PRESENTATION (CONT.)

- Management: aggressive resuscitation (PRBCs, PCC, fluids) and emergent exploratory laparotomy with splenectomy and drain placement.
- Postop: hemodynamics and labs normalized; downgraded on POD 4; anticoagulation withheld on discharge pending cardiology follow-up; doing well at 10- and 25-day visits.



DISCUSSION

- SSR is uncommon but carries reported mortality around 10–20%, higher with delayed diagnosis in older adults.
- Anticoagulants, including DOACs, are recognized contributors to atraumatic splenic rupture, particularly in elderly patients with renal impairment and multiple comorbidities.
- Presentations are often nonspecific (vague abdominal pain, syncope, hypotension) and may lack classic LUQ findings, increasing risk of misdiagnosis.
- In anticoagulated patients with abdominal pain and shock, SSR should be considered even without trauma; contrast CT and early surgical consultation are crucial.
- Resumption of anticoagulation after major visceral hemorrhage remains controversial and is not well addressed in current guidelines.

CONCLUSION

- SSR is a rare but critical diagnosis in elderly patients on DOACs presenting with abdominal pain and hypotension.
- Rapid recognition, CT imaging, resuscitation, and timely splenectomy are key to survival in unstable patients.
- Individualized, multidisciplinary planning is needed for anticoagulation management after SSR, underscoring the need for better risk-stratification tools.

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