



Missed 10 cm Abdominal Aortic Aneurysm Found on Physical Exam

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▶ INTRODUCTION

- Abdominal aortic aneurysms are typically asymptomatic until they rupture and become much more urgent. In most patients, AAA can be diagnosed via physical exam in the early stages.^{1,2}
- Limiting the physical examination solely to the reported chief complaint can increase the risk of overlooking a diagnosis and delaying treatment, especially when cognitive errors come into play.
- In this report, we explore the case of a 66 year old gentleman who had a delay in the diagnosis of a 10cm abdominal aortic aneurysm and how errors like anchoring and Sutton's slip may have contributed to this.

▶ CASE PRESENTATION

Patient is a 66 year old African American male with a medical history of dementia and anemia presenting to the emergency room after a mechanical fall and being found saturated in diarrhea and emesis. Upon arrival in the ER, the patient felt lethargic. The patient had previously been admitted to the hospital 5 months earlier for COVID-19 infection. Patient denies syncope, sick contacts, fever/chills, new-onset weakness, and chest pain. Patient endorsed dizziness, diarrhea, polyuria, shortness of breath, and a non-productive cough. Blood pressure on arrival was 135/81, heart rate 91 BPM, afebrile, with oxygen saturation at 92% on room air. Patient was alert and oriented to person, place, and time and not in any acute distress. His heart had regular rate and rhythm, with audible S1 and S2, no S3 or S4, and no murmurs. The neurological and musculoskeletal exams were unremarkable. Pulses were present and equal in radial arteries, +2 in left dorsalis pedis, and +1 in right dorsalis pedis, with no peripheral edema. Patient's abdominal exam was remarkable for an abdominal bruit with a large, midline pulsatile mass. Laboratory studies were unremarkable.

▶ IMAGING AND CLINICAL COURSE

CT Abdomen and Pelvis revealed a 10.6 x 8.7cm infrarenal abdominal aortic aneurysm, which was confirmed by CT Angiography (Image 1).

GI and Vascular surgery were consulted and the patient underwent a percutaneous endovascular abdominal aortic repair (Image 2). He was later discharged with a recommendation for outpatient follow up for primary care management.

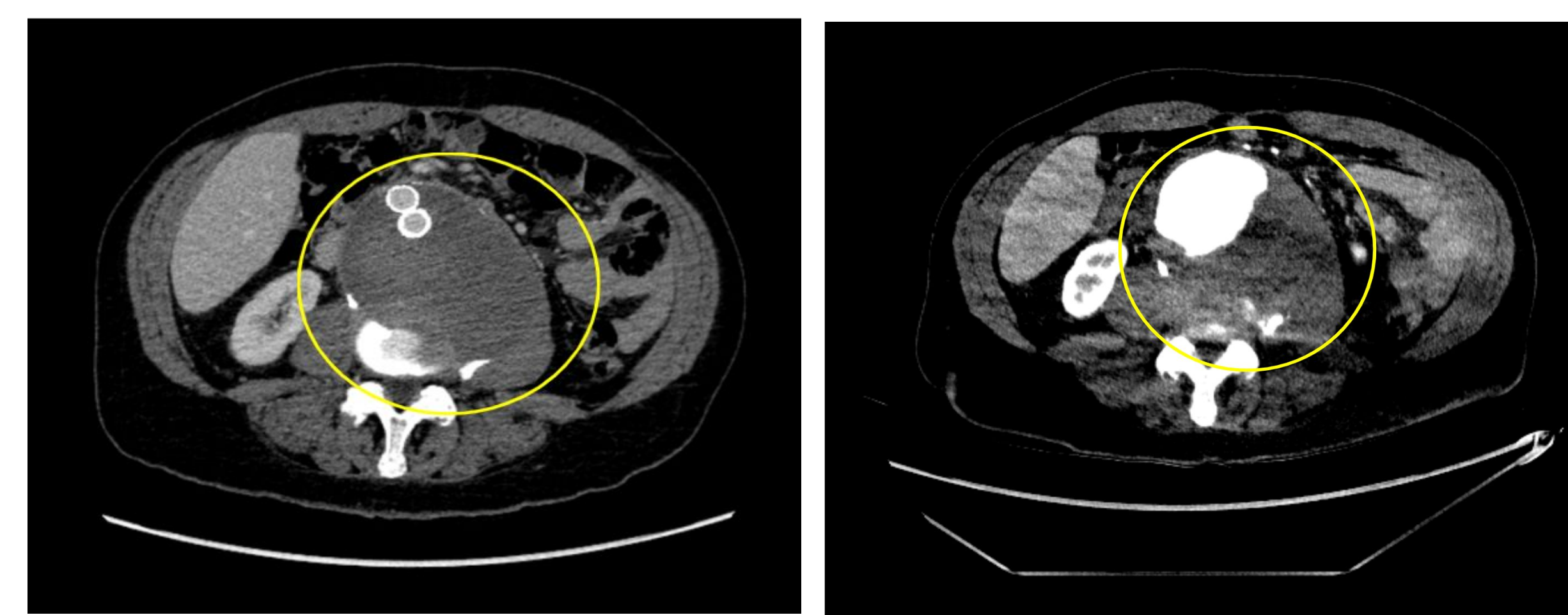


Image 1: 10.6 x 8.7cm infrarenal abdominal aortic aneurysm confirmed with CT Angiography
Image 2: CT angiography showing 10.6 x 8.7cm infrarenal abdominal aortic aneurysm after percutaneous endovascular abdominal aortic repair.

▶ ANCHORING

- Occurs when a physician sticks with the initial chief complaint and disregards new information that becomes available throughout the patient's hospital course⁶
- In this case, if the physical examination was focused more on the initial complaint of the mechanical fall, a proper abdominal examination may not have been performed
- Physical examinations can lead to significant change in the management of a patient⁷

▶ SUTTON'S SLIP

- Occurs when physicians may not give sufficient consideration to other variables and diagnoses beyond the most obvious ones⁶
- In this case, a mechanical fall in a 66 year old may have initially presented as a straight-forward diagnostic dilemma with a focus on neurological, cardiovascular or even musculoskeletal etiologies
- If the physician team had adhered too strictly to these causes, the abdominal exam may not have been performed thoroughly, leading to potentially fatal consequences

▶ DISCUSSION

- Physical examination is an important skill to develop in the early levels of training
- Key diagnoses may be missed
- Balance between physical examination and diagnostic imaging
- Physical exam is low-cost, high reward; helps foster physician-patient relationship and reduce unnecessary imaging³
- Trainees spend as little as 12% of time in direct contact with patients and families⁴
- Teaching skills of the physical examination to trainees can improve abilities as diagnosticians⁵
- Creating an environment and routine of only focused physical examinations due to time constraints can increase morbidity/mortality

▶ CONCLUSION

- Throughout this case, we highlight the importance of physicians and trainees to prioritize performing a comprehensive physical examination as an essential component of patient care
- This may require a greater investment in training and education as well as a broader cultural shift towards valuing the importance of physical examination skills
- Overcoming the limitations of time constraints as well as being aware of cognitive biases like anchoring and Sutton's slip can help physicians and trainees increase the depth, accuracy and scope of their physical examination.

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