



PATIENT SAFETY RESOURCES

NARROW FOCUS FOGS OPPORTUNITY FOR TIMELY PE DIAGNOSIS

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DESCRIPTION

A 55-year-old patient died of a pulmonary embolism (PE) one week after an urgent care visit.

KEY LESSONS

- A narrow diagnostic focus can fog the need for additional assessment.
- Fragmented medical records can challenge multi-specialty care.

CLINICAL SEQUENCE

A 55-year-old woman with a history significant for obesity, hypertension, asthma, and anxiety presented to Urgent Care complaining of shortness of breath, hemoptysis, and persistent cough for three days. She reported pain (6-7/10) in her posterior right shoulder and right calf. Nursing assessment revealed P: 120 and O2 sat: 94% on room air. These were documented in handwritten notes, to be entered later into the patient's electronic health record (EHR). The Urgent Care provider, a family medicine physician, did not review the nursing notes, and during the exam, the patient only complained of cough and hemoptysis, leaving the tachycardia and low O2 saturation—and the patient's complaint of pain—unaddressed. A chest X-ray (CXR) was ordered, and the wet read revealed cardiomegaly and the possibility of slight infiltrates. The patient was given a prescription for Levaquin for potential pneumonia.

The final radiology report noted marked cardiomegaly on the CXR, as well as mild central pulmonary vascular prominence and no infiltrates. The radiologist recommended a chest CT scan if hemoptysis persisted. The patient was not informed of this result.

Three days later, the patient returned to the Urgent Care clinic and was examined by her own primary care provider. (PCP). She remained short of breath with no improvement; she denied calf pain at this time. Her cough prevented her from lying flat at this visit, and examination revealed P:130, O2 sat: 96% on room air, lungs clear. The patient was sent for a stat cardiology consult. The cardiologist saw the patient without access to the PCP's notes, which had not yet been recorded in the EHR. At this visit, she reported resolved hemoptysis and feeling better on antibiotics.

The patient declined a stat echocardiogram, instead, scheduling it for the following week. A pulmonary consult was ordered.

Two days later, the patient called her PCP complaining of "coughing up more dark red blood" and requesting a refill on her inhaler, which was ordered. Within 24 hours of this phone call, the patient died of a massive PE. Autopsy revealed the patient had been showering emboli for weeks.

ALLEGATION

The patient's family asserted a case against both family medicine physicians, the nurse, the radiologist, and the cardiologist for failure to diagnose pulmonary embolism.

DISPOSITION

The nurse, radiologist, and cardiologist were eventually dropped from the case, which was settled in excess of \$1M.

DISCUSSION POINTS

Narrow diagnostic focus and failure to establish a differential diagnosis

In this case, providers failed to consider pulmonary embolism in the differential diagnosis. Contrary to the standard of care, no d-Dimer test was ordered for this patient. Likewise, the urgent, then emergent, need for imaging studies was not acted upon.

Interventions to decrease error in medical reasoning:

- Use clinical decision support tools to avoid cognitive bias.
- Engage in reflective practice. (What else could it be? What diagnosis can I not afford to miss? How does this fit with my past experience?)
- Work in diagnostic teams. (Whose input do I need?)
- Document clinical reasoning in the medical record.

Fragmented medical record

Medical notes and nursing assessments were not available in real-time, leading to fragmentation in the medical record. None of the providers had access to 100 percent of the critical information needed to properly evaluate and treat this patient.

Continued on Page 2





Continued from Page 1

Interventions to increase communication during transitions of care:

- Interact directly with diagnostic team members.
- Person-to-person handoffs in urgent/emergent situations.

REFERENCES

Health Research & Educational Trust. (September 2018). Improving Diagnosis in Medicine Change Package. Chicago, IL: Health Research & Educational Trust. Accessed at <http://www.hret-hiin.org/>

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