

Ticking Time-Bomb: Diagnostic Strategy of Aortic Dissection

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INTRODUCTION

Aortic Dissection is a frequently misdiagnosed life-threatening condition that requires a high index of suspicion and awareness of the variety and subtlety in clinical manifestations. In atypical presentations such as reported below, it is demonstrated that the sensitivity of bedside FOCUS is higher in expediting the diagnosis compared to traditional textbook chest x-ray findings.

CASE REPORT

A 61 year old gentleman with no known medical illness had presented to ED complaining of chest discomfort that is difficult to describe with right lower limb cramps and no autonomic symptoms. Patient was normotensive, not tachycardic and comfortable. In ED, he began perspiring with coolish peripheries, but normal capillary return and good pulse volume. There was no murmur, radioradial or radiofemoral delay. ECG showed sinus arrhythmia and cardiac biomarkers were normal while erect chest x-ray showed no obvious mediastinal widening.

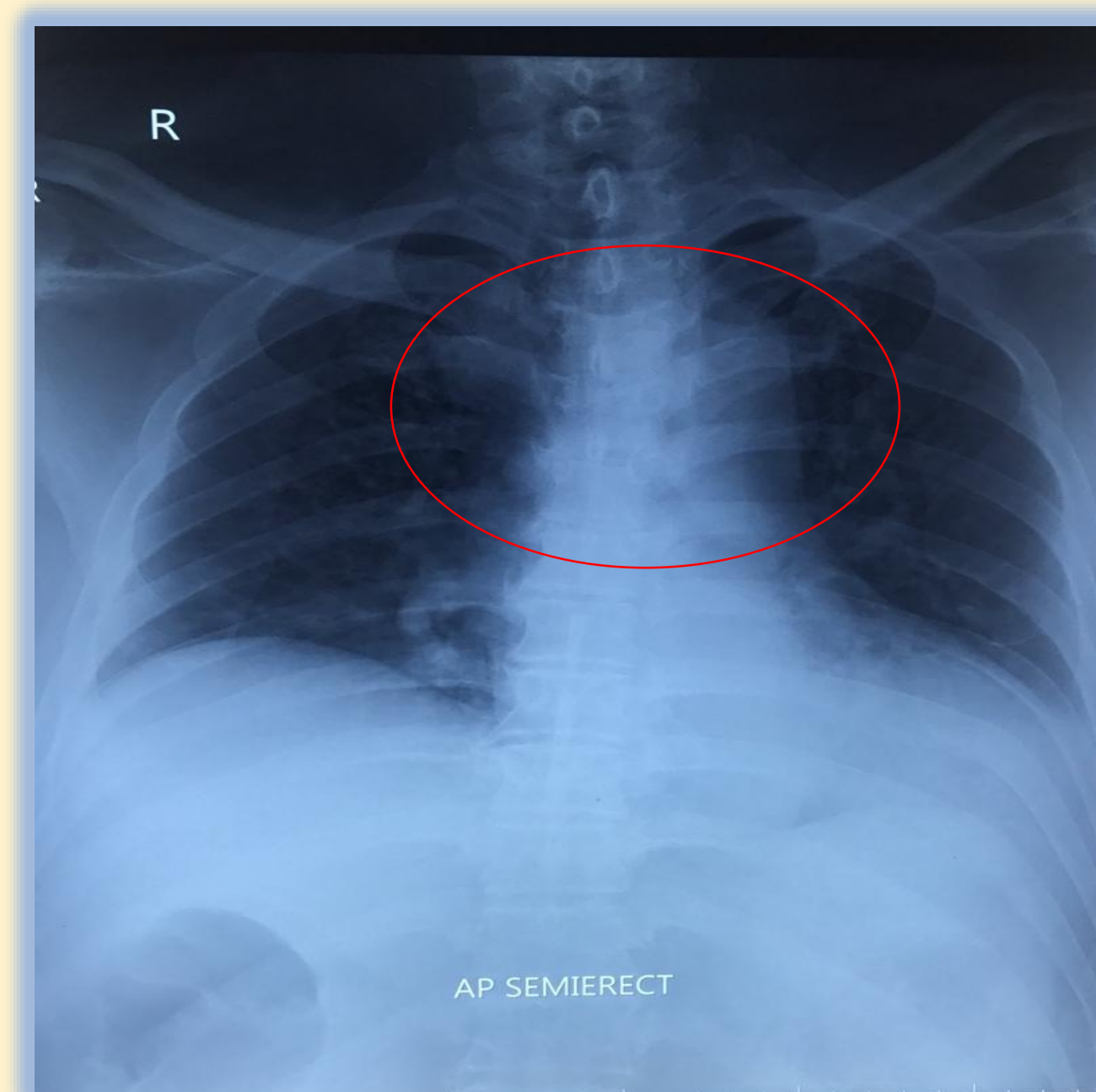


Figure 1.0 : Semi-erect chest x-ray showing less than 8cm widening of mediastinum.

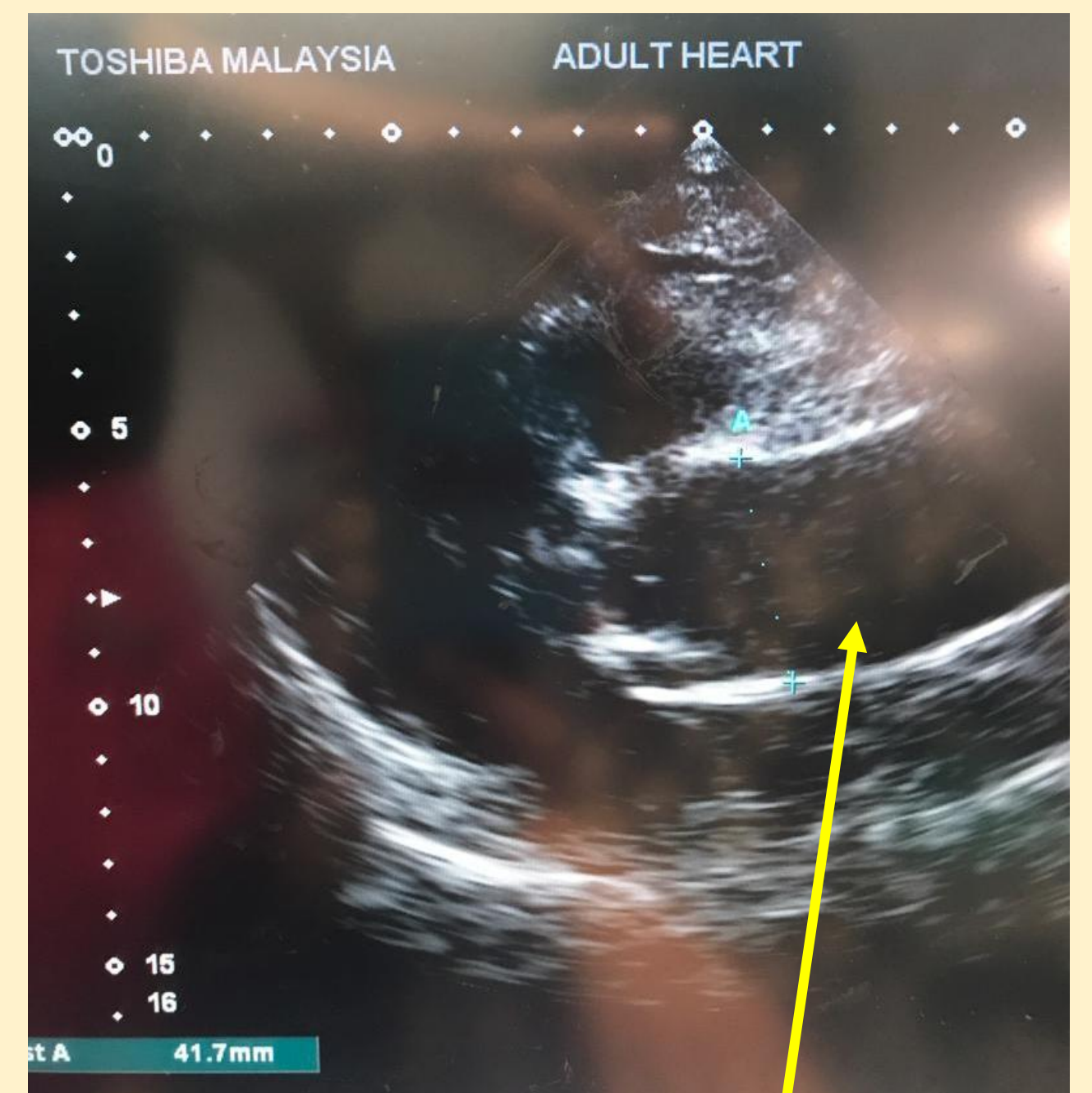


Figure 2.0 : FOCUS parasternal long axis view of dilated aortic root

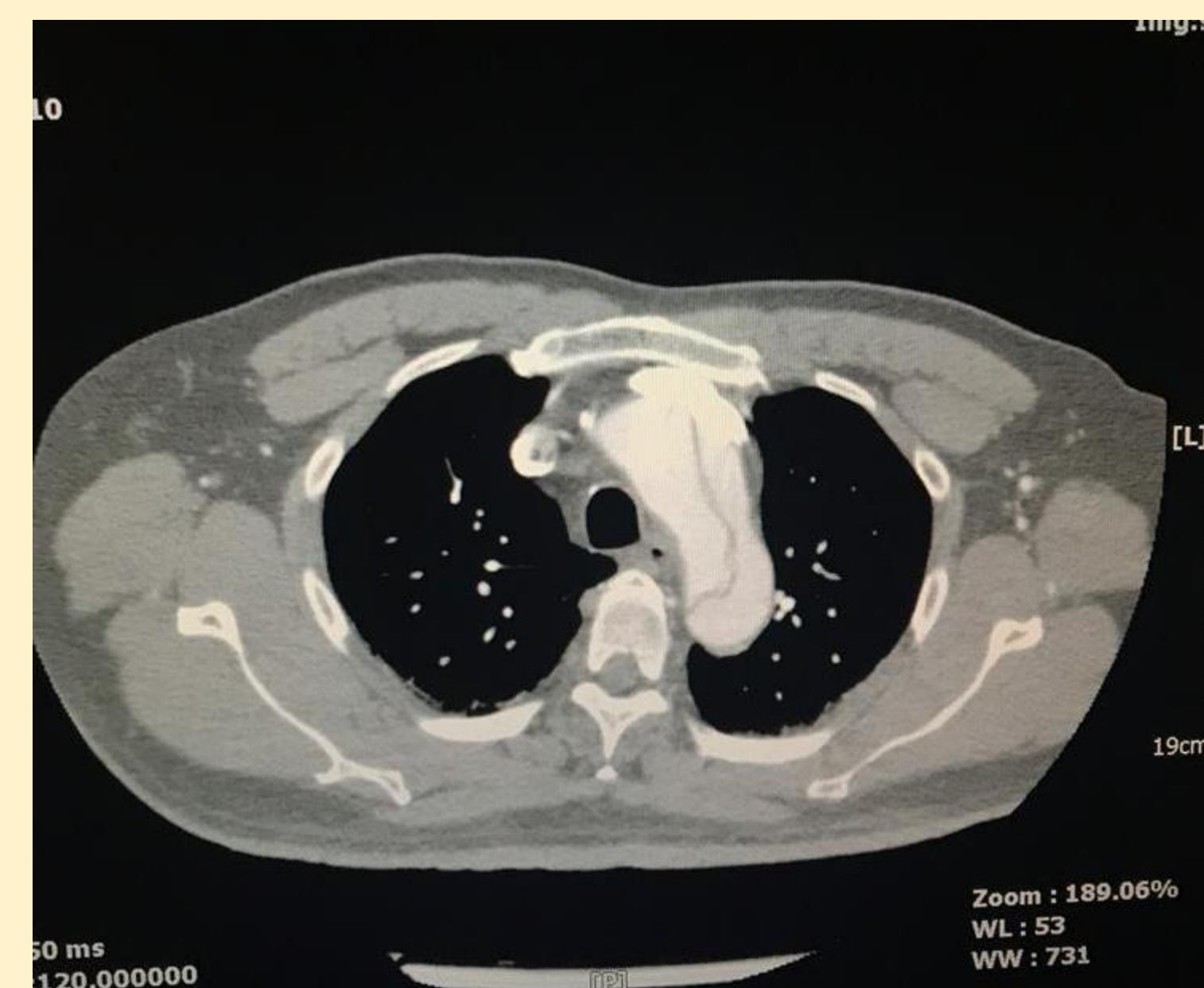
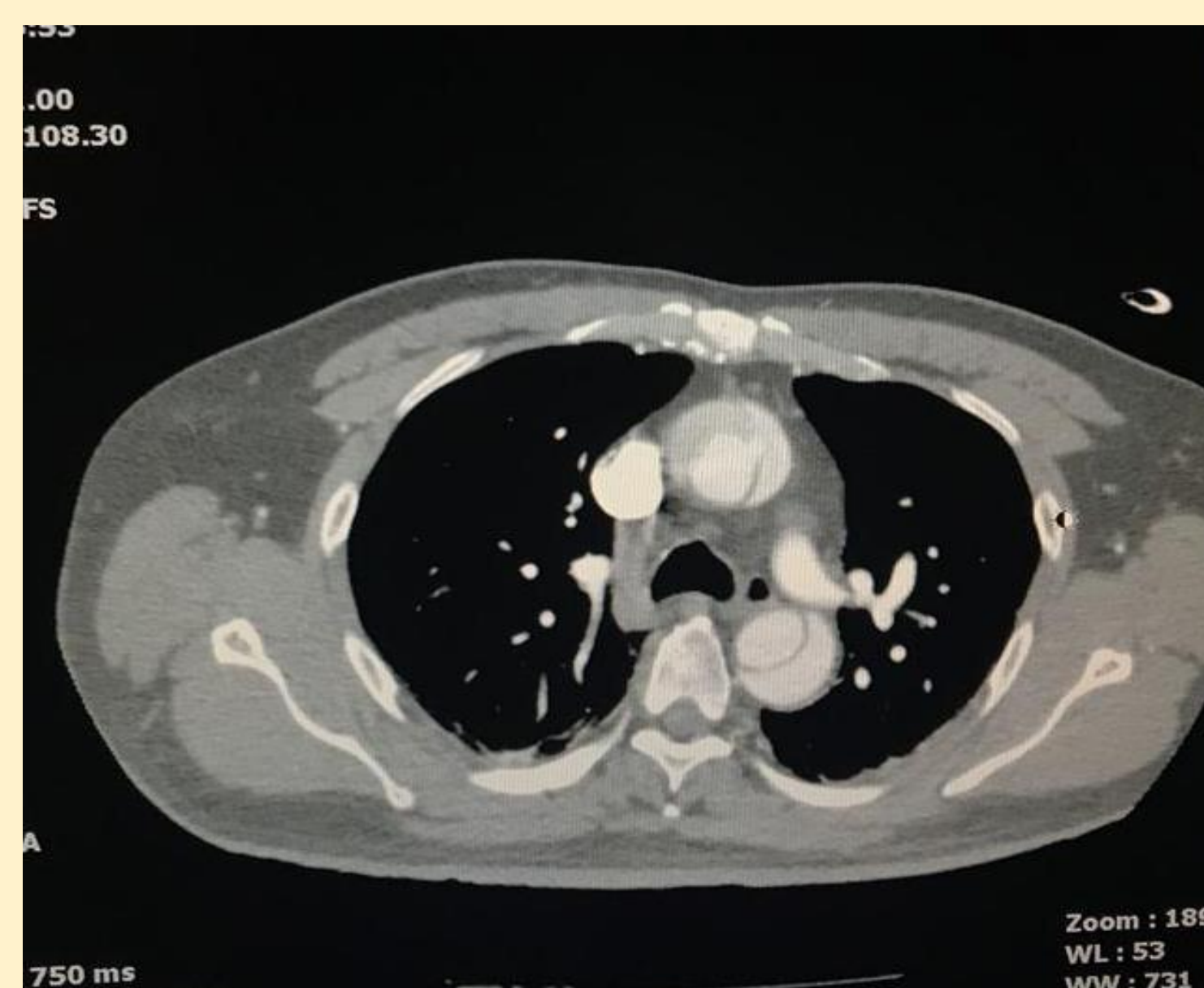


Figure 3.0 and 4.0 : Ct-Thorax showing intimal flap of aortic dissection

DISCUSSION

A widened mediastinum is seen in 60-90% of aortic dissection cases, particularly with a predilection for Stanford A. This case illustrates the sensitivity of FOCUS as a point-of-care diagnostic modality overruling traditional chest x-ray findings. A bedside FOCUS, revealed a dilated aortic root at 4.2cm when chest x ray showed no obvious mediastinal widening and a CT Angiography was requested on that grounds, unveiling Stanford A Aortic Dissection. Patient was referred to the surgical team and transferred to a cardiothoracic facility for urgent surgery.

CONCLUSION

Recognition of not relying solely on chest x-ray as a single imaging modality to strengthen diagnosis, but rather to complement it with the readily available and non-invasive bedside ultrasound is critical in deciding to proceed with the gold standard CT Angiography.

REFERENCES

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2. SKhalifa Al-Wahaibi, N. (2019). *Acute Cardiovascular Emergency: Missed Killer in the Emergency Room*. PubMed Central (PMC).