# **Defining Moments**

Why I Never Forget Point of Care Ultrasound in Hospital Medicine

A Case Study by

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#### Introduction

As a Hospitalist, I began using Point of Care Ultrasound (POCUS) to help guide procedures, such as central lines and paracentesis. Gradually, I started using POCUS as a diagnostic tool to supplement my bedside physical exam. My progress was cautious, as I continued to experiment with new methodologies and ways to incorporate POCUS.

But I will never forget the moment that my first diagnosis using POCUS radically changed my management of a patient. This defining moment changed my clinical practice irrevocably. Since then, I've come to know that cardiac POCUS alone has been shown to change management in up to 37% of patients, which is reason enough to tell this story.

# **Case History**

I was rounding with a medical student, teaching physical exam findings. We were examining one of my partners' patients, an elderly woman with chronic heart failure (CHF). We auscultated her heart and lung, hearing rales and noting jugular vein distention (JVD). She was receiving diuretics, the appropriate therapy for CHF. We then placed the ultrasound probe on her chest.

# **Imaging Exam**

We placed the probe over the apex of the heart, and both immediately recognized that there was a large pocket of fluid around it, impairing the heart's ability to fill with blood returning from the IVC. This is the typical appearance of a pericardial effusion.

I immediately paged my partner and told him about our findings. As a direct result of this ultrasound scan and phone call, diuresis was stopped, IV fluids were administered and Cardiology was called to do an urgent pericardiocentesis.

In that moment, I recognized the value of consistently enhancing my physical exam with POCUS, and wanted to ensure the quality of my interpretation to positively impact my patient management. Immediately thereafter, I made the decision to join the <u>Ultrasound</u> <u>Leadership Academy</u> to receive formal training in POCUS. Since then, I have become a staunch advocate of POCUS as an extension of the physical exam, and am now a POCUS instructor, to help others gain this skill. One scan, on one patient, changed my entire approach to medicine.



Fig 1. Typical appearance of a pericardial effusion. Note the anechoic collection around the apex of the heart.

### What Does This Teach Us?

Every patient presenting with signs and symptoms of CHF should be seen by a clinician who is capable of doing a focused, bedside cardiac ultrasound to assess left ventricular (LV) function and rule out cardiac tamponade. This has been shown to change the course of management in over 1 in 3 of these patients.

We need to pause to take stock of moments like this, where one decision and one scan can change the course of a patient's lifeand our own.

#### References

Point-of-Care Ultrasound for Hospitalists: A Position Statement of the Society of Hospital Medicine © 2018 Society of Hospital Medicine DOI 10.12788/jhm.3079

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