Worsening Pericardial Effusion Despite Intensive Hemodialysis

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Published: 05 May 2023

End-stage renal disease affects over 500,000 people living in the United States. Complications of end-stage renal disease can include pericarditis and pericardial effusion. Treatment for renal disease is dialysis, and the most common type of dialysis is hemodialysis. Some patients are able to successfully complete peritoneal dialysis at home, which is more convenient. However, patient compliance plays an important role in making sure peritoneal dialysis remains a successful treatment. Hemodialysis is associated with an increased risk of bleeding compared to peritoneal dialysis. In our case presentation, we discuss a 31 year old male developing a hemorrhagic pericardial effusion after undergoing an emergent transition from peritoneal dialysis to hemodialysis with heparin administration in the setting of worsening uremia during two separate hospital admissions less than one month apart. The patient had a pericardial effusion of 2.4 cm without tamponade physiology during his first admission, and upon the second admission the effusion grew to 5.75 cm with tamponade physiology. He had the fluid drained and showed significant clinical improvement. We will further discuss how urgent transition from peritoneal dialysis to hemodialysis with heparin use can worsen a hemorrhagic pericardial effusion.

https://dx.doi.org/10.46570/utjms.vol11-2023-715