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WHEN LESS IS MORE: PURULENT PERICARDITIS FOLLOWING COVID 19 PNEUMONIA

Poster Contributions

For exact presentation time, refer to the online ACC.22 Program Planner at <https://www.abstractsonline.com/pp8/#!/10461>

Session Title: Complex Clinical Cases: FIT Flatboard Poster Selections -- Covid

Abstract Category: FIT: Coronavirus Disease (COVID-19)

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Background: Purulent pericarditis is rare accounting for <1 % of pericarditis cases. Before the widespread use of antibiotics, purulent pericarditis was predominantly a complication of bacterial pneumonia. Currently it is mostly seen in the immunocompromised host or post-surgical interventions. It is associated with high rates of mortality between 20-30% even with appropriate treatment.

Case: A 71-year-old hypertensive diabetic female presented with confusion within 2 months after a complicated COVID 19 pneumonia. She was notably tachycardic but normotensive. ECG demonstrated diffuse ST elevations with PR depression, echocardiogram revealed a large circumferential pericardial effusion with tamponade that warranted urgent pericardiocentesis, 450mL of purulent fluid was removed which later grew *Escherichia Coli*. After initial stabilization, she developed septic shock with early features of constrictive pericardial physiology. CT surgical consultation was requested for definitive washout and subxiphoid window of the pericardial space.

Decision-making: Subxiphoid and pericardiotomy intervention is the optimal treatment modality in patients with purulent pericarditis for source control. However, in our case, after multidisciplinary discussions, surgical intervention was deferred due to a high perioperative risk. Aggressive antibiotics and supportive critical care were employed. Our patient interestingly hemodynamically stabilized within days and improved with medical management. Repeat ECHO demonstrated hemodynamic improvement, and she has been seen in outpatient follow up fully recovered 6 months after her hospitalization.

Conclusion: Purulent pericarditis can be a fatal disease associated with high mortality rate. Complications such as pericardial tamponade, constrictive pericarditis often require aggressive management with surgical intervention. Although it has become a disease we rarely encounter in the modern antibiotic era, we should consider possible associations in a new covid-19 world. Our case highlights the rapid rate of complications and clinical decline, but also notes full clinical recovery with conservative management.