

Case study

Septicaemia induced acute heart failure with elevated Troponin I : a case report in Fourniers gangrene

Abstract: A 42 yrs Diabetic, H/O healthy cardiac status male patient presented as scrotal abscess admitted in surgery ward and debridement done as a case of Fourniers gangrene under regional anaesthesia. Patient had symptoms of cough, dyspnoea, frothy secretions, high color urine and episodes of desaturation preoperatively. 4 hours following debridement patient develops marked dyspnoea, chest heaviness with increased frothy secretions and shifted to intensive care unit. In critical care comprehensive management patient symptomatic improvement done and shifted to ward.

Introduction: Infection induced acute heart failure is sometimes remained underdiagnosed cause of death in hospital admission. Any sort of initial systemic infection caused greatly increased oxygen consumption, decrease microvascular circulation and decrease oxygen delivery to heart, causing release of Troponin I in systemic circulation.

Case report : The patient 42 yrs Male, Diabetic had a history of 3 days of pain in lower scrotum and perineal area. On admission patient diagnosed as scrotal abscess and underwent surgery with regional anaesthesia. On exploration it was gangrenous and labeled as Fourniers. Preoperatively patient was febrile, mild dyspnoeic, frothy secretions and high colored urine. Perioperatively patient was desaturated and managed with high flow of oxygen. Following 4 hrs of Wide local excision and debridement of devitalised tissues, patient status was deteriorated, worsening dyspnoea, frothy secretions and restlessness. Immediately shifted for intensive care and parameters reveals ABG-mild respiratory alkalosis, markedly raised TLC (20,140/cumm), CRP (157 mg/l), HBA1C(12.7). D dimer-6928.21 ng/ml. pro BNP -2905 pg/ml. his urinary ketones also was positive. Troponin I 27.2ng/ml and dyselectrolytaemia. Screening echocardiogram was non significant. By comprehensive critical care with collaboration of surgery team, patient status improved gradually and shifted to ward.

Discussion : In Hospital admitted patient morbidity and mortality review, sepsis induced acute heart failure is a great contribution though we sometimes overlook. Pulmonary edema and fluid overload, pulmonary embolism is a major part in perioperative period eventful recovery. Previous healthy individual sudden respiratory complaints with sepsis, acute heart failure should kept in mind even in remote thinking.

Conclusion: Infection induced acute heart failure should be kept in mind in treating sepsis. Fluid overload, Pulmonary embolism is also not always for respiratory complaints in perioperative sepsis. Definitive pathophysiology of acute heart failure in infection will provide basis for further definitive therapeutic strategies. Elevated troponin I is always not the cause of acute MI in sepsis.

References

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