

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. Preoperatively 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.

Comment [DM1]: Is Troponin I is significantly elevated in this case? reference range shall be mentioned

Comment [DM2]: Sentence shall be reframed

Comment [DM3]: Sentence shall be reframed

Comment [DM4]: Sentence shall be reframed

Comment [DM5]: Capital I shall be used

Comment [DM6]: Reference range shall be written for CRP, D-dimer, BNP and Troponin I
What is the reason for post-operative deterioration is not clear (diagnosis shall be mentioned)

Comment [DM7]: Small letter m and d shall be used

Comment [DM8]: Sentence shall be reframed

Comment [DM9]: Sentence shall be reframed

Comment [DM10]: Write full word instead of short form

Comment [DM11]: Small w shall be used

Comment [DM12]: Spelling shall be checked

Comment [DM13]: space shall not be there before comma.

Comment [DM14]: Grammar shall be checked

Comment [DM15]: Spelling shall be checked

Comment [DM16]: Space shall not be there before comma

Comment [DM17]: Not shall be used instead of non

Comment [DM18]: Shall be little more elaborate
significance of estimating D dimer and pro BNP shall be commented
How? acute heart failure diagnosis was made shall be discussed
similar case studies if any shall be discussed

Comment [DM19]: Sentence shall be reframed

Conclusion: Infection induced acute heart failure should kept **In** mind in treating sepsis. fluid overload ,Pulmonary embolism is also not always for respiratory complains in perioperative sepsis. **Definitive** pathophysiology of acute heart failure in infection will provide basis for furtherdefinitive therapeuticstrategies. **Elevated trop I** is always not the cause of acute MI in sepsis.

Comment [DM20]: Small I shall be used

Comment [DM21]: Sentence shall be reframed

Comment [DM22]: Troponin I reference range shall be included to comment on the raise of Troponin I

References

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