

# Group B streptococcal tricuspid valve endocarditis after abortion, presenting with septic emboli to the lungs.

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## Citation

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## Abstract

Group B streptococcal endocarditis following elective abortion is a rare complication seen in patients colonized with Group B Streptococci. Screening and prophylaxis for Group B Streptococci should be considered for all patients undergoing elective abortion.

## INTRODUCTION

We report a case of a 21 year old female presenting with group B streptococci (GBS) tricuspid valve endocarditis and multiple septic emboli after an elective abortion.

## CASE

A 21 year old woman reported to the emergency room (ER) with complaints of chest pain, shortness of breath and fever. She had undergone an elective abortion eight days earlier and was discharged in a healthy condition. Four days after discharge she felt tired, experienced a loss of appetite and muscle pain. She also had a temperature of 102 F. She started getting worse over couple of days and also experienced a sharp pleural pain in the lower right chest region. She also became short of breath progressively.

The next day she decided to go to the ER. In the ER she had a temperature of 104.2; her pulse was 120, blood pressure 118/65. Auscultation of the lungs revealed scattered rales bilaterally. Cardiovascular examination revealed a prominent v wave in the neck veins and d grade III-IV/VI murmur in the tricuspid area. Abdominal and pelvic examination demonstrated no discharge, or uterine /adnexal tenderness. Laboratory tests revealed hemoglobin of 12. G/L, white cell count  $20.2 \times 10^9 /L$  with 90% neutrophils, and a platelet count of  $300 \times 10^9 /L$ . Blood and urine cultures were taken and empiric antibiotic therapy commenced with vancomycin and levofloxacin. Chest X-ray demonstrated right lower lobe infiltration. Computed tomography angiography demonstrated multiple nodules surrounded with haziness scattered throughout the lungs bilaterally, more prominent in the lower lobes. These opacities were thought to be scattered

infiltrates, pulmonary emboli or septic emboli. The patient was prophylactically started on heparin for possible pulmonary embolism. The blood culture grew group B streptococci. A transeosophageal echocardiography was ordered and it revealed large vegetation on the tricuspid valve with tricuspid regurgitation. No other valve abnormality was demonstrated.

The clinical case scenario of chest pain, fever in a post abortion period with tricuspid valve vegetation and multiple scattered opacities in both lungs was consistent with tricuspid valve endocarditis with septic emboli. The patient improved on the antibiotics and was discharged home on ceftriaxone for six weeks.

## DISCUSSION

Group B streptococcal (GBS) endocarditis is a well established complication following gynecological procedures<sup>(1)</sup>. There have been multiple case reports of endocarditis due to GBS in female patients<sup>(2,3,4)</sup>. Many of these cases followed elective abortions. However, till date there have been only 7seven cases of GBS tricuspid valve endocarditis following obstetric and gynecological procedure<sup>(1,2,3,4,5)</sup>. Among these seven patients only four followed an elective abortion<sup>(1,2,3,4,5)</sup>. Only few had associated septic emboli to the lungs<sup>(5)</sup>.

The mortality rate of GBS endocarditis can be as high as that of staphylococcal endocarditis<sup>12</sup>. Thus, like staphylococcal endocarditis, GBS endocarditis can be exceedingly aggressive with a high mortality rate (almost 40%)<sup>(3-4)</sup>. The mortality rate in patients with prosthetic valves is almost

100% (1-5). Left sided valve involvement is more often seen than right sided. Due to its aggressive nature and the potential to cause valve destruction, initiation of antibiotics early in the disease course is imperative against GBS.

## **CONCLUSION**

Screening and prophylactic treatment against GBS should be considered in all in patients undergoing elective abortion.

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