INTRODUCTION

Pregnancy has been identified as a risk factor for paroxysmal supraventricular tachycardia (PSVT) as reported in medical literatures. Treatment of PSVT during pregnancy is crucial to protect both mother and fetus. Guidelines have recommended IV Adenosine as the first line treatment. However, challenges arise when there is a need to opt for the safest treatment based on concurrent emergencies of a presenting patient.

CASE REPORT

A 30-year old primigravida with underlying bronchial asthma and 18 weeks pregnant was presented to the health clinic with chief complaints of dyspnea and palpitation for one day. During initial examination, she was having rhonchi and electrocardiogram showed stable paroxysmal supraventricular tachycardia (PSVT). Patient was referred to the Emergency Department (ED) for further management.

On arrival, cardiac monitor still shows PSVT. She did not respond to carotid massage and Modified Valsalva maneuver. Her heart rate was between 160-180 bpm with blood pressure of 103/73 mmHg upon arrival to the ED. She was given IV Verapamil 2.5mg with additional 4 doses over the next 3 hours giving a total dose of 12.5mg, but was unsuccessful. Subsequently, after consultation with Medical team, IV Adenosine 6mg was administered with no success and without worsening of bronchospasm.

The patient was then given synchronized electrocardioversion with 50J but failed on the first attempt. Finally, PSVT resolved after another electrocardioversion with 100J was given.

DISCUSSION AND CONCLUSION

This case illustrates the use of IV Verapamil instead of IV Adenosine as the initial treatment as IV Adenosine is best avoided during acute exacerbation of bronchial asthma to prevent worsening of bronchospasm. Although IV Verapamil failed for our patient, it has been reported with more than 70% successful conversion rate. All treatment options must ensure effectiveness and safety to the expecting mother and fetus.