

Case report Abstract

Title

POTs and Pregnancy: Recommendations for the anaesthetic management of a labouring patient with Postural Orthostatic Tachycardia syndrome (POTs)

A.Primrose Ayrshire Maternity Unit, Crosshouse Hospital, Kilmarnock.

Introduction

Postural Orthostatic Tachycardia syndrome (POTs) is a chronic disorder of the autonomic system. The condition results in orthostatic intolerance and tachycardia in the absence of orthostatic hypotension. Symptoms when standing upright include palpitations, syncope, exercise intolerance, nausea and dizziness that are usually relieved by the supine position.

The condition most commonly affects women of child bearing age. Acute stressors such as pregnancy, sepsis, trauma or surgery often precede the condition¹

This case report describes the anaesthetic management of a pregnant patient during labour who suffers from POTs, with recommendations of anaesthetic interventions that appear to help alleviate the symptoms associated with the condition.

Case report

A 28 year old Primagravida of 29+6 weeks gestation presented to the maternity ward in established labour. Past medical history included a recent diagnosis of POTs with poor symptom control despite medical therapy consisting of Fludrocortisone 50mg and Propranolol 10mg daily.

On examination she appeared visibly distressed, complaining of palpitations and dizziness. Heart rate was 122bpm with a Blood pressure of 101/69mmHg. An epidural was advised for pain relief and the risks discussed. A 1000ml crystalloid fluid bolus was administered pre insertion and as the patient was already upright in bed, the epidural was inserted in the sitting position to minimise changes in posture. The block was established using 5ml incremental doses of 0.125% Levobupivacaine until pain relief was achieved. Heart rate one hour post insertion had settled to 85bpm with a Blood pressure of 107/73. The patient went on to have a SVD of a live male 5 hours after epidural insertion.

Discussion

The pain and stress response associated with labour can often aggravate the tachycardic response seen in POTs sufferers. Early epidural, adequate preload, prevention of sudden posture changes and the avoidance of Epinephrine-containing local anaesthetics and indirect sympathomimetic drugs such as Ephedrine to treat hypotension can help to manage the symptoms of POTs in the labouring patient.

References

1. Kanjwal Y, Kosinski D, Grubb B P. The postural orthostatic tachycardia syndrome: definitions, diagnosis, and management. Pacing Clin Electrophysiol 2003. 26:1747–1757.

Consent

Written consent obtained from patient.