

Cardiac disease in pregnancy and the MDT: The Wellington Experience

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Introduction

Cardiac disease is becoming increasingly recognised in pregnancy¹, and is the highest cause of maternal death in Australia contributing to 14.3% of maternal mortality^{1,2}. In New Zealand 8.5% of maternal deaths are the result of cardiac conditions³.

Recent guidelines published by the European Society of Cardiology recommend that pregnant women with cardiac disease are seen in a specialised centre by a multidisciplinary "pregnancy heart team"¹.

Wellington Regional Hospital is a tertiary unit that provides a multidisciplinary service for the lower North Island of New Zealand.

Objectives

To define the severity and range of cardiac disease in pregnant women in New Zealand, alongside the maternal morbidity and mortality compared with the background obstetric population.

Methods

We retrospectively audited pregnant women with cardiac comorbidity seen at a tertiary referral centre by a multidisciplinary team consisting of anaesthetists, cardiologists, midwives and obstetricians in 2016-2017.

Results

Condition	Modified WHO Score	n	%
Arrhythmia		20	27.8%
Congenital Anomaly		19	26.4%
Palpitations	Variable	10	13.9%
Rheumatic Heart Disease	Variable	6	8.3%
Family History of Cardiac Disease	Variable	4	5.6%
Cardiomyopathy	II-III	3	4.2%
Pacemaker	II	2	2.8%
Hypertension	I	2	2.8%
Ischaemic Heart Disease	Variable	1	1.4%
Non Rheumatic Valvular Disease	Variable	1	1.4%
Vasculitis	Variable	1	1.4%
Chest Pain	I	1	1.4%
Cardiac Murmur	I	1	1.4%
History of Myocarditis	I	1	1.4%

The mode of delivery was Caesarean Section for 28.8% (hospital average 32.4%), instrumental delivery for 19.2% (hospital average 10.8%) and spontaneous vaginal birth for 51.9% (hospital average 56.8%).

Six neonates (11.5%) required NICU admission (hospital average 16.5%)

Of the 52 patients delivering at Wellington hospital, no significant maternal morbidity or mortality was found.

Conclusion

Obstetric patients with cardiac disease benefit from multidisciplinary review, as a service, to ensure risk modification prior to conception and throughout pregnancy and the puerperium

References

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3. Belgrave, S. *et al.* *Eleventh Annual Report of the Perinatal and Maternal Mortality Review Committee.* (2017).