



PERFECT
UNIVERSITY OF ZIMBABWE



University of Zimbabwe
College of Health Sciences

The Contribution of Hypertensive Disorders of Pregnancy to Peripartum Cardiomyopathy in an African Cohort

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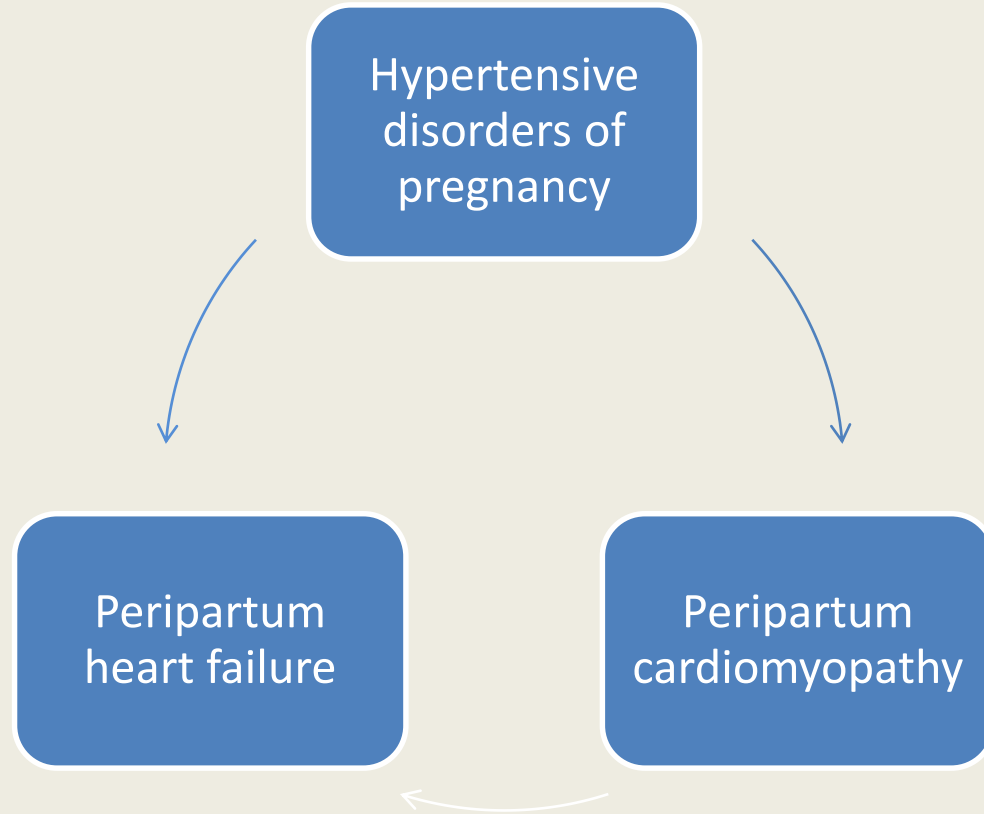
South African Heart Congress 2018

Background

*“Peripartum cardiomyopathy is an **idiopathic cardiomyopathy** presenting with heart failure secondary to left ventricular systolic dysfunction towards the end of pregnancy or in the months following delivery where no other cause of heart failure is found. It is a **diagnosis of exclusion.**”¹*

¹Sliwa K, et al. Eur J Heart Fail 2010;12(8):767-778

Introduction



Aim

To **compare the clinical characteristics and outcomes** of patients with peripartum cardiomyopathy **with/ without hypertensive disorders of pregnancy** at a tertiary centre in Zimbabwe.

Hypertensive disorders of pregnancy

- Elevated blood pressure: systolic BP \geq 140mmHg or diastolic BP \geq 90mmHg for the first time in pregnancy +/- proteinuria
 - Preeclampsia
 - Eclampsia
- Excluded all forms of chronic hypertension before pregnancy & hypertension diagnosed at <20 weeks gestation

Methods

- Prospective study with 6 months follow up

Baseline	Follow up
Demographics	Functional status
Medical & Obstetric history	Echo
Clinical examination	Mortality
Echo	

- Comparison between those with hypertensive disorders of pregnancy and those without.

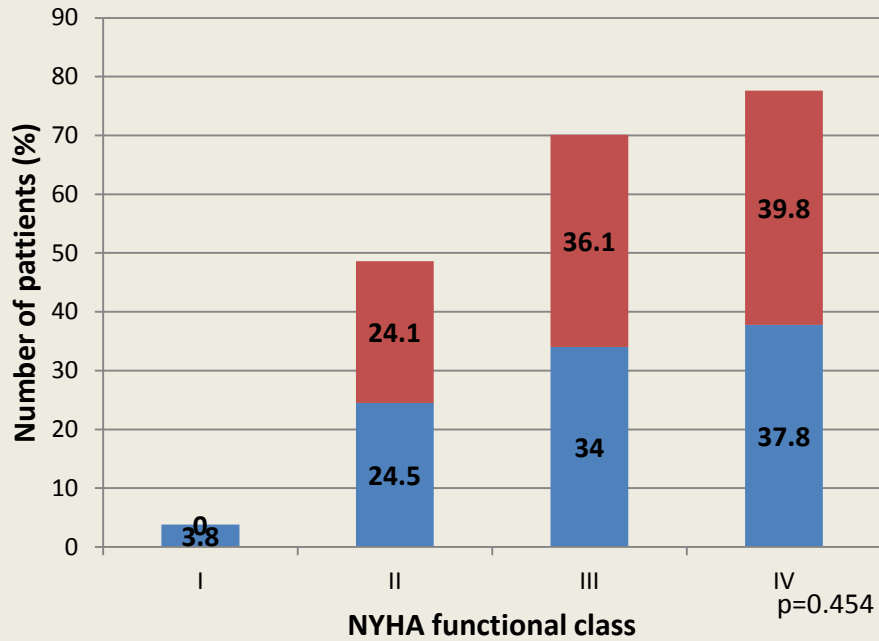
RESULTS

Baseline demographic and clinical characteristics

Variable	HD (+) (n=53)	HD (-) (n=85)	p value
Age (yrs)	29.3±5.5	29.5±6.6	0.19
Median parity	2	2	
Gestational age at delivery (n,%)			
Preterm	10(18.9)	4(4.71)	
Term	40(75.5)	79(92.9)	
Post-term	3(5.7)	2(2.4)	0.01
Mode of delivery n=137 (n,%)			
Vaginal delivery	35(67.3)	69(81.2)	
Cesarean section	17(32.7)	16(18.8)	0.065
Gestation type (n,%)			
Singleton	45(84.9)	80(94.1)	
Twins	8(15.1)	5(5.9)	0.081
Time of symptom onset n=131 (n,%)			
Pre-partum	4(7.6)	9(11.1)	
1-3 months post-partum	41(83.7)	68(80.0)	
4-5 months post-partum	4(7.6)	8(9.4)	0.565
Blood pressure (mmHg)			
sBP	120.7±20.2	117.6±16.1	0.35
dBP	78.0±17.1	74.8±12.3	0.26

NYHA functional class

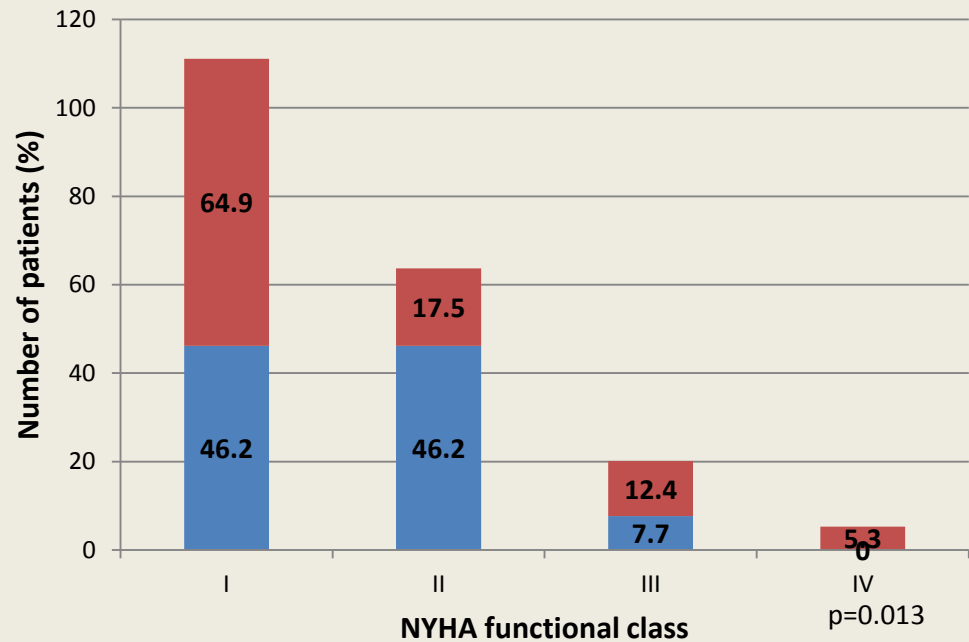
Baseline NYHA



■ HD (-)
■ HD (+)

p=0.166

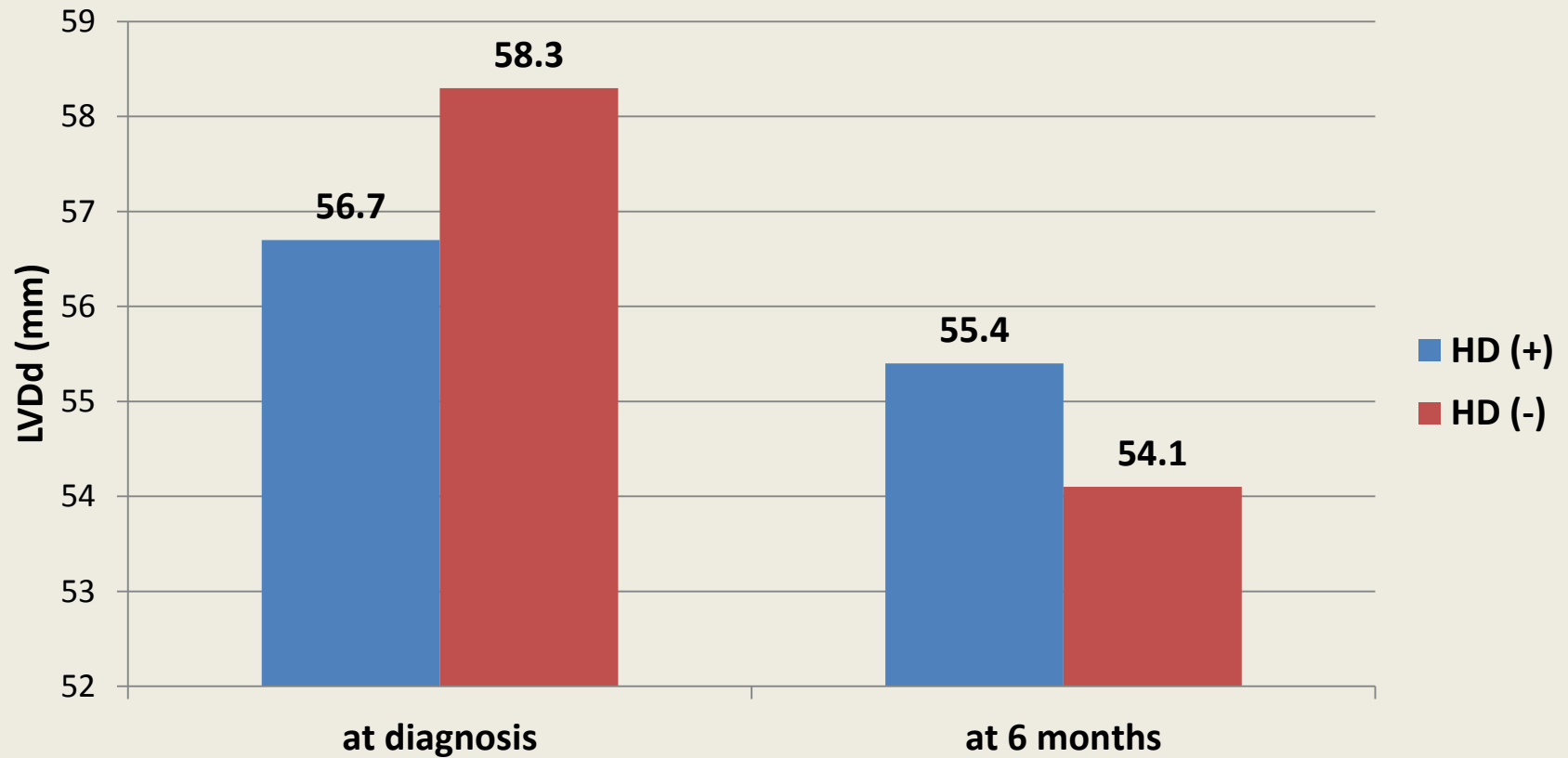
NYHA at 6 months



p=0.013

Left ventricular diastolic dimensions

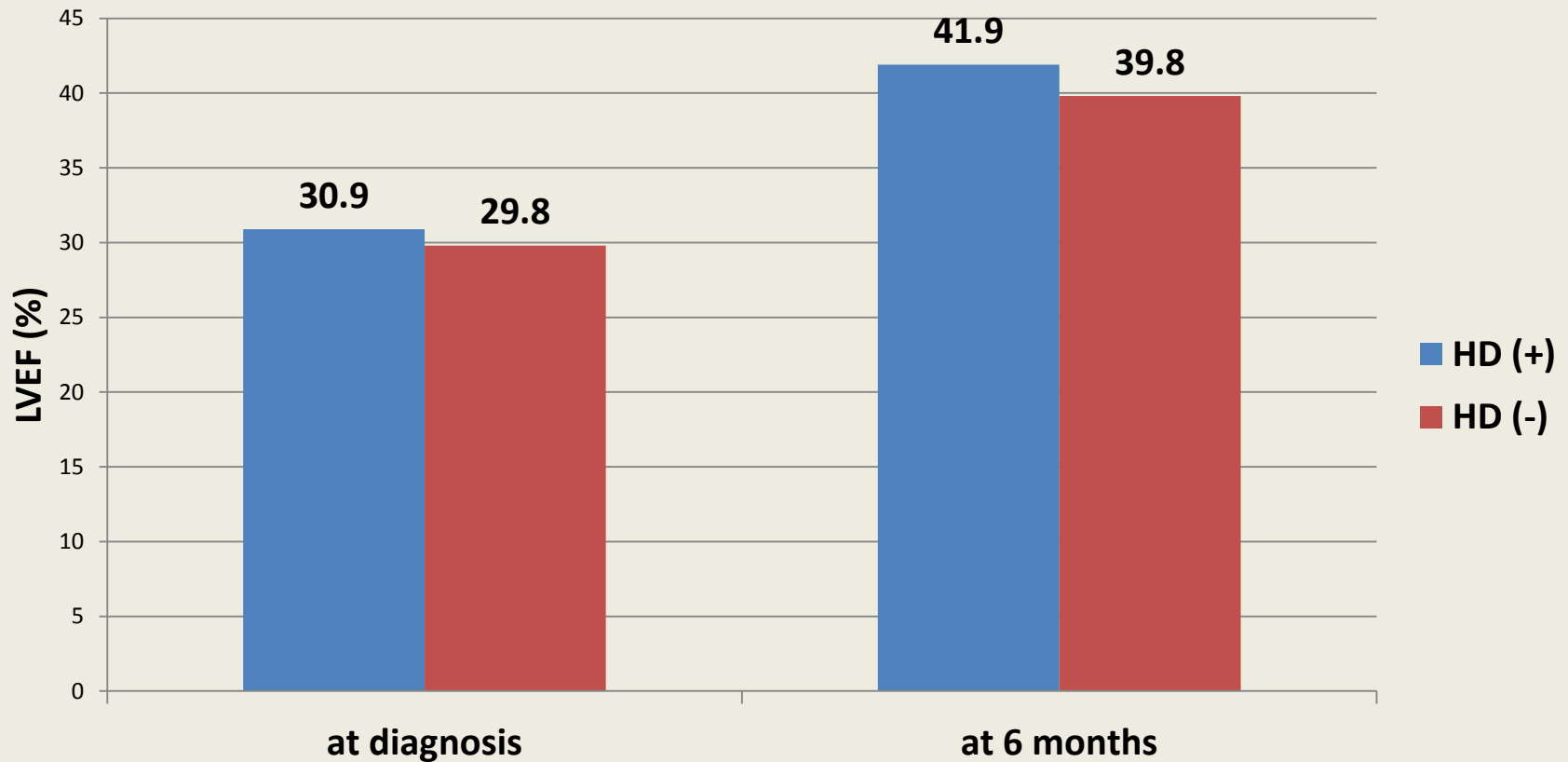
Change in LVDd



p=0.47

Left ventricular ejection fraction

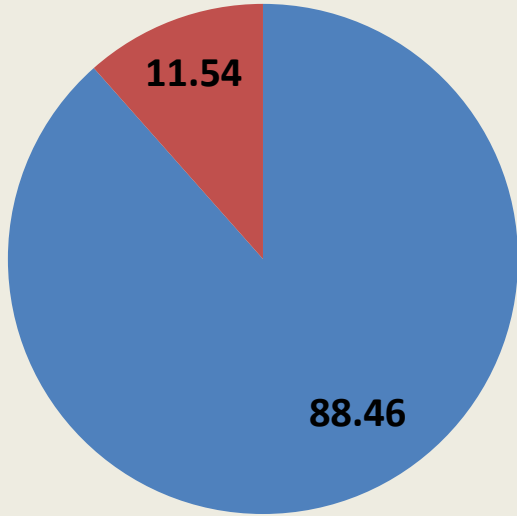
Change in LVEF



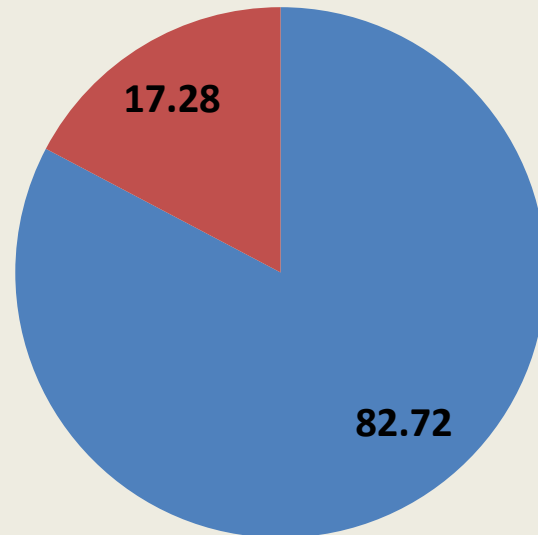
p=0.39

Mortality

HD (+)



HD (-)



■ Alive

■ Dead

p=0.39

Conclusion

- No significant differences in baseline characteristics between HD (+) vs HD (-)
- Trend towards better outcome in HD(+) vs HD(-), but not statistically significant
- HD(+) should be considered in case definition of PPCM