

Factors associated with increased blood loss in women with Congenital Heart Disease

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Increased blood loss is reported in women CHD

Why?

Uterotonics

Excess Caesarean Sections

LMWH

Lesion specific

Importance of blood loss in those CHD

Reduced adaptive capacity

Inability deal large fluid shifts

Replace too much

Or too little

Objective

Significant factors determining increased blood loss CHD

Methods

Retrospective study

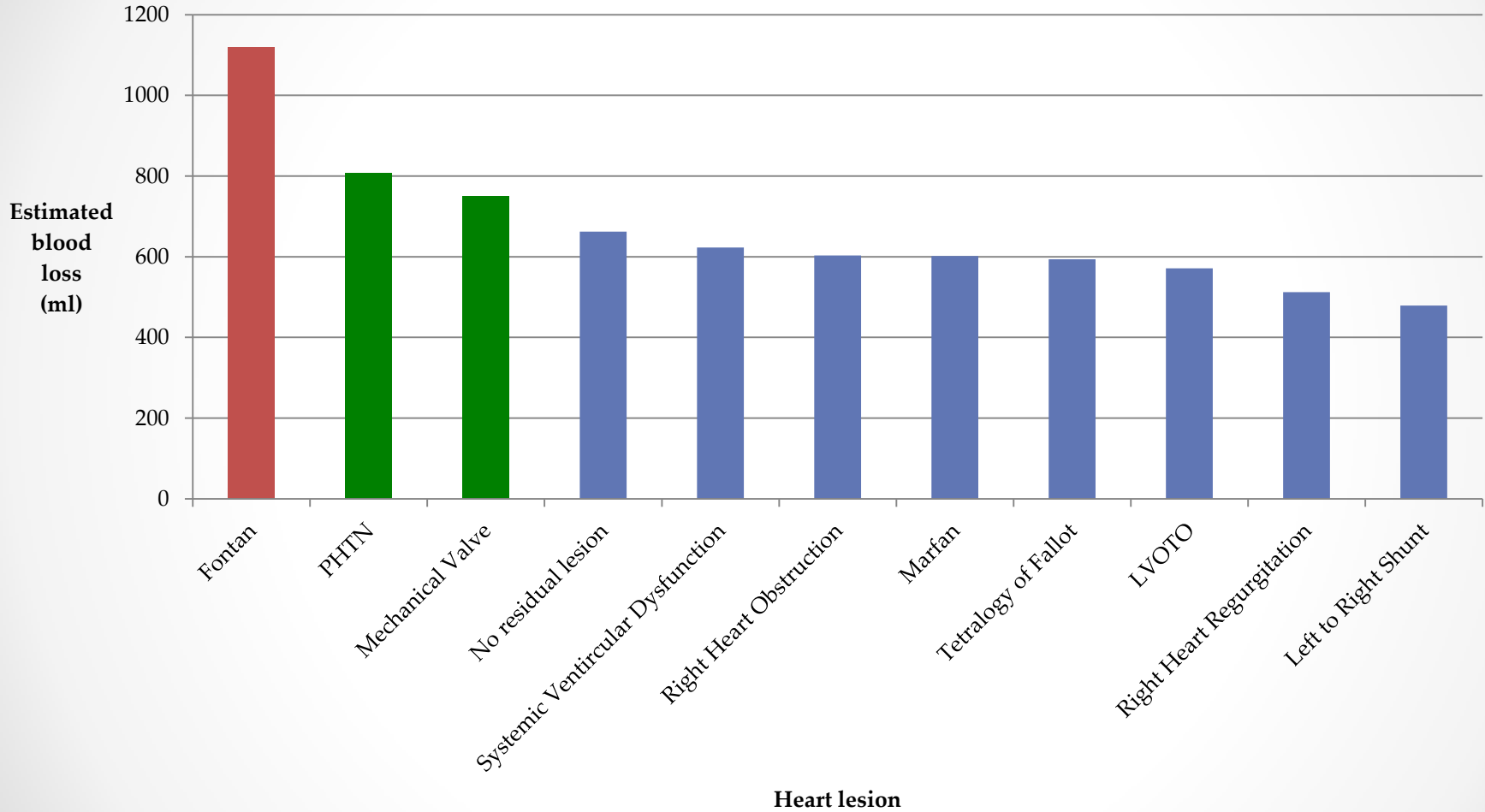
Classified women 12 groups

Univariate & multiple regression
significant factors

Corrected significant factors

	Total N=366	Mean Age + SD	BMI	White European	Asian	Black
LVOTO	75	30.4 (4.8)	23.9 (4.07)	58	4	11
Left Heart Regurg	42	33.07 (5.1)*	23.36 (3.7)	32	7	3
RVOTO	19	27.5 (6.3)	26.7 (6.7)*	15	3	1
Right Heart Regurg	17	31.12 (4.8)	22.7 (4.1)	17	0	0
TOF	50	28.08 (5.8)*	24.12 (4.8)	42	4	1
Pulmonary HTN	6	30.33 (4.6)	23.67 (5.6)	3	4	2
Mechanical Valve	11	31.27 (8.6)	26.91 (6.6)	5	2	4
Marfans	28	31.46 (4.88)	22.39 (4.5)	25	1	2
Systemic Ventricular Dysfunction	44	28.8 (5.4)	24.98 (4.3)	34	8	1
No Residual Lesion	33	31.27 (6.6)	23.18 (4.4)	27	2	4
Left to Right Shunt	30	30.40 (5.8)	24.67 (5.3)	28	2	0
Fontan	8	31.75 (5.25)	23.63 (2.5)	6	2	0

Unadjusted estimated blood loss by lesion



Unadjusted Mean Blood Loss 607mls

Significant Factors

Obstetric Factors:	SVD	439mls
	Forceps Delivery	722mls
	Emergency C/S	715mls
	General Anaesthesia	854mls
Medications:	LMWH Prophylaxis	778mls
	LMWH Therapeutic	993mls
Cardiac Lesions:	Fontan	1120mls

CARPREG & NYHA Scores

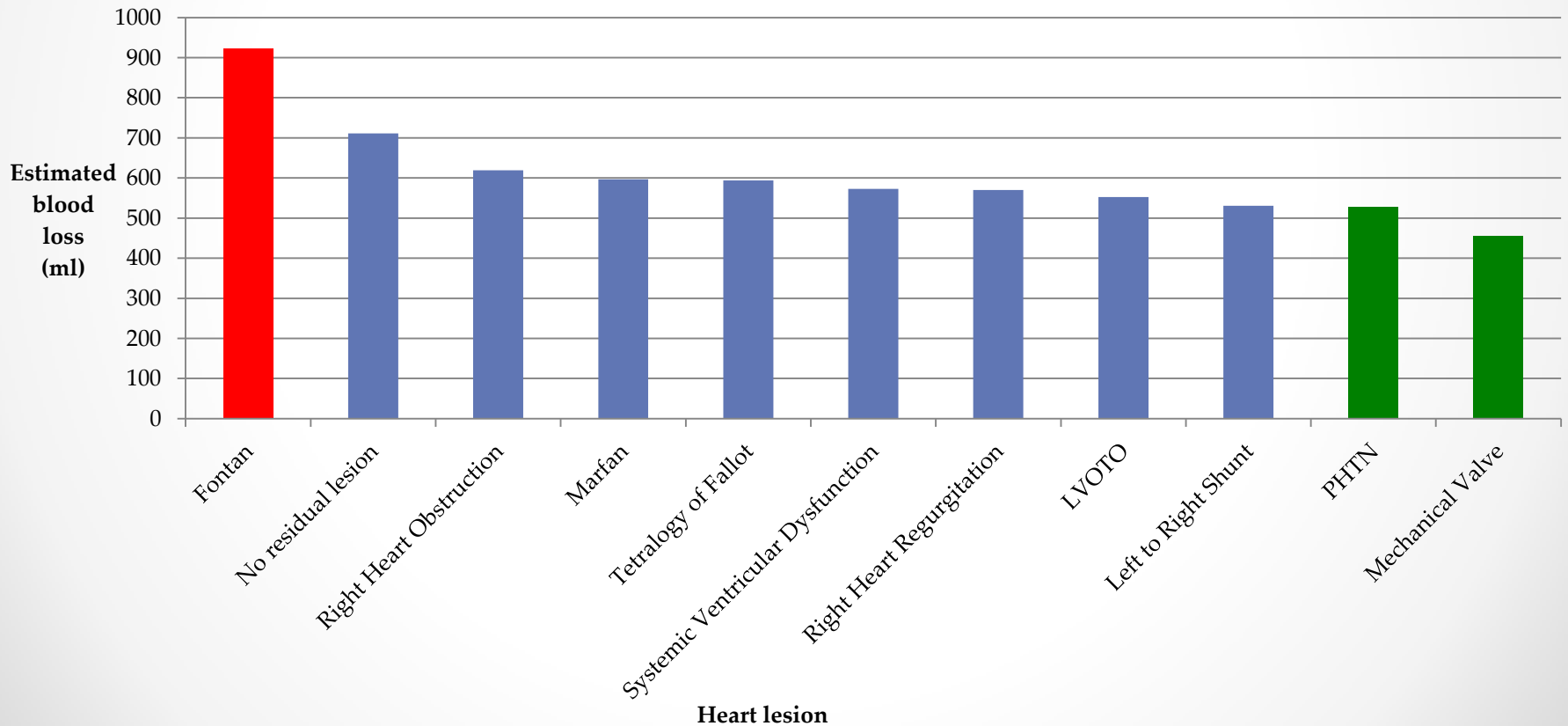
Mean Blood Loss

CARPREG 0=	573mls
CARPREG 1=	666mls
CARPREG 2=	1008mls

NYHA not significant

Correct for significant factors:

**Estimated blood loss by heart lesion
adjusted for significant factors**



Conclusions

Blood loss in CHD mode and diagnosis

Carpreg Score correlates blood loss

Fontan circulation increases EBL

