Is Plasma Corin Level an Independent Predictor of Left Ventricular Systolic Dysfunction?

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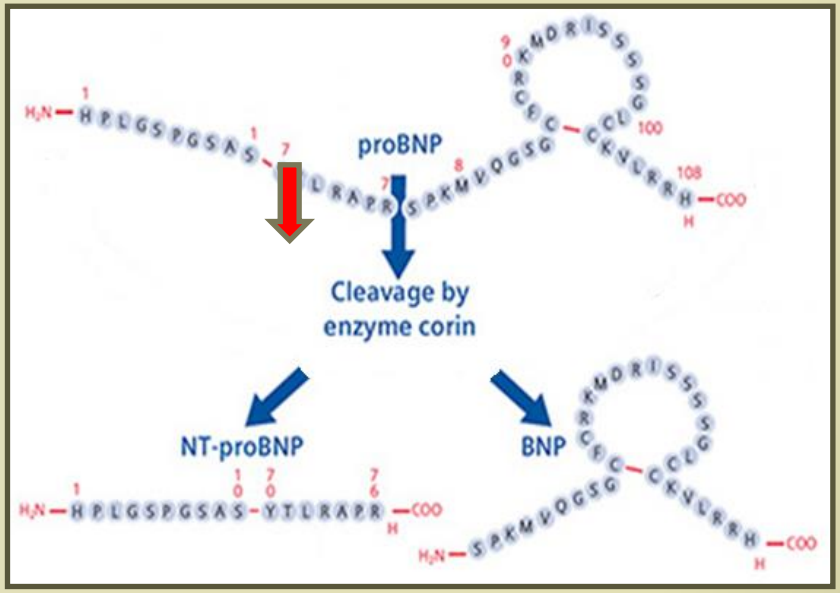
Background

Left ventricular systolic dysfunction (LVSD) - coronary and non coronary origin

Natriuretic peptides (NPs)

- Confer myocardial and vascular protective effects.
- Reduce the injury inflicted Important component of the neurohormonal activation.

Fig. 1 Natriuretic Peptid Processing by Corin Enzyme



Aims

To examine if plasma Corin level is an independent predictor of LVSD

Methods

Cross-Sectional Study Design

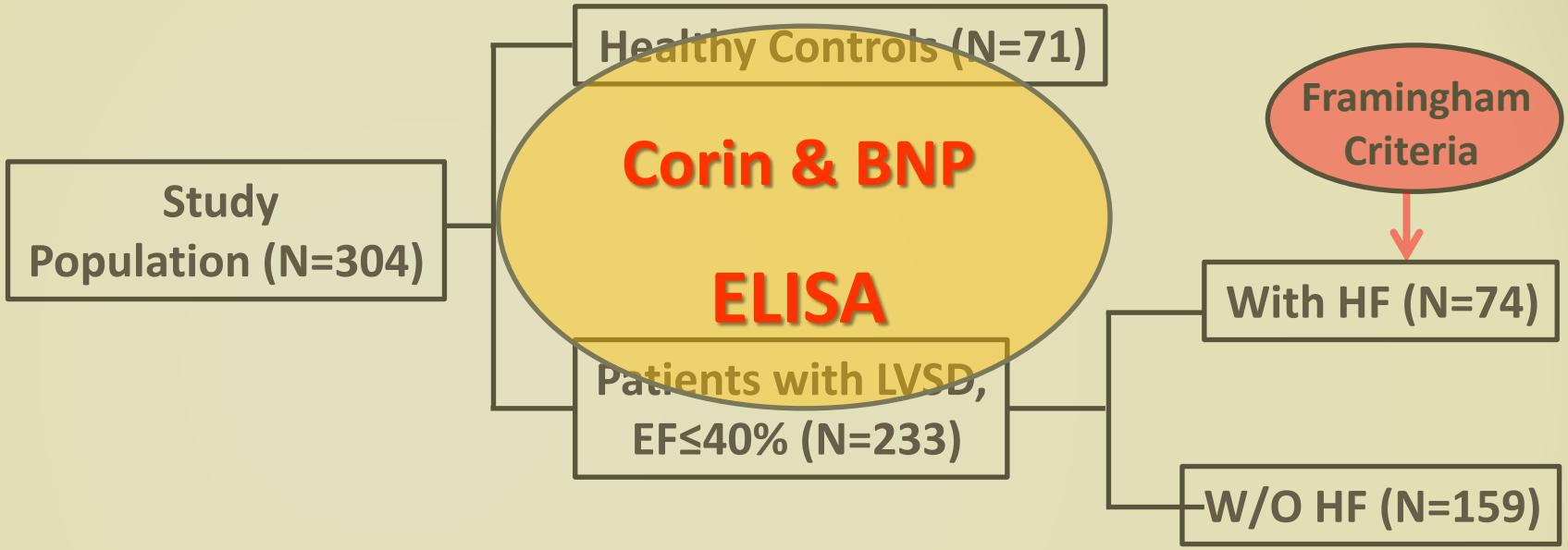


Table 1. Study Population Characteristics (N=304)

	LVSD Patients (N=233)	Healthy Controls (N=71)
Age, years	69±12.70	52±13.74
Gender, Males	141 (61%)	32 (45%)
HF, %	32%	

Results

Table 2. Significant Predictors of LVSD (N=304)

		OR	95 % CI
Age, year	Older	1.08	1.04, 1.12
Gender	Female	13.60	5.59, 51.58
Corin (pg/mL)	⇩	0.040	0.002, 0.57
BNP (pg/mL)	⇧	1.01	1.01, 1.02

Conclusions

- LVSD patients are characterized by low Corin level, indicating reduced myocardial protection during both ischemic and non ischemic myocardial injury.
- Conducting cohort study is suggested to clarify temporal relationship in order to determine causality.