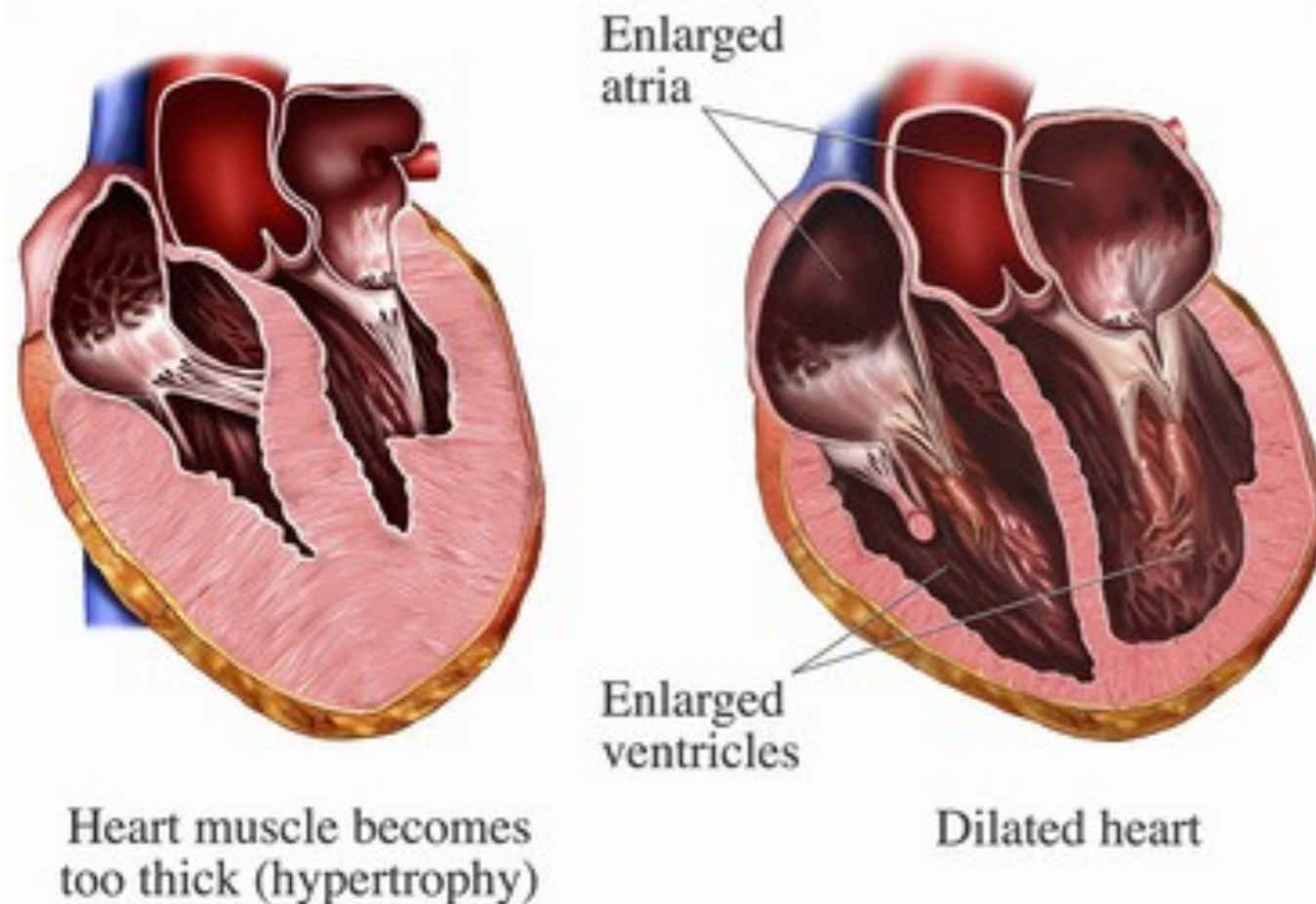


HYPERTROPHY & ENLARGEMENT



Ask Mish

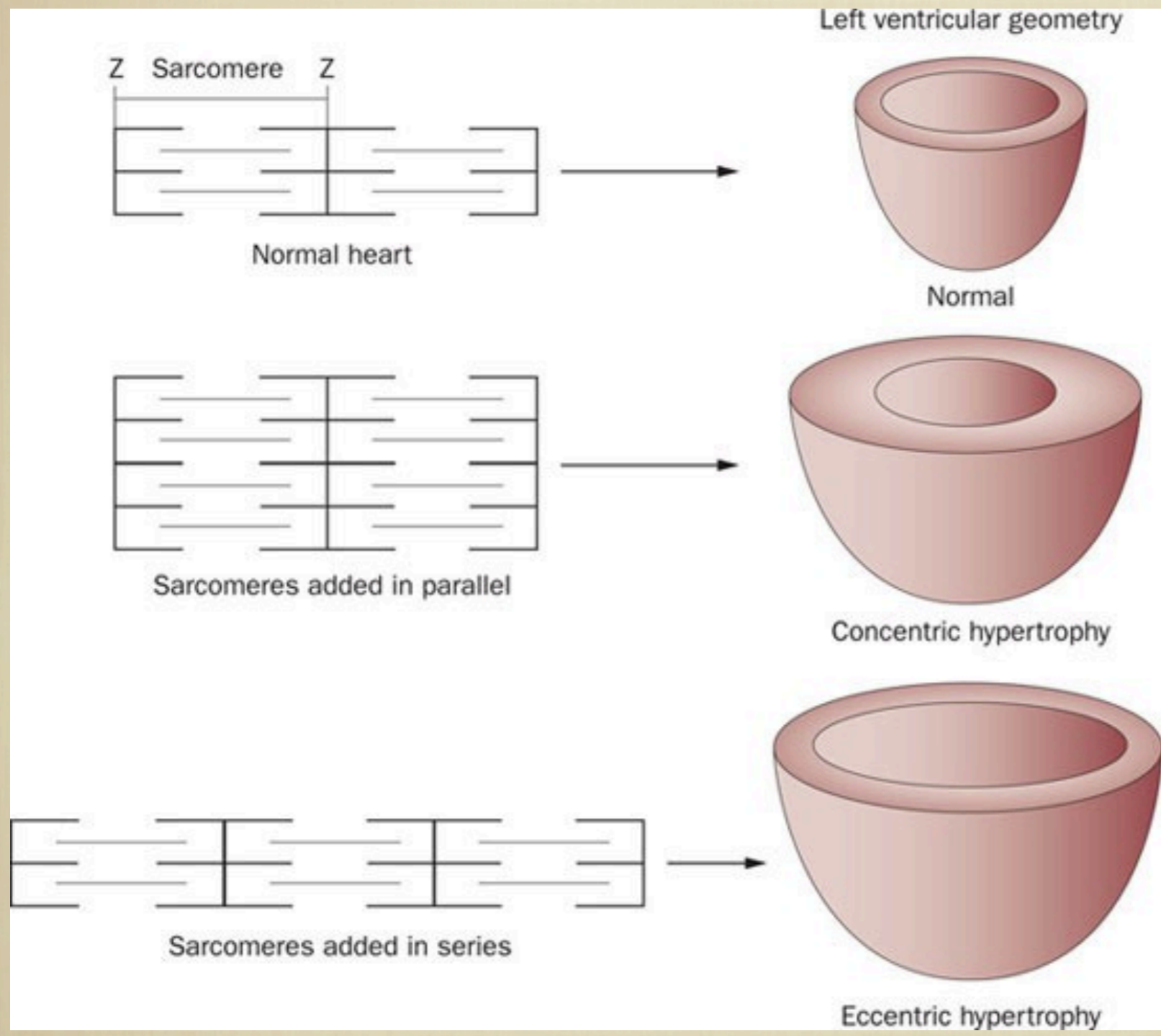


- **HYPERTROPHY** means **increase** in chamber **wall thickness**.
- **ENLARGEMENT** refers to **increase** in chamber **size**.
- On **EKG**, **H&E** show **low sensitivity** and a **higher specificity** for **both atria and ventricles**
- We use always the term **ENLARGED** or **ABNORMAL** for **ATRIA** while for **VENTRICLES** we use **HYPERTROPHY** or **ENLARGED** depending on the findings on echocardiography.

HYPERTROPHY & ENLARGEMENT



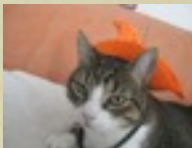
Ask Mish



	Hypertrophy	Enlargement
↑ muscle mass	concentric	eccentric
due to overload*	pressure*	volume*
myocyte	thickening	lengthening
molecular level	gene expression	gene expression

*in case of the overload pressure or volume pathophysiology is much more complicated

HYPERTROPHY & ENLARGEMENT



Ask Mish

	ENLARGEMENT	HYPERTROPHY
DEFINITION	↑ chamber size	↑ chamber wall thickness
DUE TO:	volume overload	pressure overload
EKG distinguishes btw E&H	NO	NO
ECHO, MRI distinguishes btw E&H	YES	YES
↑ muscle mass	atria enlargement or enlarged ventricles	ventricles hypertrophy