

Società Italiana
dell'Iperensione Arteriosa
Legg Italiana contro
l'Iperensione Arteriosa

SIIA



University of Turin
Department of Medical Sciences
Division of Internal Medicine
Hypertension Unit



DANNO D'ORGANO CARDIACO: *CHALLENGING DIAGNOSIS*

Marco Cesareo – **SIIA Inter-regionale 09.10.2021**



Guido, 65 anni

Anamnesi Patologica Muta

Arruolato come soggetto sano per studio clinico



Guido, 65 anni

Esame clinico nella norma

PAO 135/87 mmHg

FC 74 bpm

ECG

RS, FC 74 bpm, AQRS intermedio, T invertite in V5-V6, Sokolow 2.6



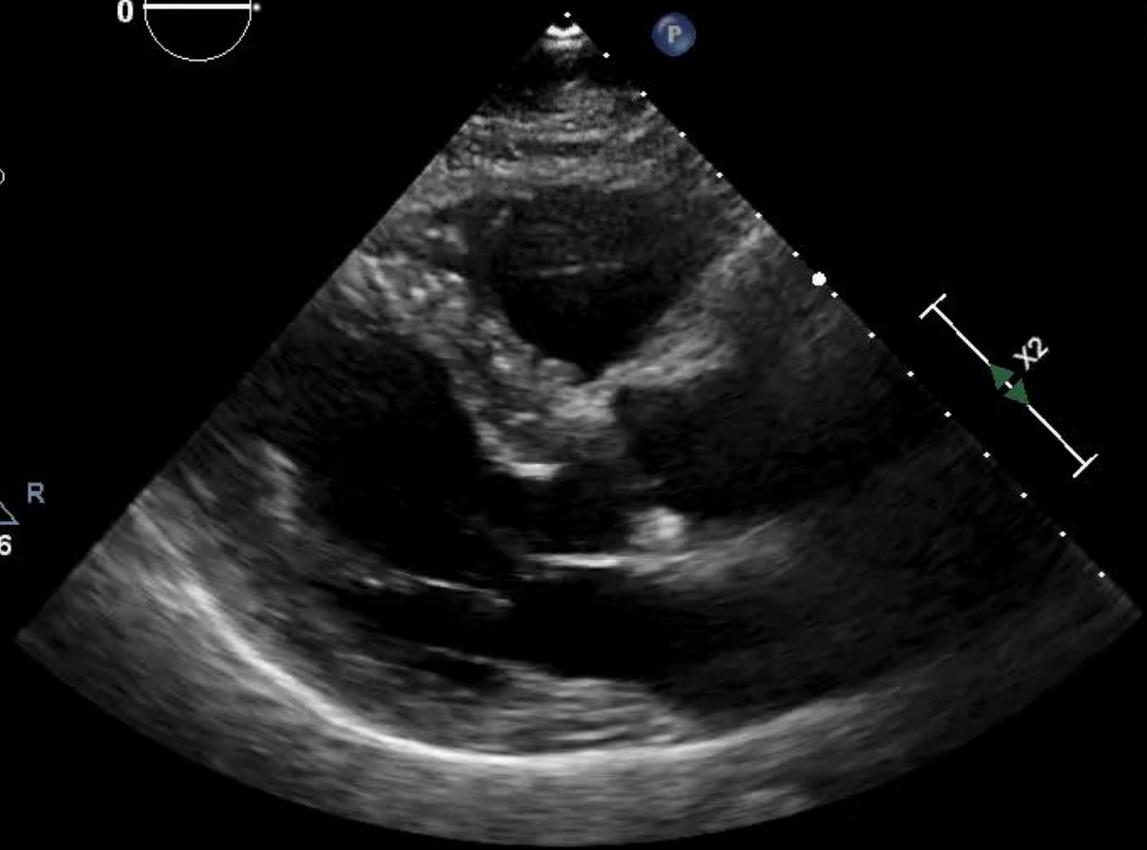
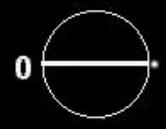
Guido, 65 anni



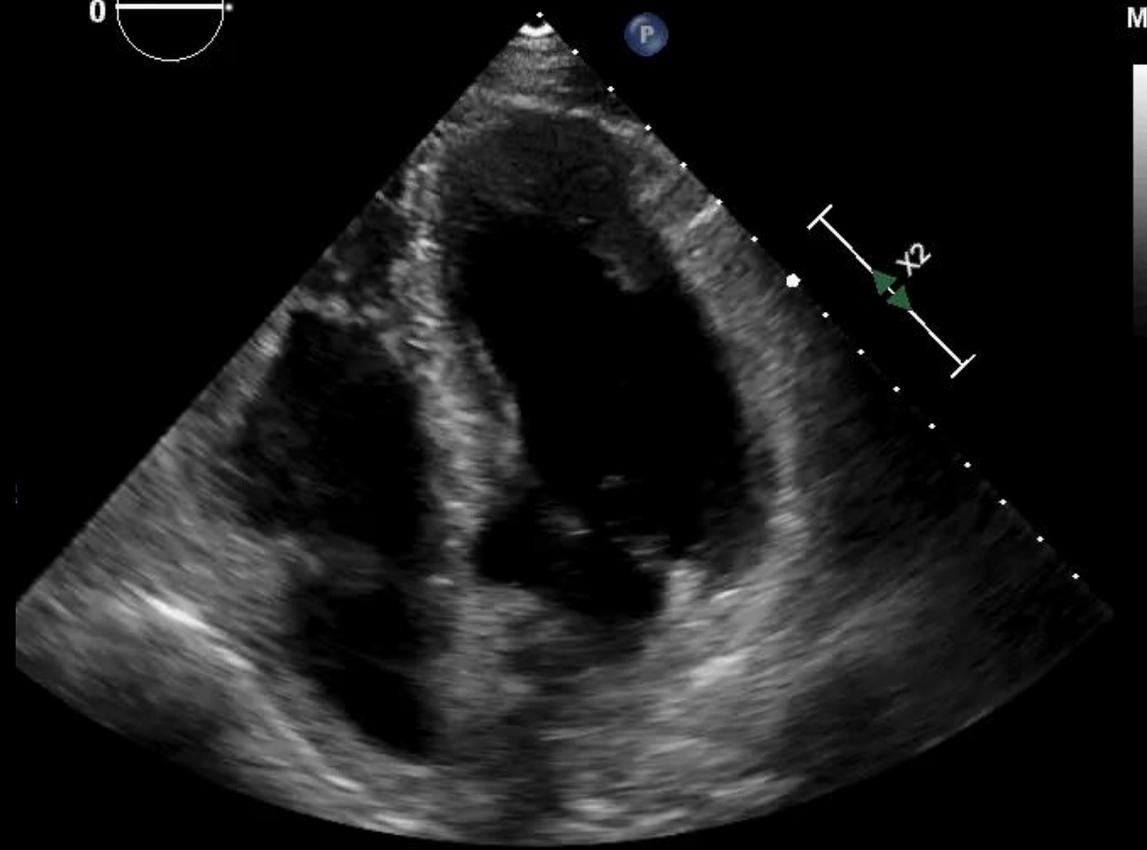
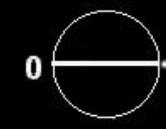
Eco adulti
HR: 63
50Hz
15cm
2D
64%
C 51
P Basso
APen



TIS0.4 MI 1.2



TIS0.4 MI 1.2



Guido, 65 anni

Ecocardiogramma

SIV 15 mm

DTD 45 mm

PP 13

LVMi 135 g/m²

FE 62%



Ambulatory Blood
Pressure Monitoring

Visita di controllo a 3 mesi

Guido, 65 anni

Visita di Controllo a 3 mesi

PAO Office 142/90 mmHg

FC Office 75 bpm

ABPM

Conferma ipertensione grado 1



Ramipril 5 mg
Amlodipina 5 mg

**Visita di controllo ed
Ecocardiogramma a 1 anno**

Guido, 66 anni

Ecocardiogramma di controllo a 1 anno

SIV 17 mm

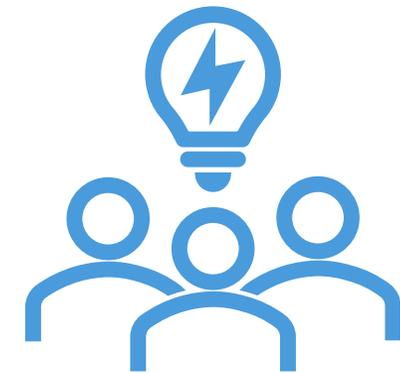
DTD 45 mm

PP 13

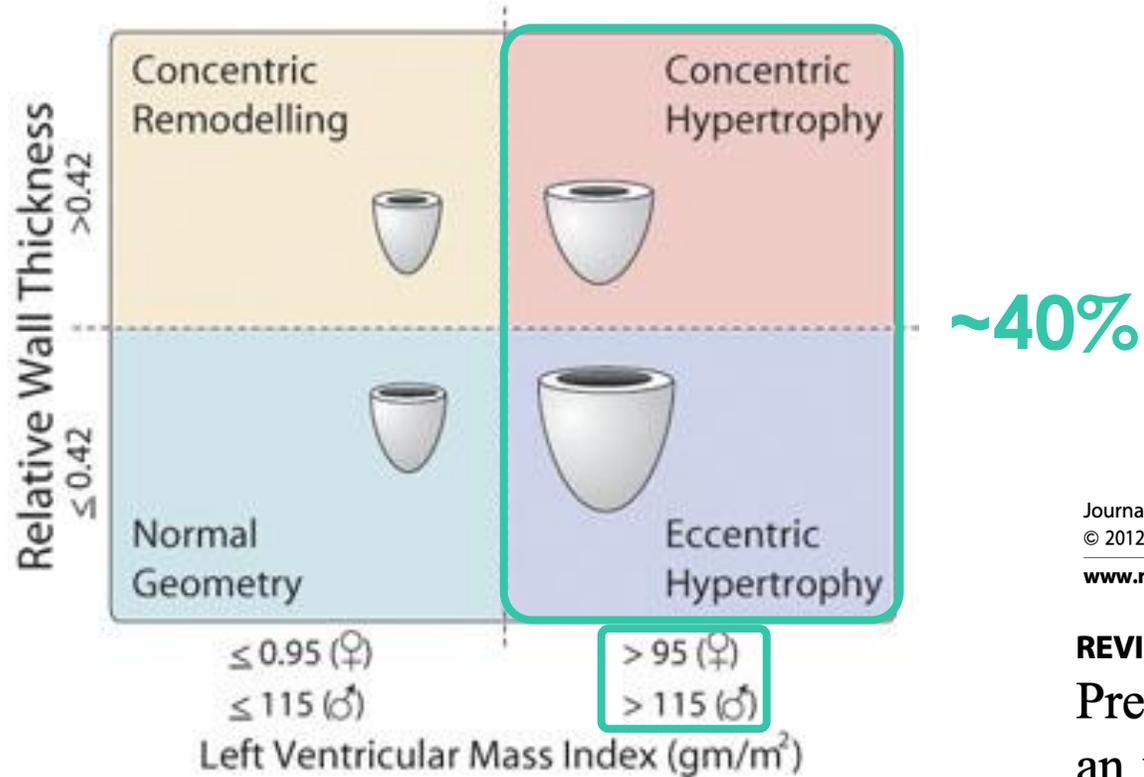
LVMi 150 g/m²

FE 68%

Buon controllo pressorio



Left Ventricular Hypertrophy Diagnosis



Lang et al. 2015, JASE

Journal of Human Hypertension (2012) 26, 343–349

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www.nature.com/jhh

REVIEW

Prevalence of left-ventricular hypertrophy in hypertension: an updated review of echocardiographic studies

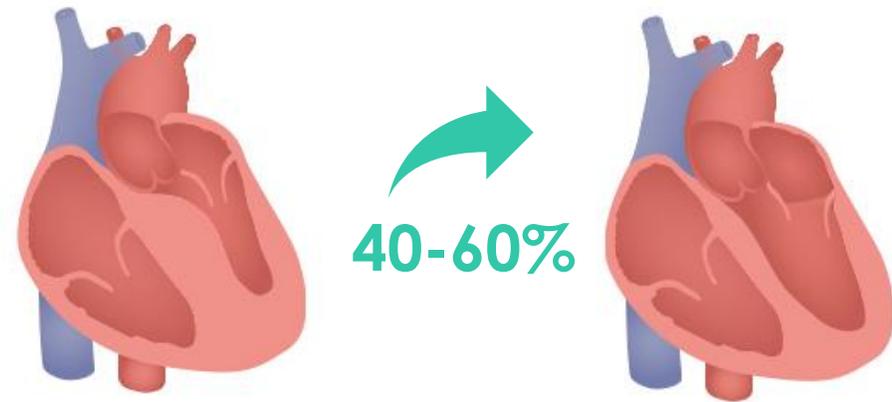
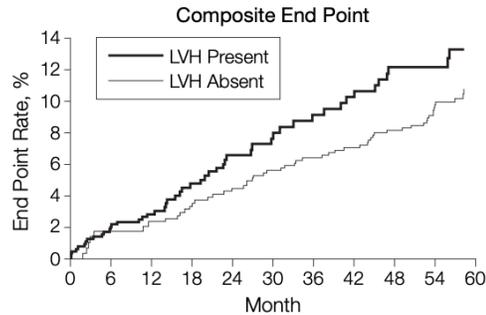
C Cuspidi^{1,2}, C Sala^{3,4}, F Negri^{1,2}, G Mancia^{1,2,4} and A Morganti^{4,5}, on behalf of the Italian Society of Hypertension

Left Ventricular Hypertrophy Regression

Prognostic Significance of Left Ventricular Mass Change During Treatment of Hypertension

JAMA
The Journal of the American Medical Association

Richard B. Devereux, MD
Kristian Wachtell, MD, PhD
Eva Gerds, MD, PhD
Kurt Boman, MD
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Vasilios Papademetriou, MD
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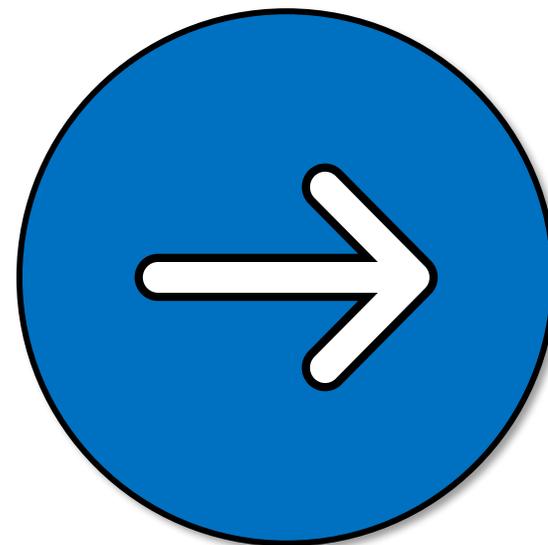
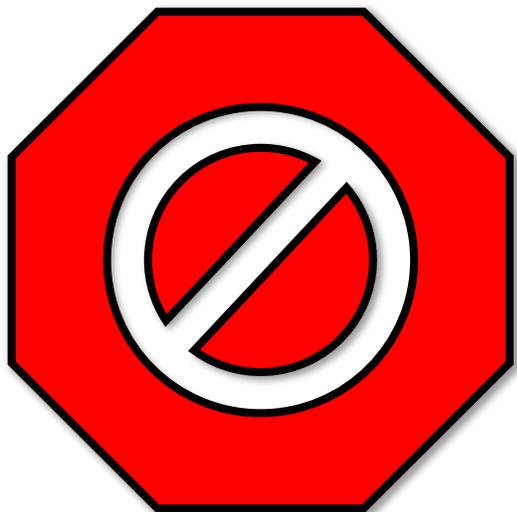


Regression of Echocardiographic Left Ventricular Hypertrophy After 2 Years of Therapy Reduces Cardiovascular Risk in Patients with Essential Hypertension

Sante D. Pierdomenico^{1,2}, Domenico Lapenna^{1,2} and Franco Cuccurullo^{1,2}

AMERICAN JOURNAL OF HYPERTENSION

Left Ventricular Hypertrophy



Left Ventricular Hypertrophy Differential Diagnosis



REVIEW ARTICLE

The Different Faces of Echocardiographic Left Ventricular Hypertrophy: Clues to the Etiology

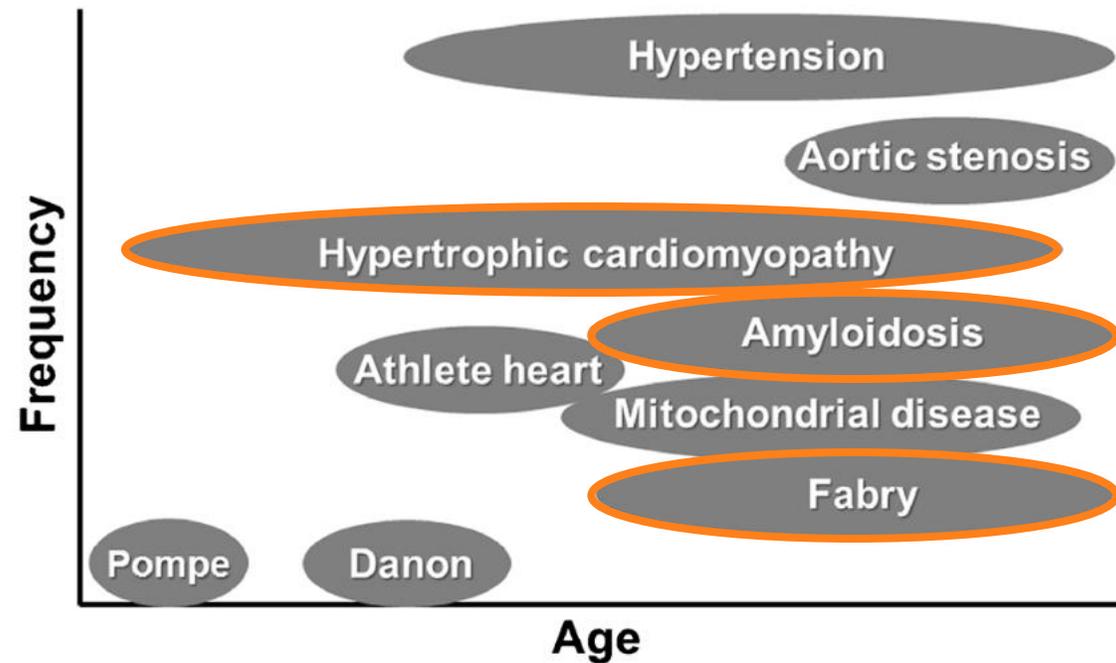
Frank Weidemann, MD, Markus Niemann, MD, Georg Ertl, MD, and Stefan Störk, MD, *Würzburg, Germany*



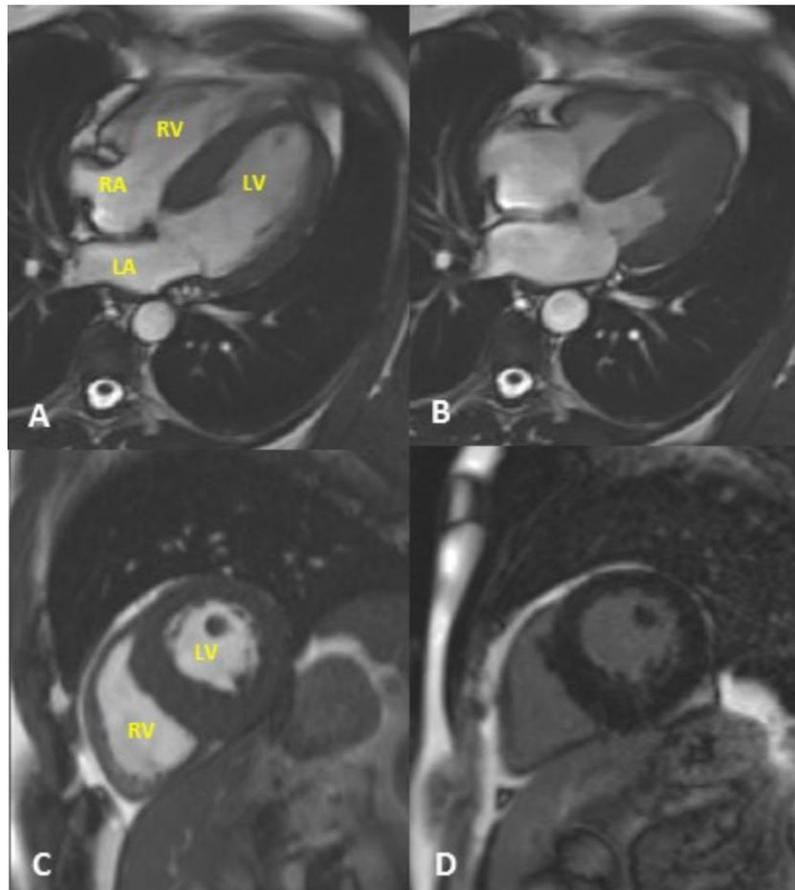
Left Ventricular Hypertrophy Differential Diagnosis

Imaging of Left Ventricular Hypertrophy: a Practical Utility for Differential Diagnosis and Assessment of Disease Severity

Toru Kubo¹ · Hiroaki Kitaoka¹



Left Ventricular Hypertrophy Multimodal Imaging



Cardiac Magnetic Resonance

HMOD	HCM
Amyloid	Fabry

Hypertrophic Cardiomyopathy

Circulation

Volume 142, Issue 25, 22 December 2020; Pages e558-e631
<https://doi.org/10.1161/CIR.0000000000000937>

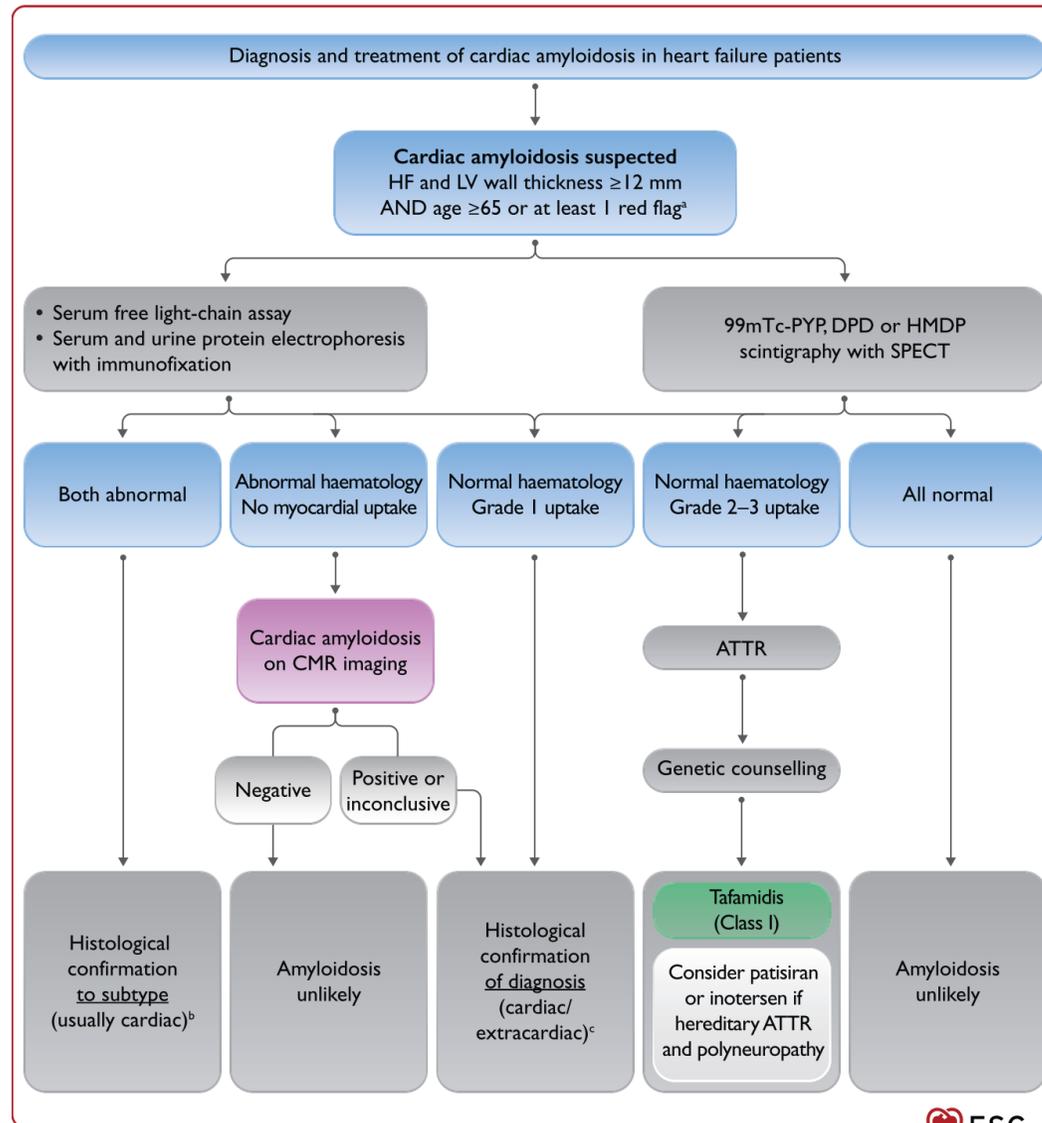


AHA/ACC CLINICAL PRACTICE GUIDELINE

2020 AHA/ACC Guideline for the Diagnosis and Treatment of Patients With Hypertrophic Cardiomyopathy

Hypertension is commonly coexistent in adult patients with HCM, with a prevalence of ~35% to 50% [...]

Cardiac Amyloidosis



ESC

European Society of Cardiology

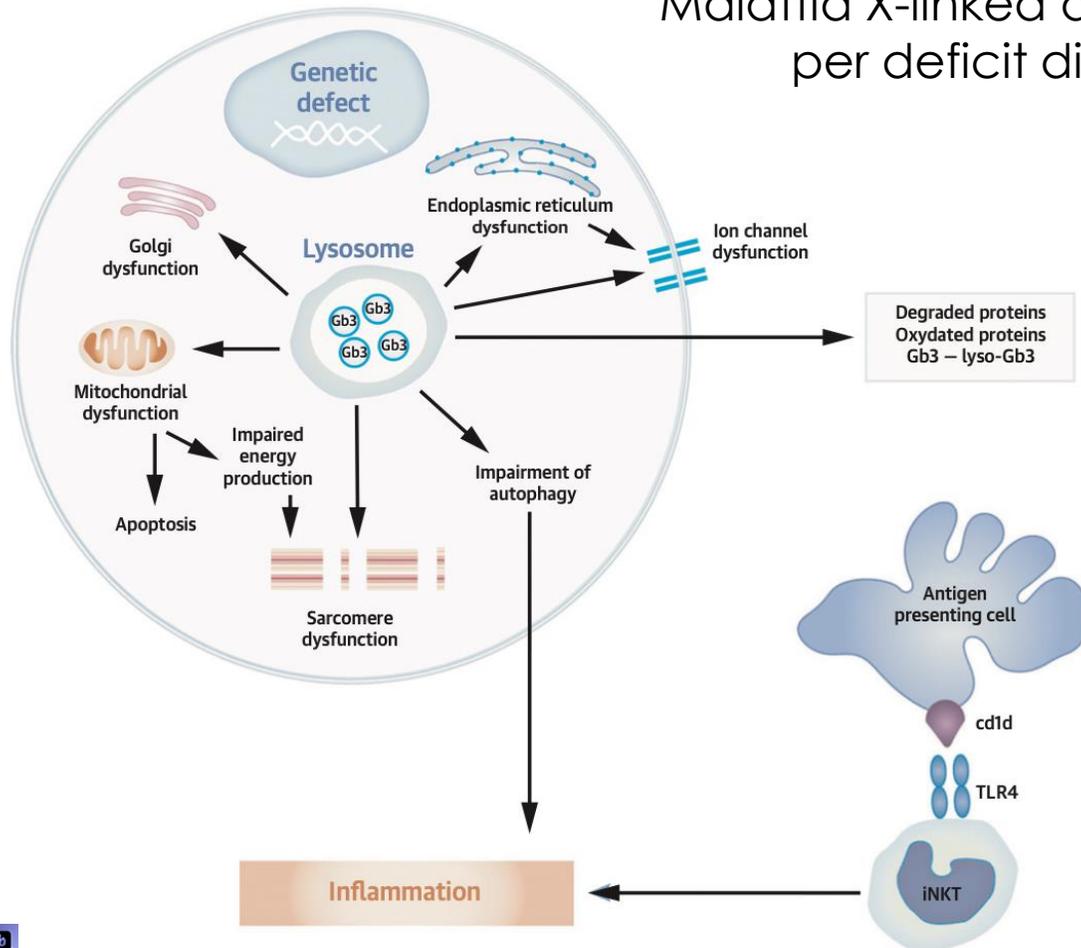
European Heart Journal (2021) 00, 1–128

doi:10.1093/eurheartj/ehab368

2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure

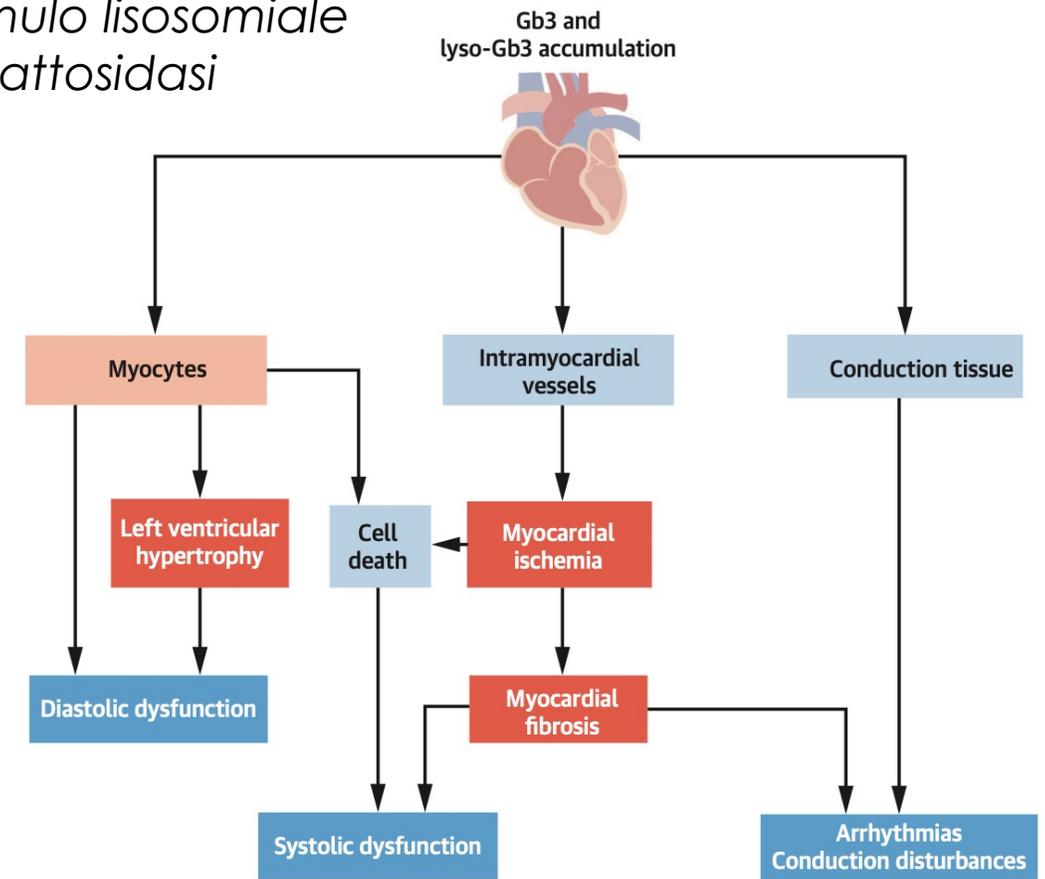
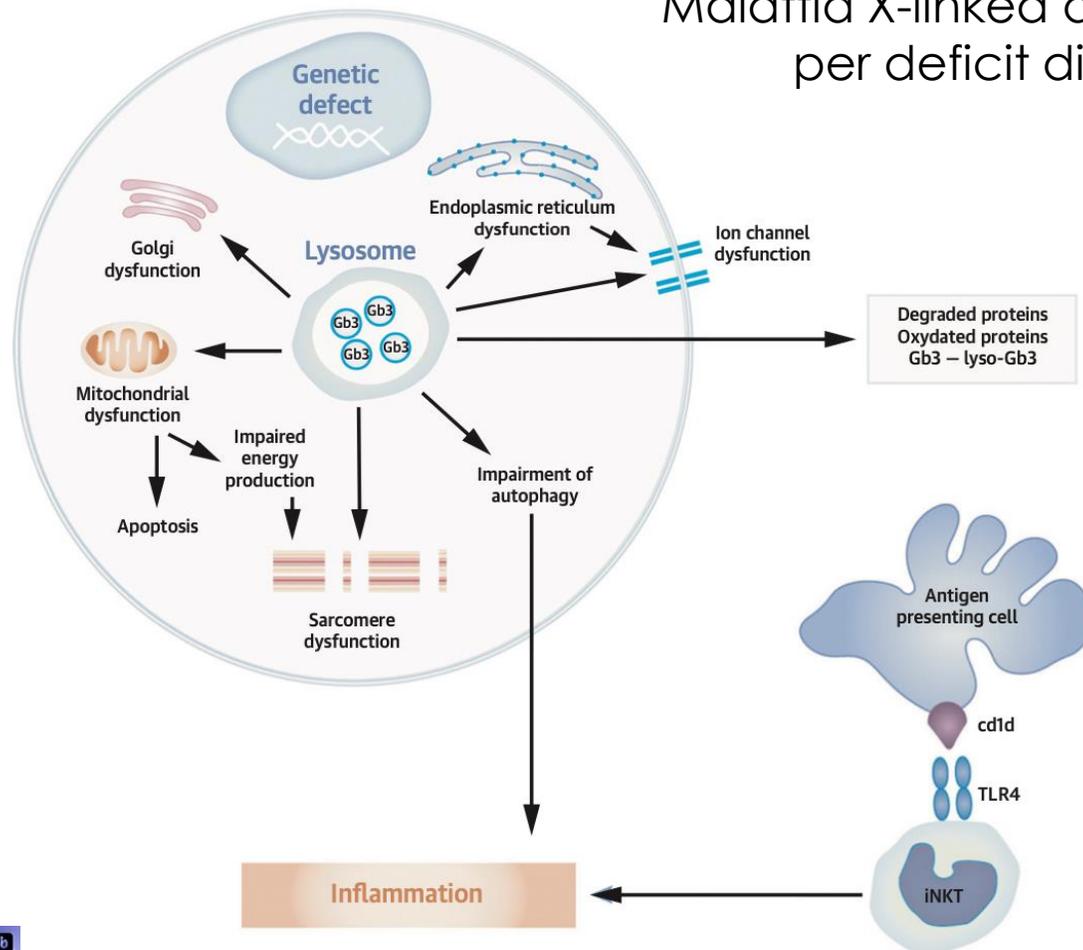
Malattia di Anderson-Fabry

Malattia X-linked da accumulo lisosomiale per deficit di *alfa-Galattosidasi*



Malattia di Anderson-Fabry

Malattia X-linked da accumulo lisosomiale per deficit di *alfa-Galattosidasi*

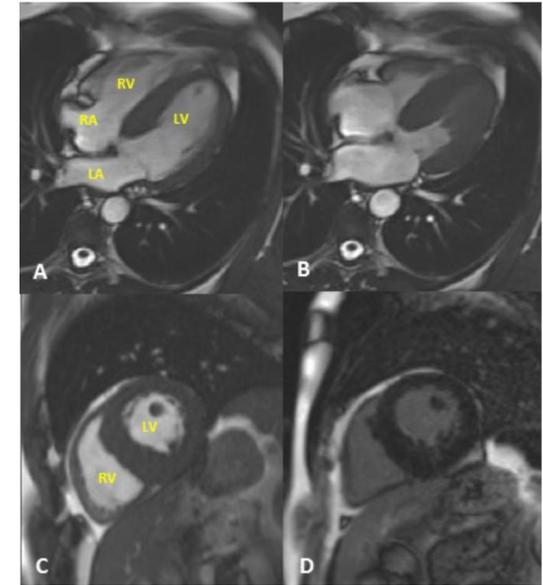


Guido, 67 anni

Risonanza Magnetica Cardiaca

- *Ipertrofia ventricolo sinistro confermata*
- *Ipertrofia muscolo papillare anteriore*
- *Sfumati segni di fibrosi*
- *Assenza di segni tipici di HCM ed amiloidosi*

Ipotesi: Malattia di Fabry; Ipertrofia Settale



HMOD	IA
Amloid	Fabry

Take Home Messages

- L'**ipertrofia del ventricolo sinistro** è una condizione ad alta prevalenza nei pazienti affetti da ipertensione arteriosa, che **può regredire** in corso di trattamento;
- La diagnosi si basa principalmente sulla misurazione ecocardiografica della massa ventricolare sinistra indicizzata per BSA (**>115 g/m² uomini**; **>95 g/m² donne**);
- L'ipertrofia del ventricolo sinistro può avere altre cause, anche nel paziente iperteso; condizioni come **Cardiomiopatia ipertrofica**, **Amiloidosi** e **Malattia di Fabry** possono simulare un danno d'organo ipertensivo;
- Va sempre valutata la **correlazione** tra danno d'organo cardiaco e quadro clinico complessivo; l'**imaging multimodale** può essere d'aiuto nella diagnosi differenziale.



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9 OTTOBRE 2021 - TORINO

Aula Magna Ospedale Molinette
Città della Salute e della Scienza di Torino