

Anticoagulation in Mitral Valve Disease

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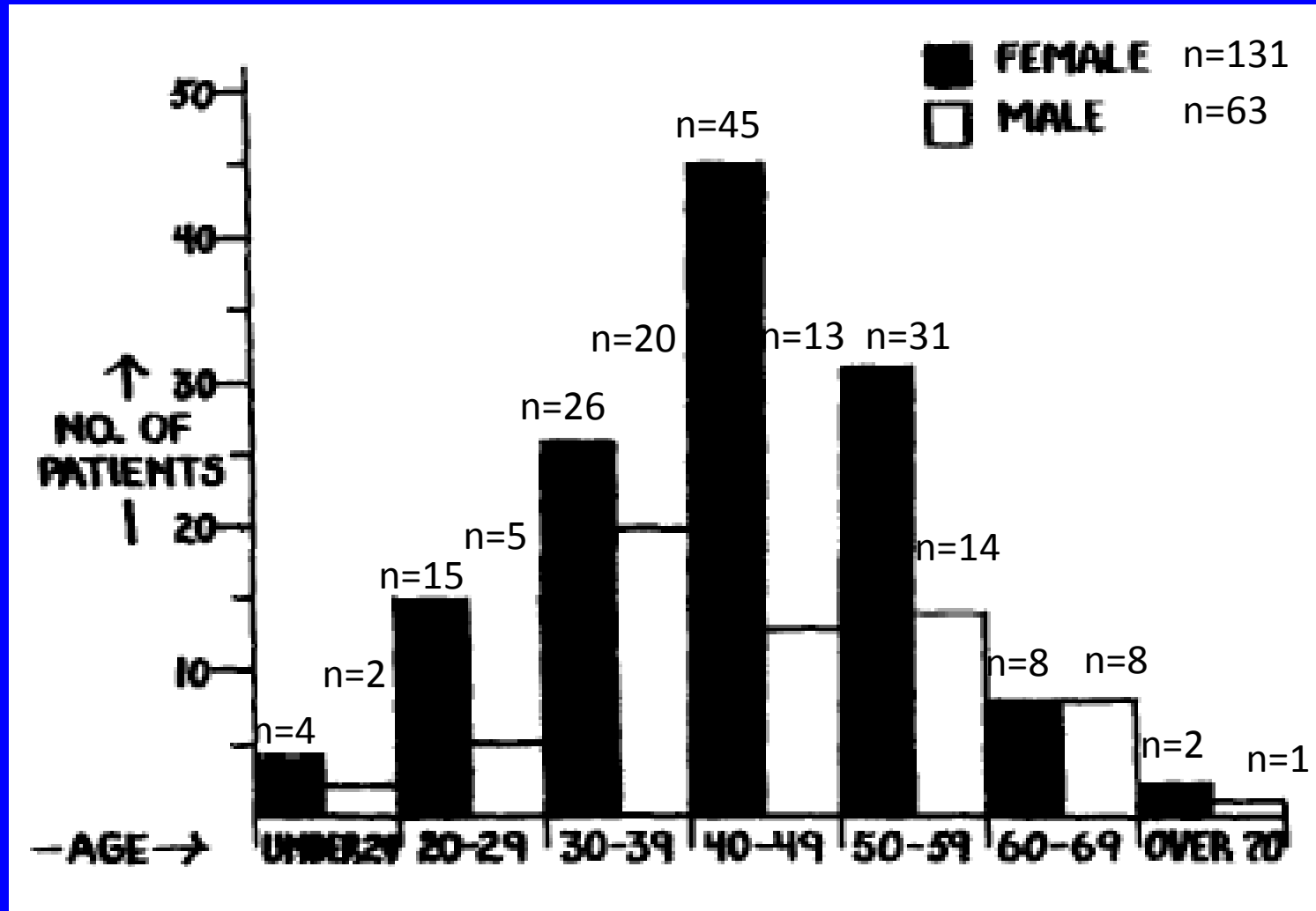
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DISCLOSURE STATEMENT

Speaker: Jeffrey S. Borer, M.D.

has disclosed that he has no actual or potential conflict of interest in regard to this lecture.

Mitral Stenosis: Age at Time of First Embolus



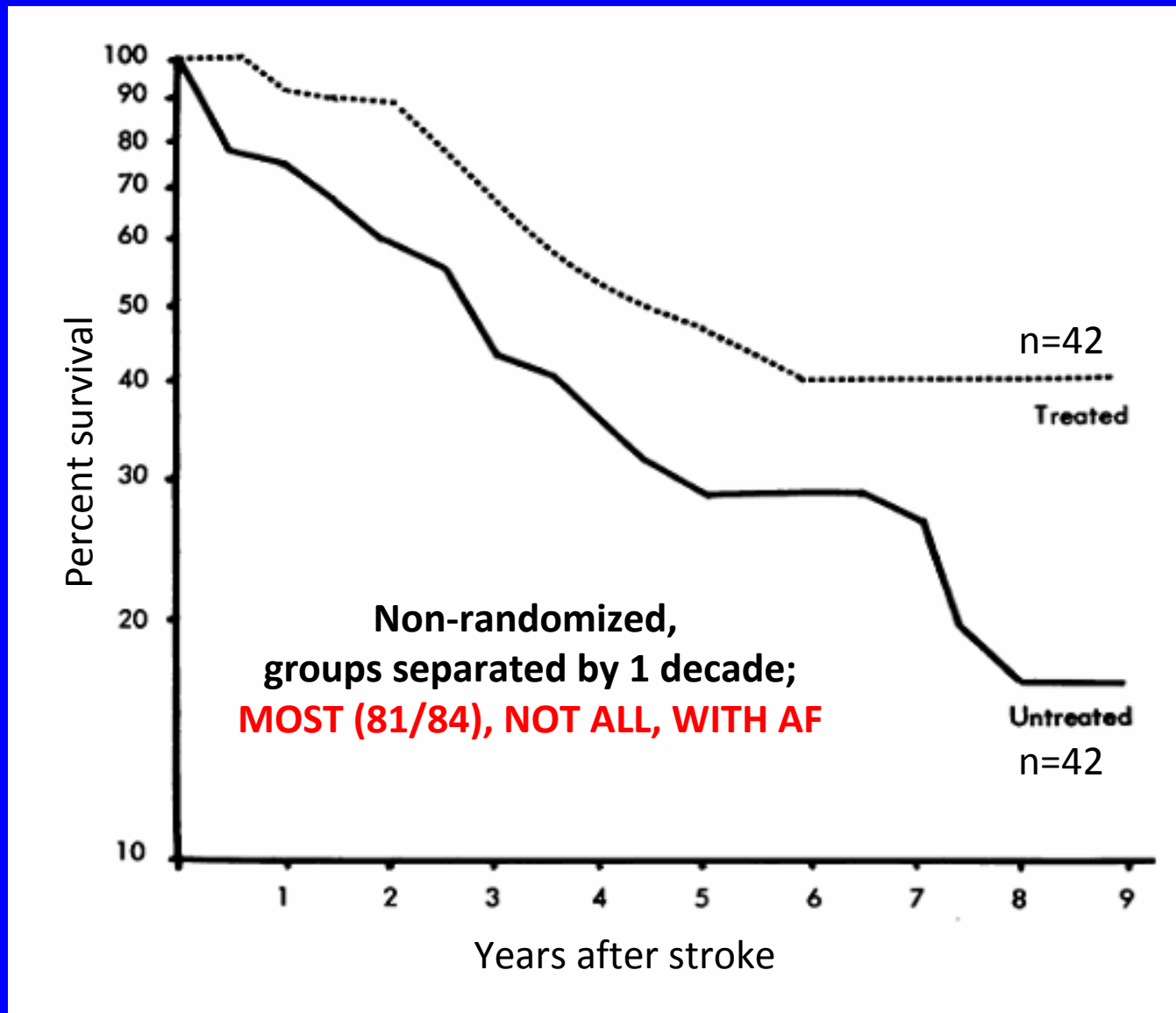
Anticoagulation in Mitral Valve Disease

- Stroke risk in AF + mitral RHD (predominantly MS): 18-fold > sex and hypertension-matched AF + non-RHD
- Thromboembolism risk without anticoagulation AF + RHD/MS = 5.5% annually
- **BUT** thromboembolism can occur without clear evidence of antecedent AF

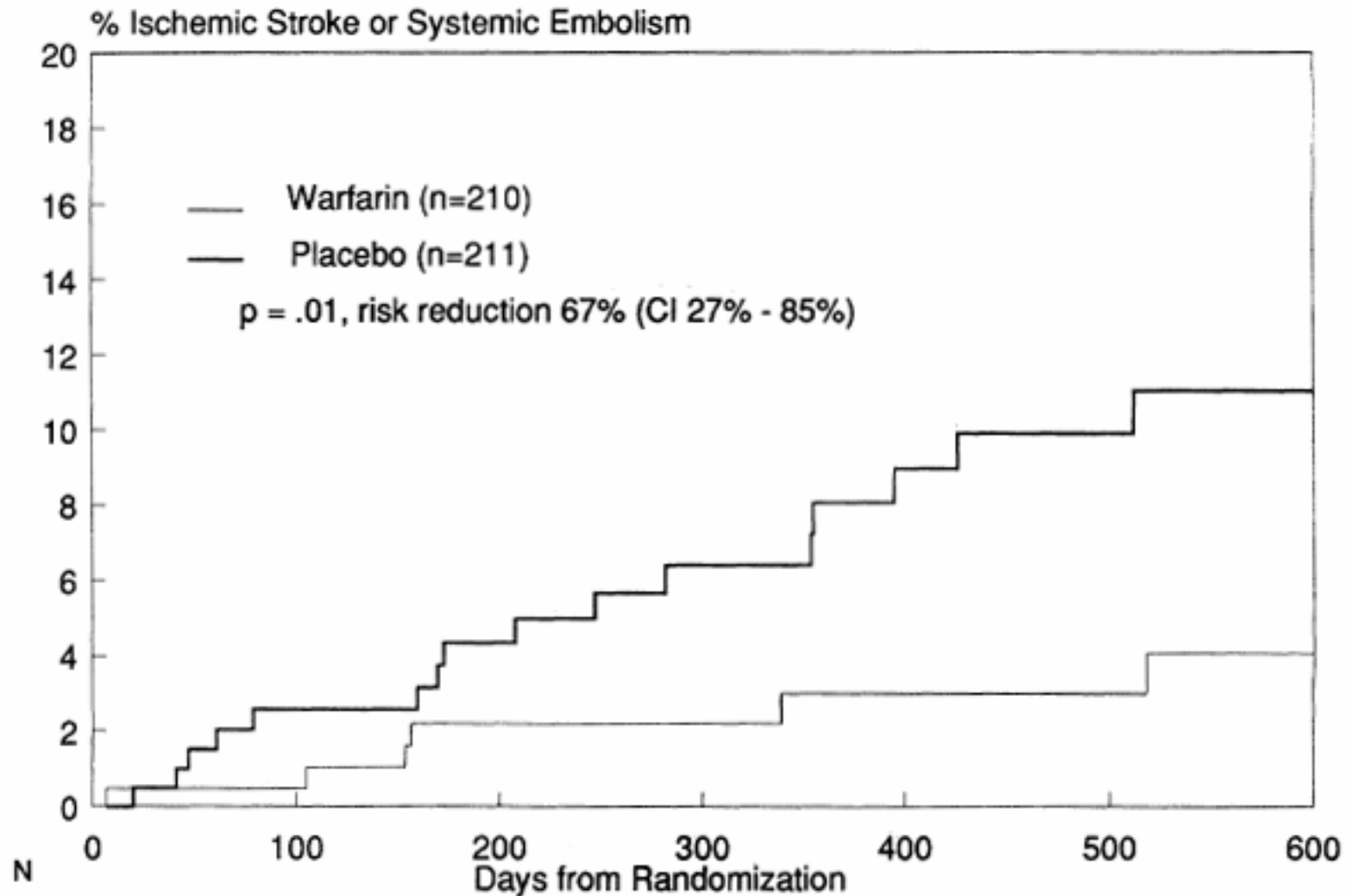
Anticoagulation in Mitral Valve Disease

- There are no randomized trials of anticoagulation for AF in VHD ***BUT***

Survival After Cerebral Embolism in Mitral Stenosis: Effect of Chronic Anticoagulation



Thromboembolism for Non-valve AF: Effect of Anticoagulation (SPAF)



Anticoagulation in Mitral Valve Disease

Mitral Stenosis

Class I

- Anticoagulation is indicated in patients with MS and atrial fibrillation (paroxysmal, persistent, or permanent). *(Level of Evidence: B)*
- Anticoagulation is indicated in patients with MS and a prior embolic event, even in sinus rhythm. *(Level of Evidence: B)*
- Anticoagulation is indicated in patients with MS with left atrial thrombus. *(Level of Evidence: B)*

Anticoagulation in Mitral Valve Disease

Relation of AF and LA Size WITHOUT MV Disease

AF Frequency

Echocardiographic View	Stroke Group N=20	Non-Stroke Group (n=20)	p
AP Parasternal >40mm	90%	20%	<.05
Transverse 4 Chamber >46mm	50%	10%	<.05

1 MS stroke , 1 MR non-stroke

Anticoagulation in Mitral Valve Disease

Mitral Stenosis

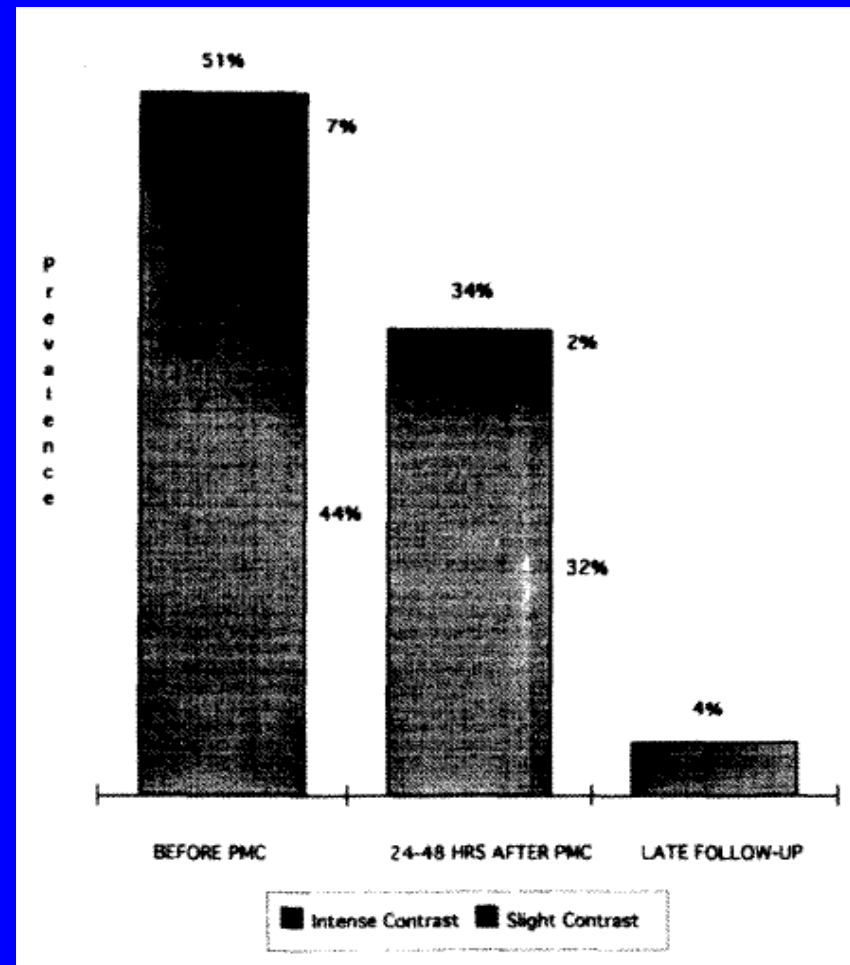
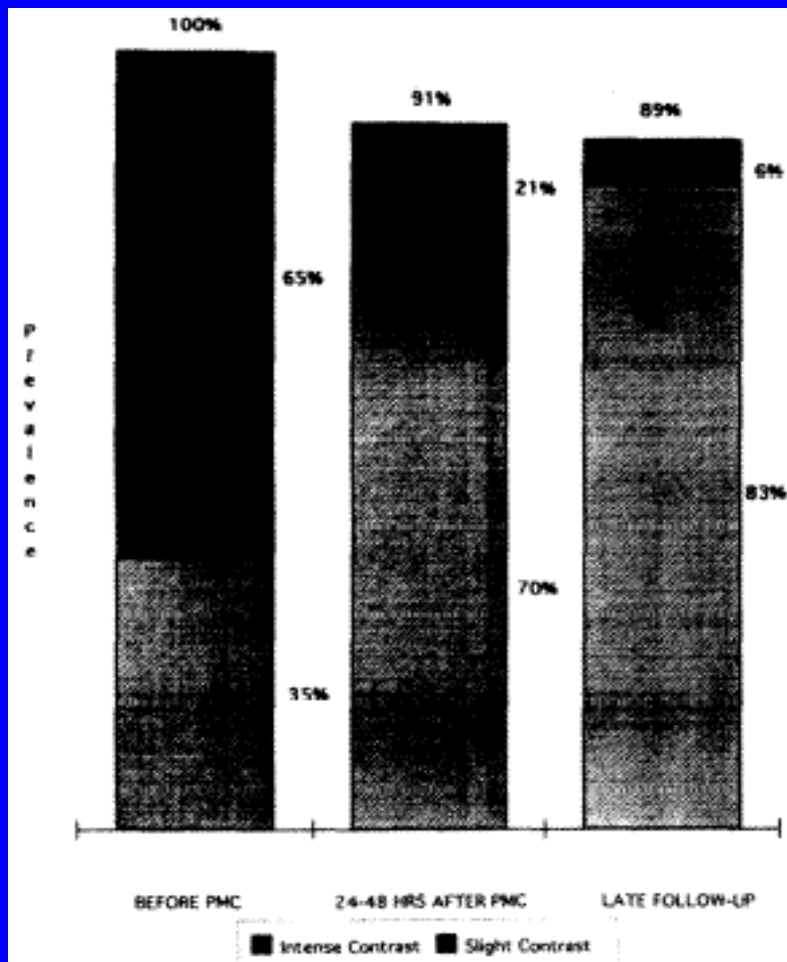
Class IIb

- Anticoagulation may be considered for asymptomatic patients with severe MS and left atrial dimension greater than or equal to 55 mm by echocardiography.* (*Level of Evidence: B*)
- Anticoagulation may be considered for patients with severe MS, an enlarged left atrium, and spontaneous contrast on echocardiography. (*Level of Evidence: C*)

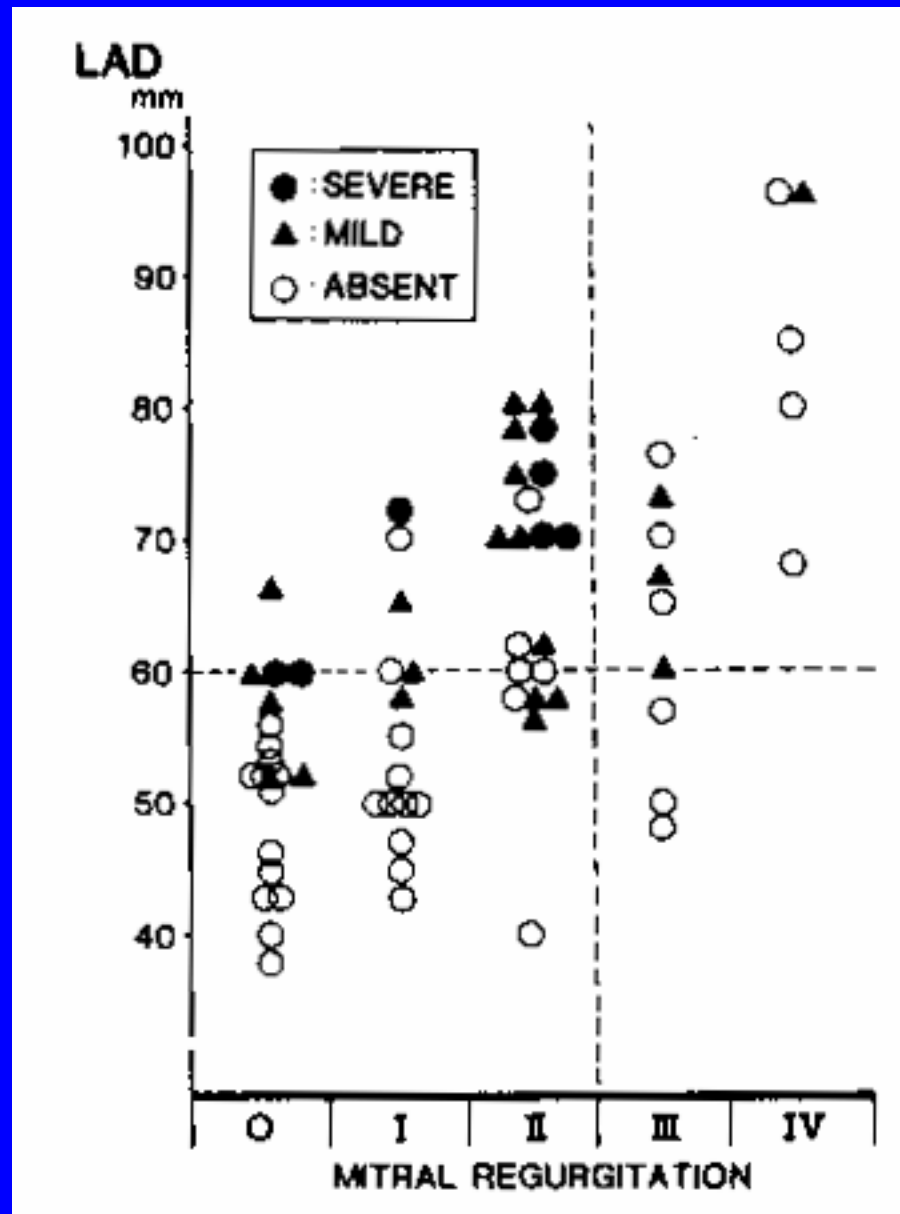
IMPACT OF MITRAL BALLOON VALVULOPLASTY ON THROMBOSIS PRECURSOR ECHOS (SPONTANEOUS CONTRAST) IN MS

Post-op AF (n=23)

Sinus Rhythm (n=59)



Impact of Left Atrial Diameter and MR on Development of Smoke-like Echo (Thrombus Precursor) in MS (n=116)

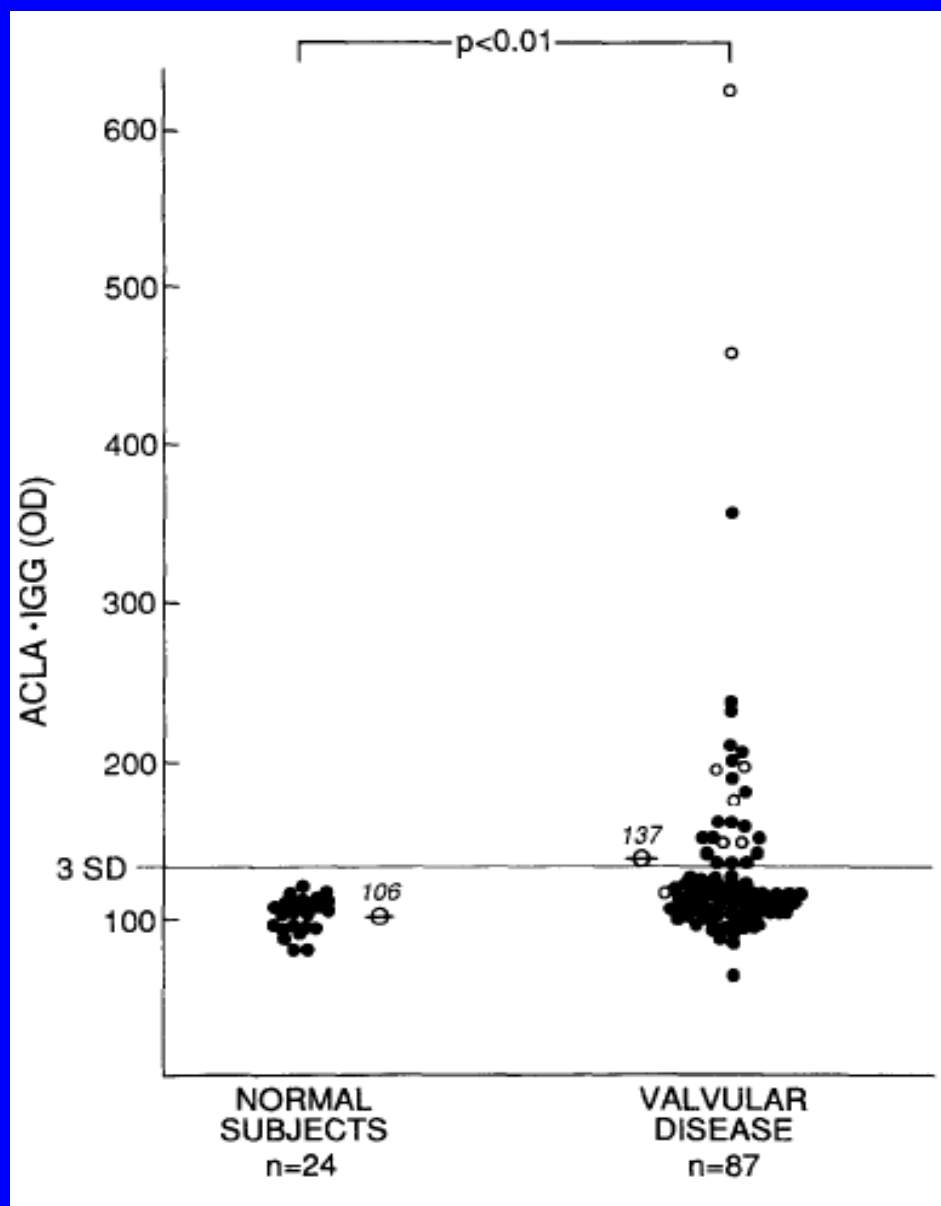


Anticoagulation in Mitral Valve Disease

Mitral Regurgitation

- If AF develops, heart rate should be controlled with rate-lowering calcium channel blockers, beta blockers, digoxin, or, rarely, amiodarone.
- Anticoagulation should be undertaken
- In patients with severe MR and chronic atrial fibrillation, a Maze procedure may be added to an MV repair to reduce the risk of postoperative stroke.

IGG*ACLA Levels in Patients with Valvular Heart Disease and Normal Controls: Relation to Stroke



- = cerebral ischemic events
- = no cerebral ischemic events