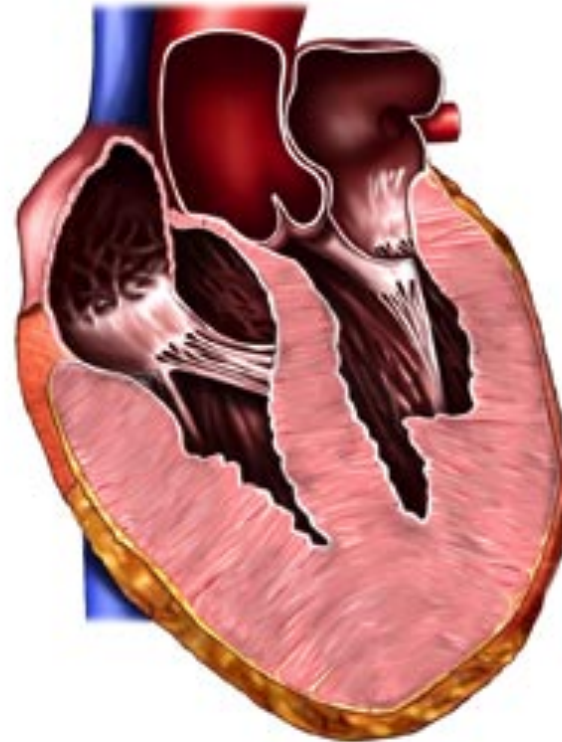


Hypertrophic Cardiomyopathy (HCM)

Comparison of Normal to HCM



Normal heart
(cross section)



Hypertrophic
cardiomyopathy

Types of HOCM

Medscape®

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1. ASH



2. IHSS or Obstructive HCM



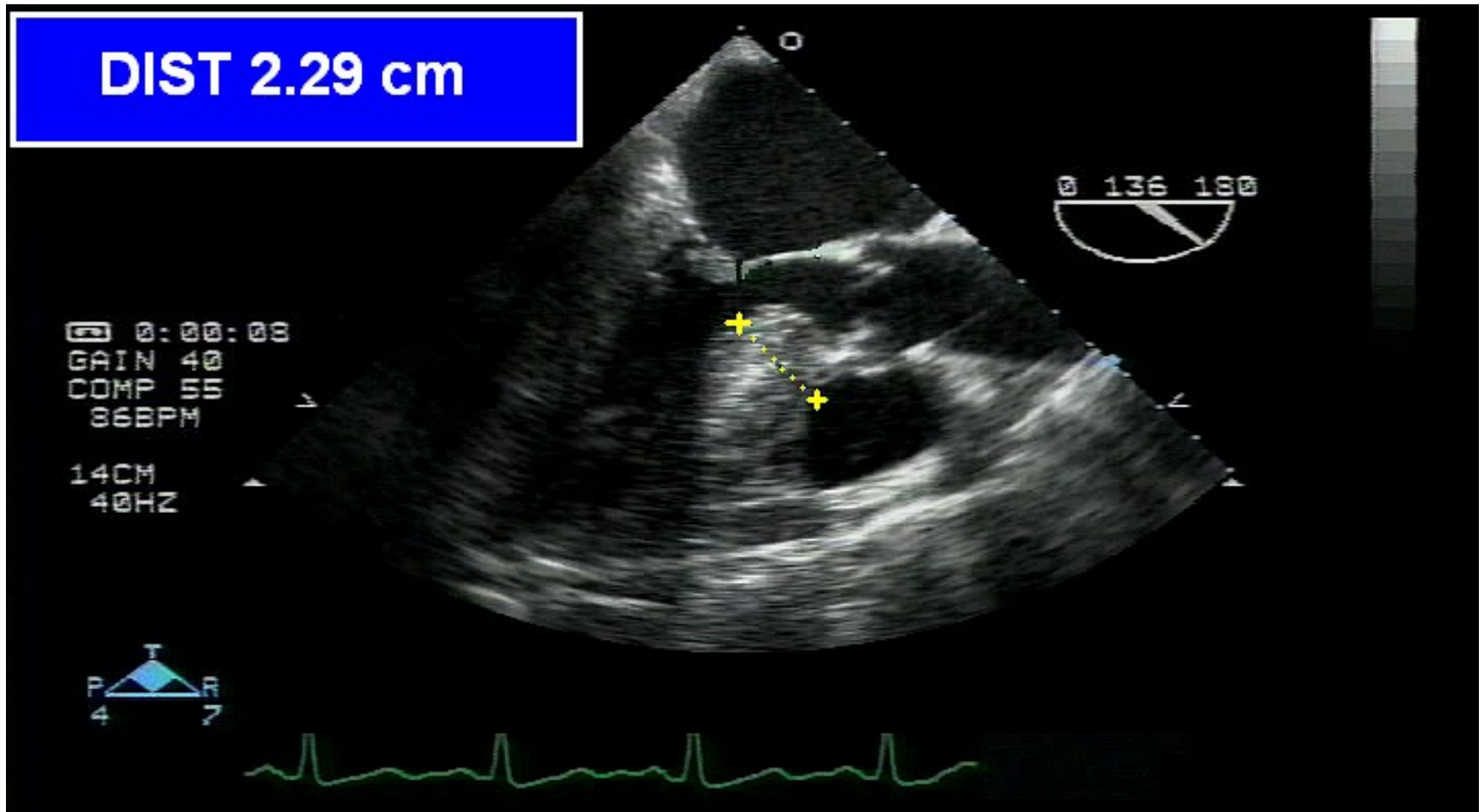
3. Apical or Japanese HCM



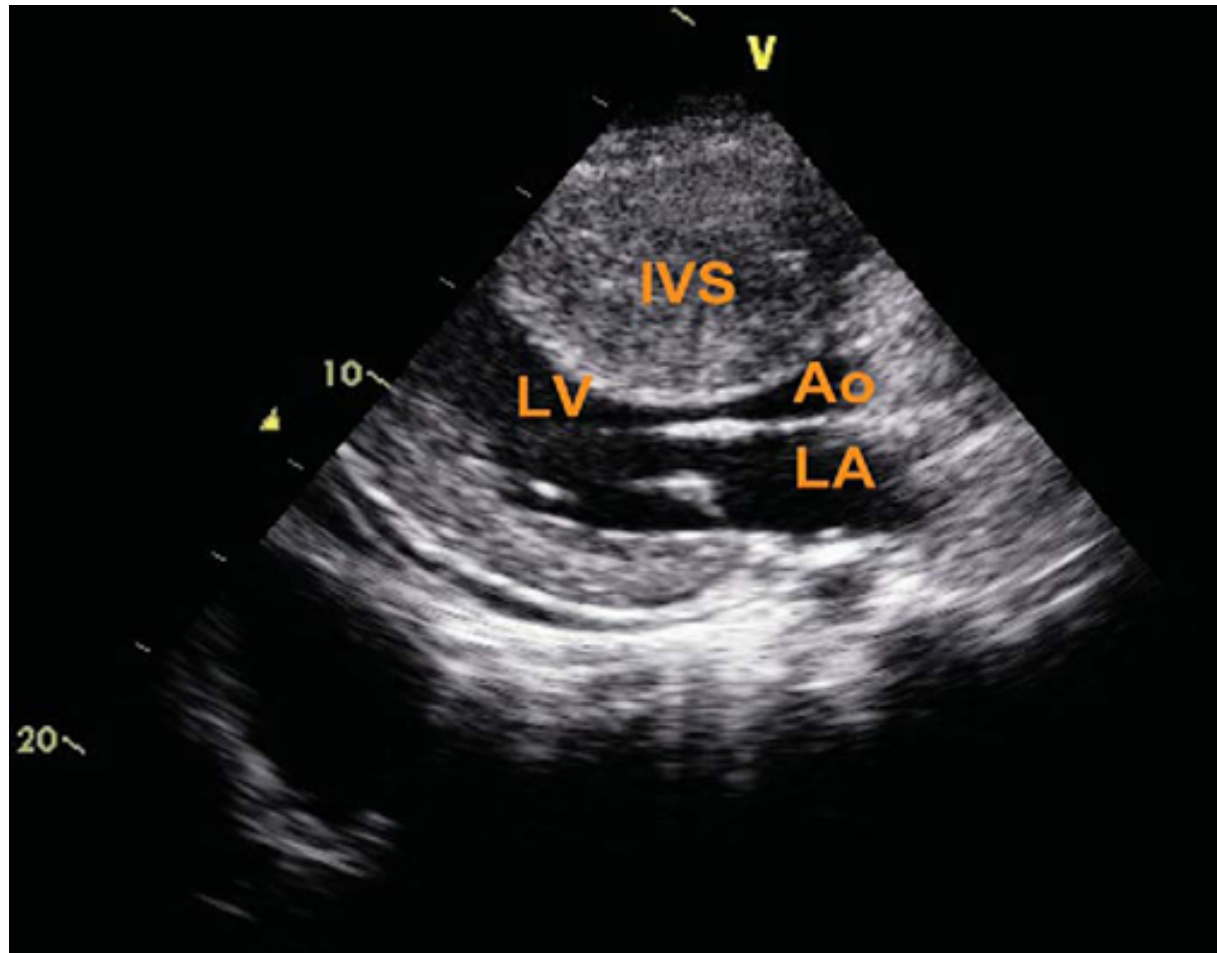
4. Mid-cavity HCM
A=aneurysm



Septal Measurement in HOCM



HOCM (TTE LAX)



Anesthetic Management of HOCM

- Use maneuvers that maintain or increase LV chamber size thereby decreasing the LVOT obstruction:
 1. Increase Preload
 2. Increase Afterload
 - Or maintain afterload; do not let SVR drop
 3. Decrease Myocardial Contractility

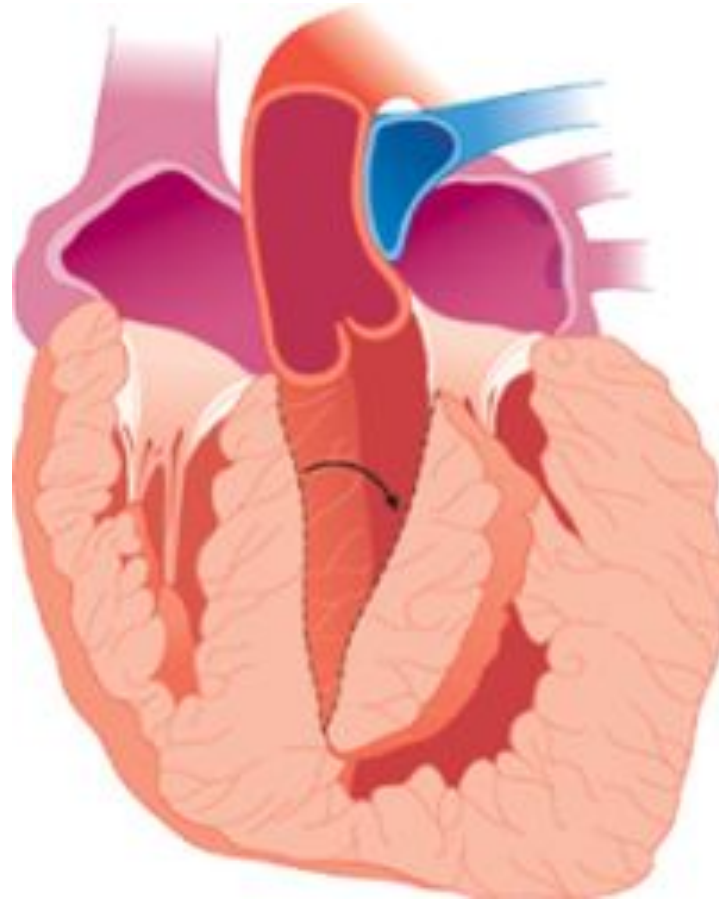
Anesthetic Management Points

1. Use Volume (↑ preload) & vasoconstrictors (Phenylephrine) to treat hypotension
2. Avoid Catecholamines (Ephedrine, Epi, Nor-Epi)
3. Myocardial depression with volatile anesthetic decreases LVOT obstruction
4. Avoid Vasodilators (NTP → decrease SVR) and venodilators (NTG → decrease preload)
5. Beta blockade with Esmolol will decrease LVOT obstruction by causing myocardial depression and decrease heart rate allowing increased filling of LV (↑ LV size & preload)

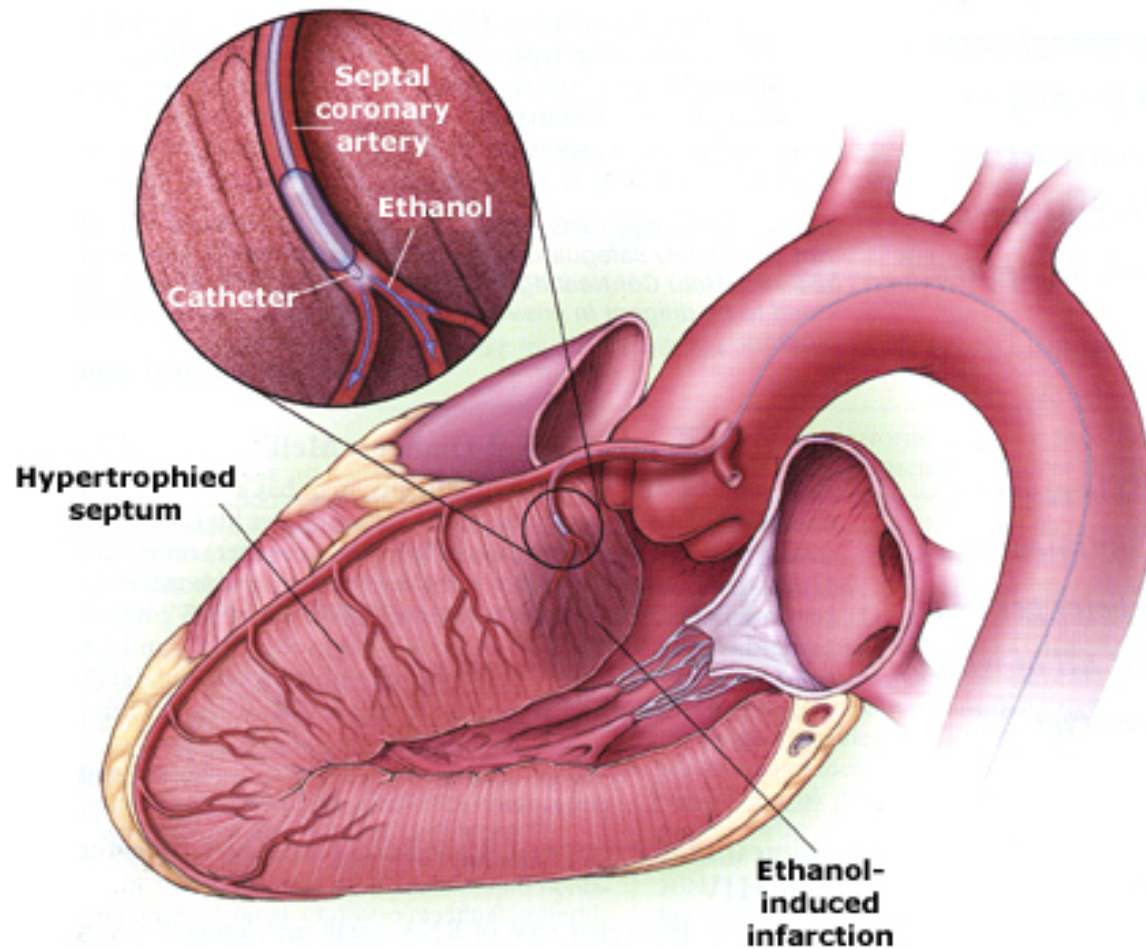
Surgical Options for HOCM

1. LV Septal Myomectomy
2. Coronary Artery Septal Alcohol Ablation

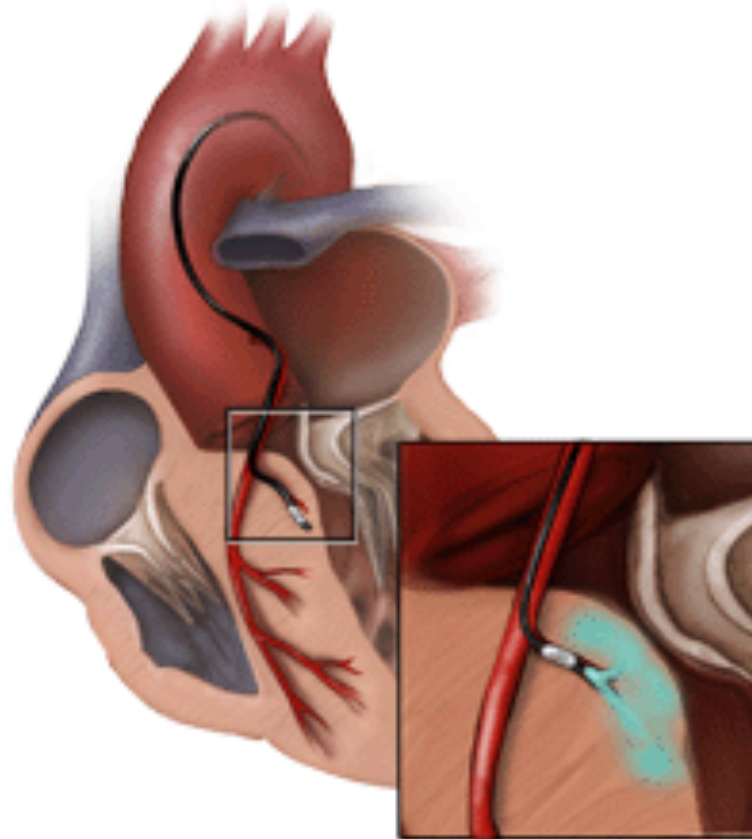
Septal Myomectomy for HOCM



HOCM Coronary Artery Septal Ablation



HOCM Alcohol Ablation



Alcohol Septal Ablation