

Perspektivy septální redukční terapie při HOCM

Josef Veselka

Kardiologická klinika 2. LFUK a FN Motol

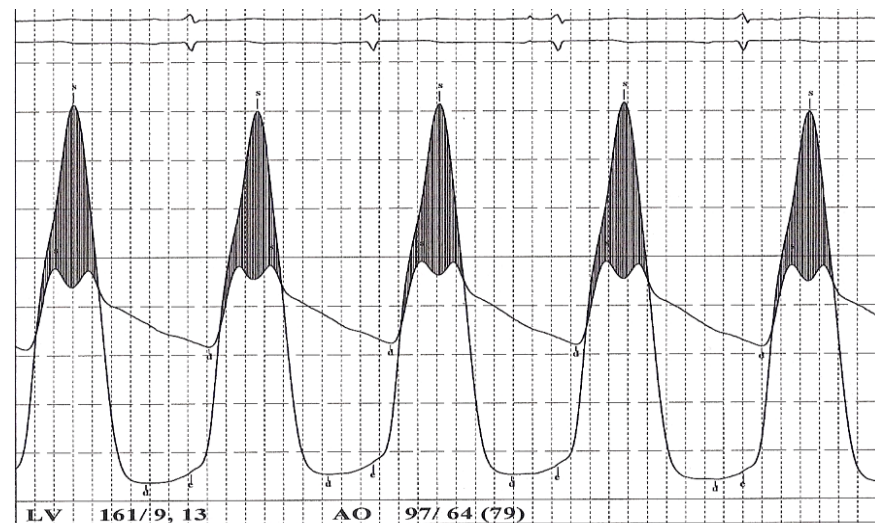


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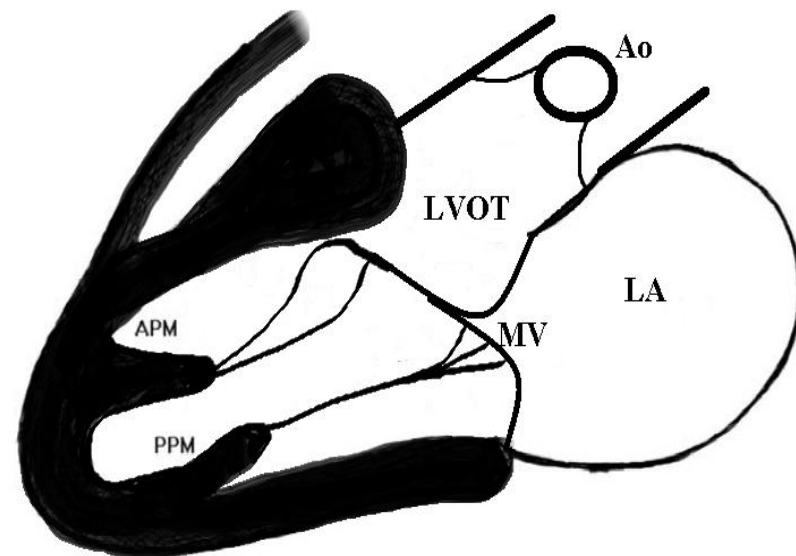
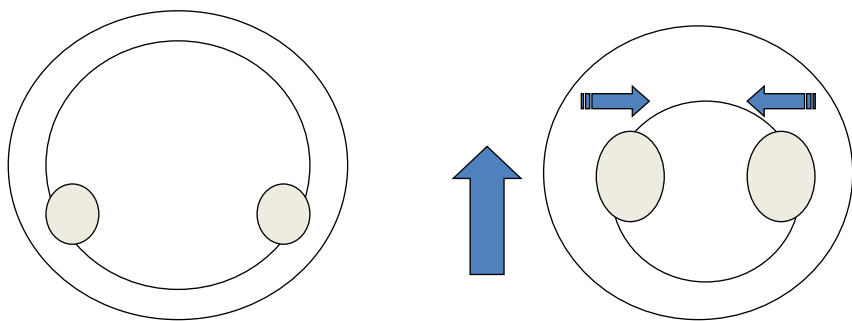


FN MOTOL

Nitrokomorová obstrukce



Změna morfologie a lokalizace papilárních svalů

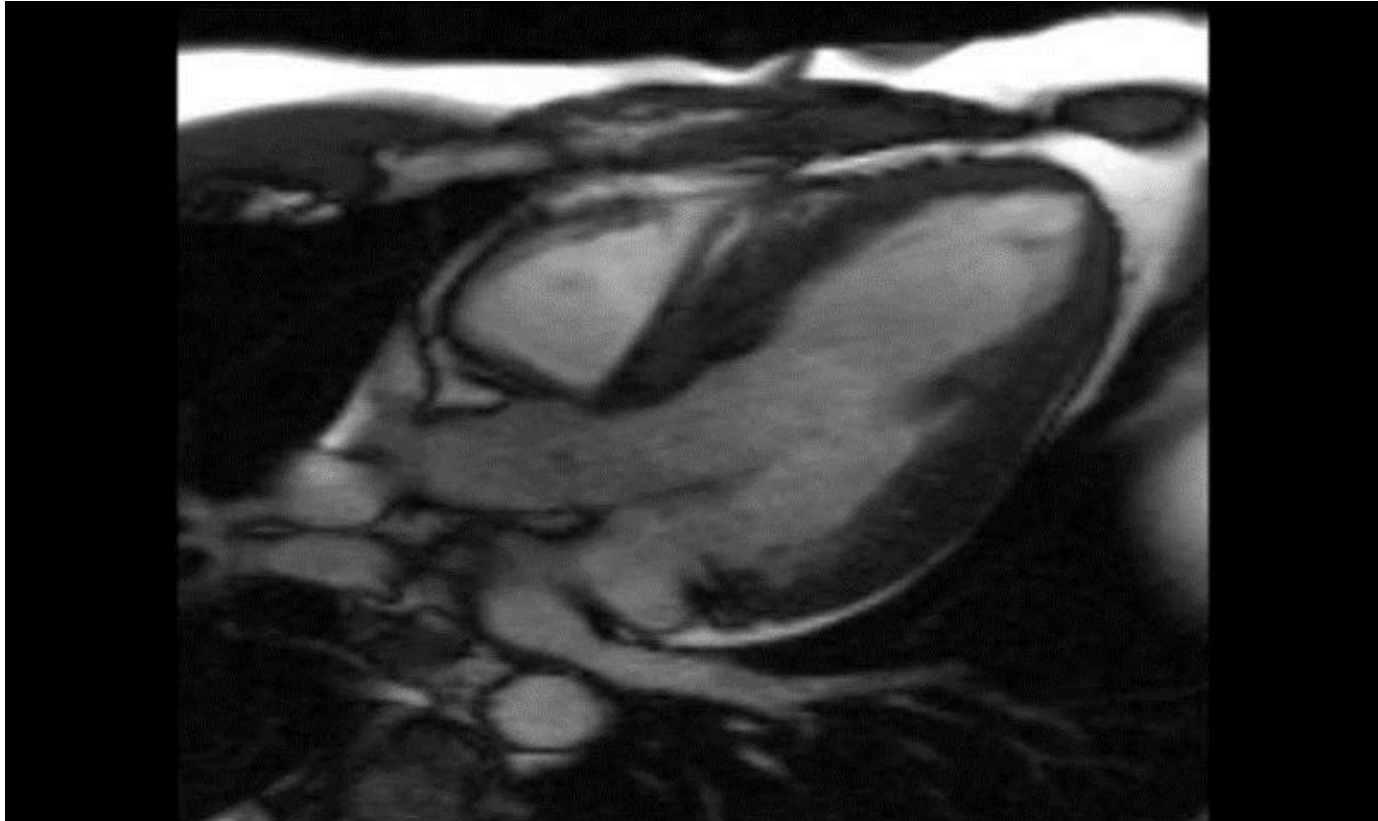
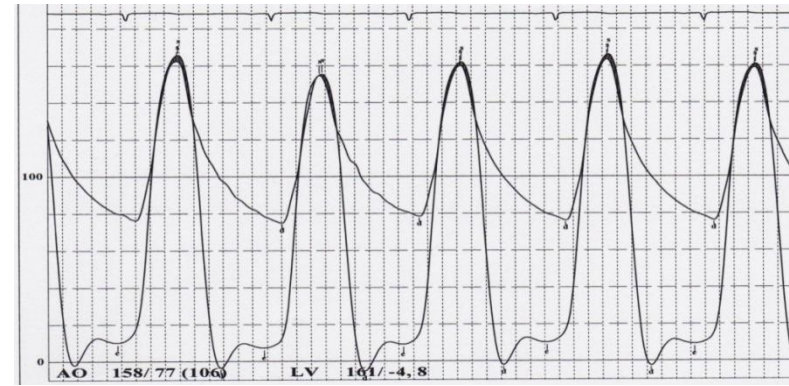
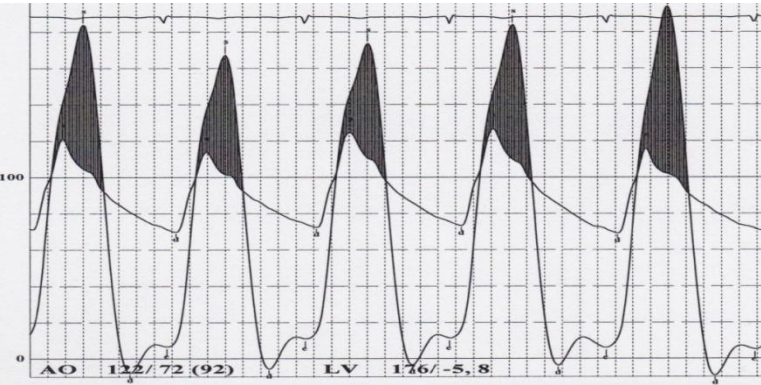


SPÁLIT!

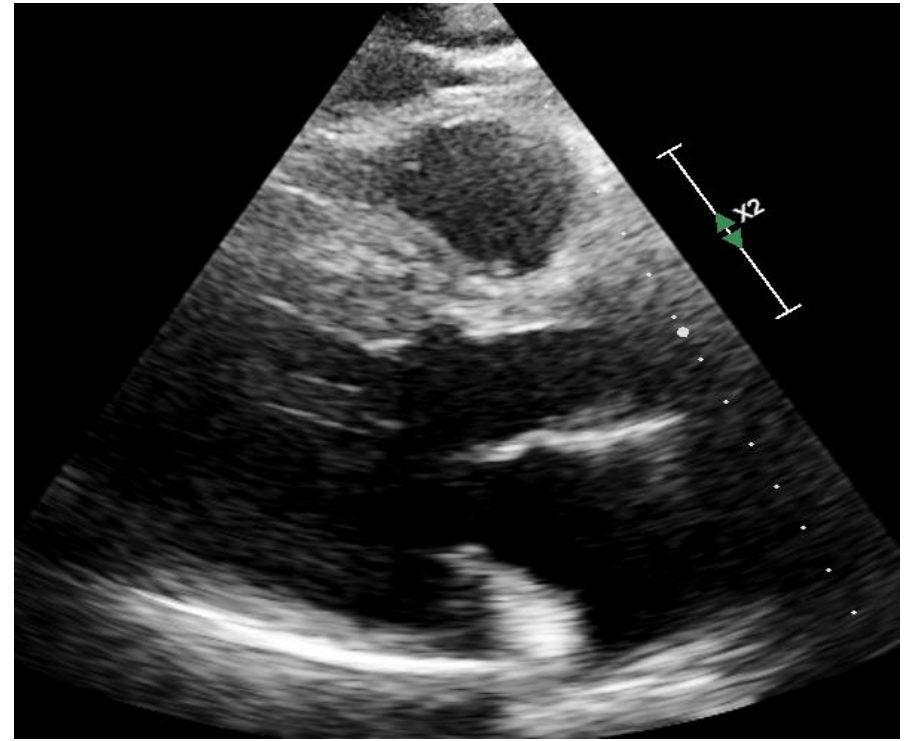
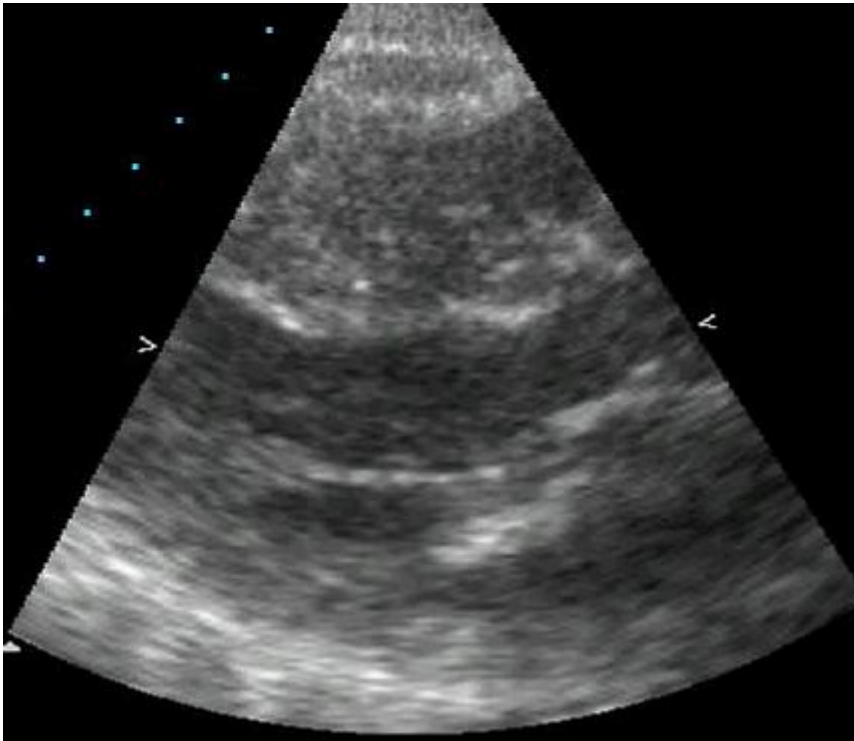
ASA

Podstatou je aplikace alkoholu do septální větve zásobující bazální septum s indukci nekrózy, remodelace LK.

Background



Myectomy-like ASA

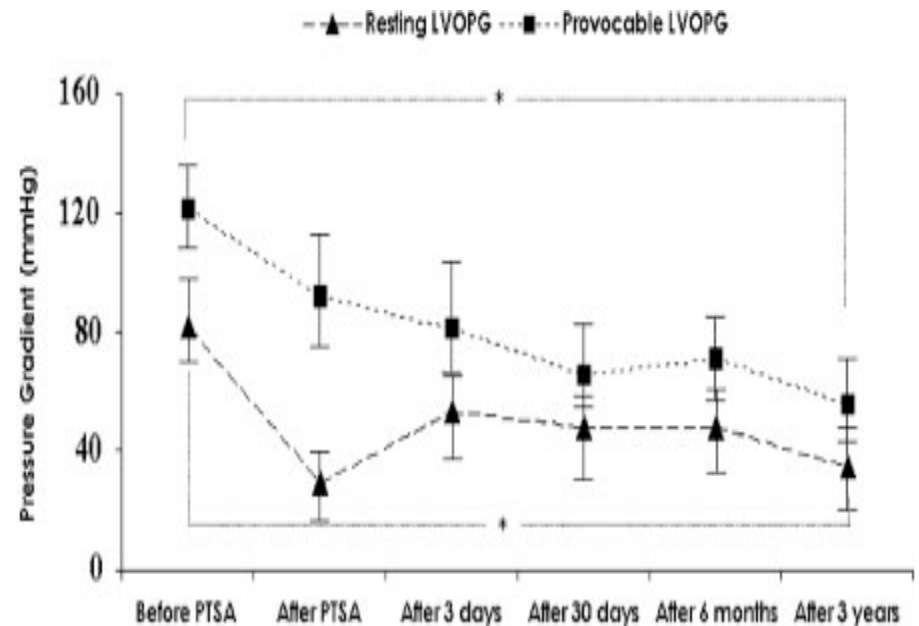
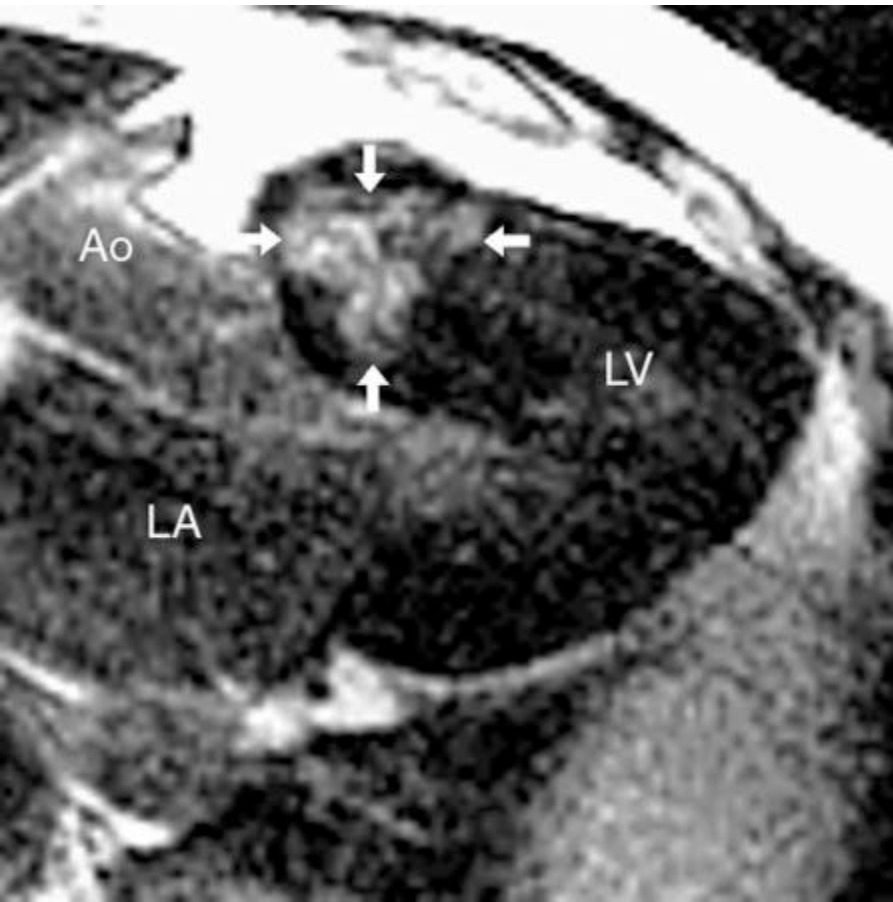


Alternativní techniky

- Implantace stentgraftu s uzavřením odstupu septální větve
- Embolizace pomocí:
 - Spirálek (coils)
 - Částí vodičů
- Polyvinylalkoholová pěna
- Tkáňové lepidlo
- ERASH

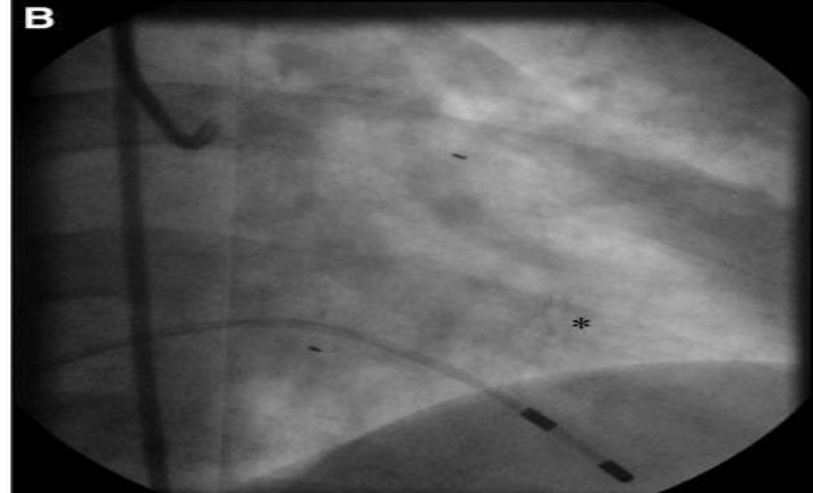
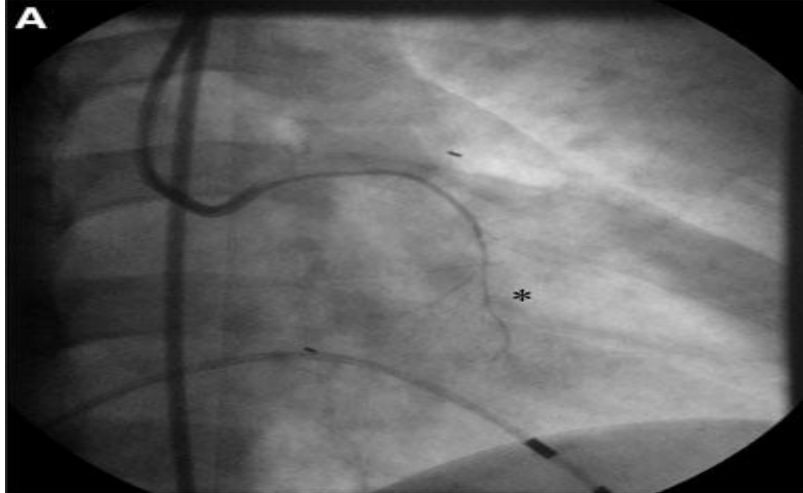
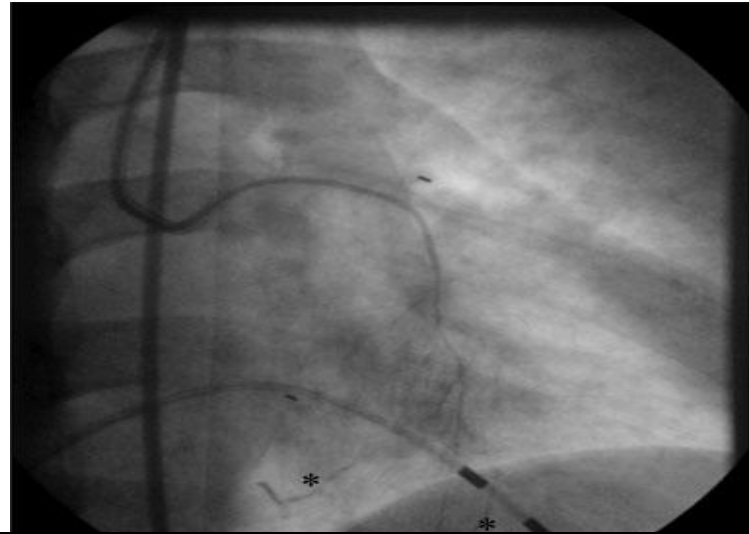
SPÁLIT A UCPAT!

Percutaneous transluminal septal artery ablation using polyvinyl alcohol foam particles for septal hypertrophy in patients with hypertrophic obstructive cardiomyopathy: acute and 3-year outcomes



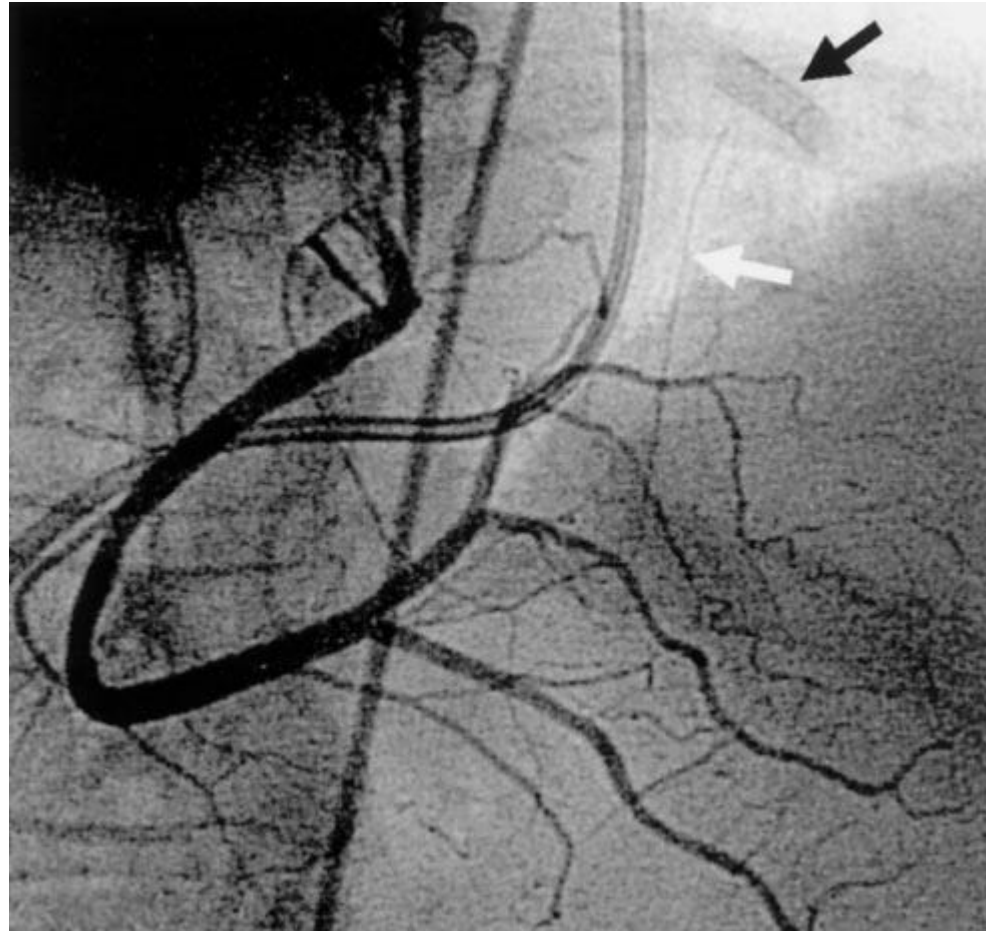
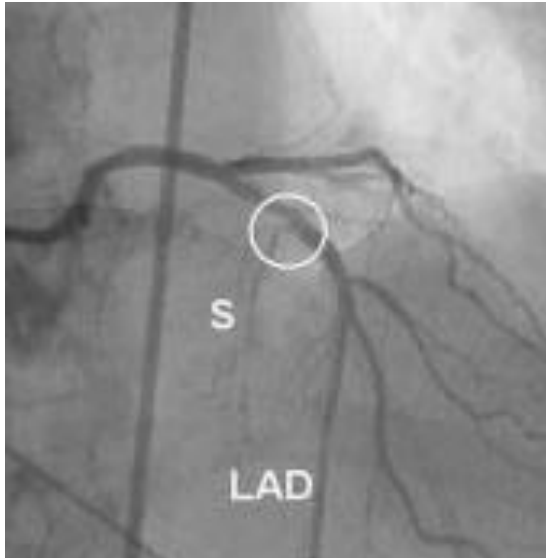
ZALEPIT!

New Approach to Septal Ablation: Glue (Cyanoacrylate) Septal Ablation



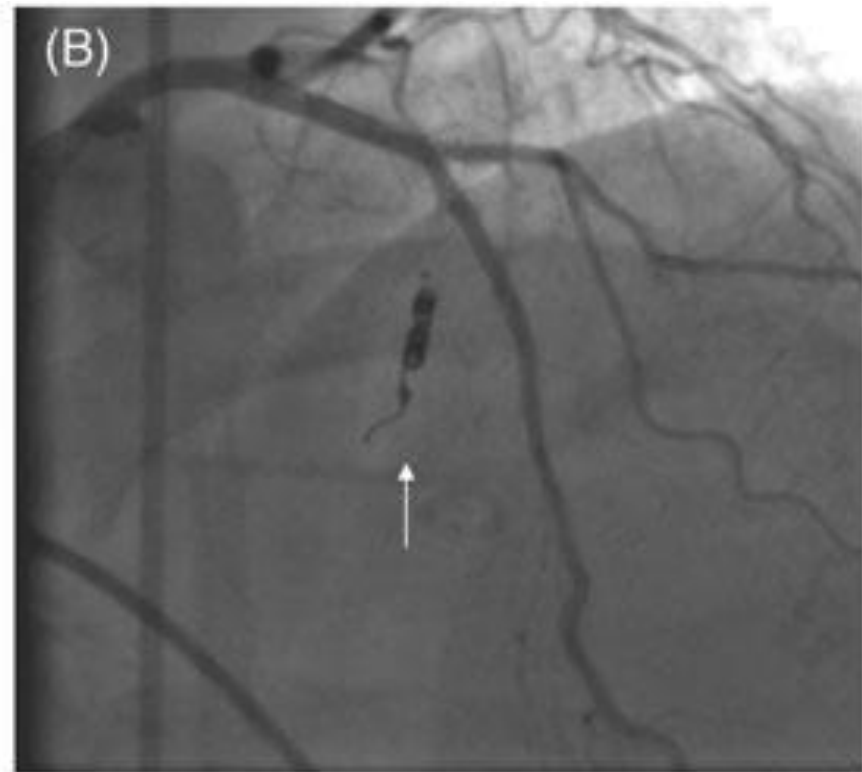
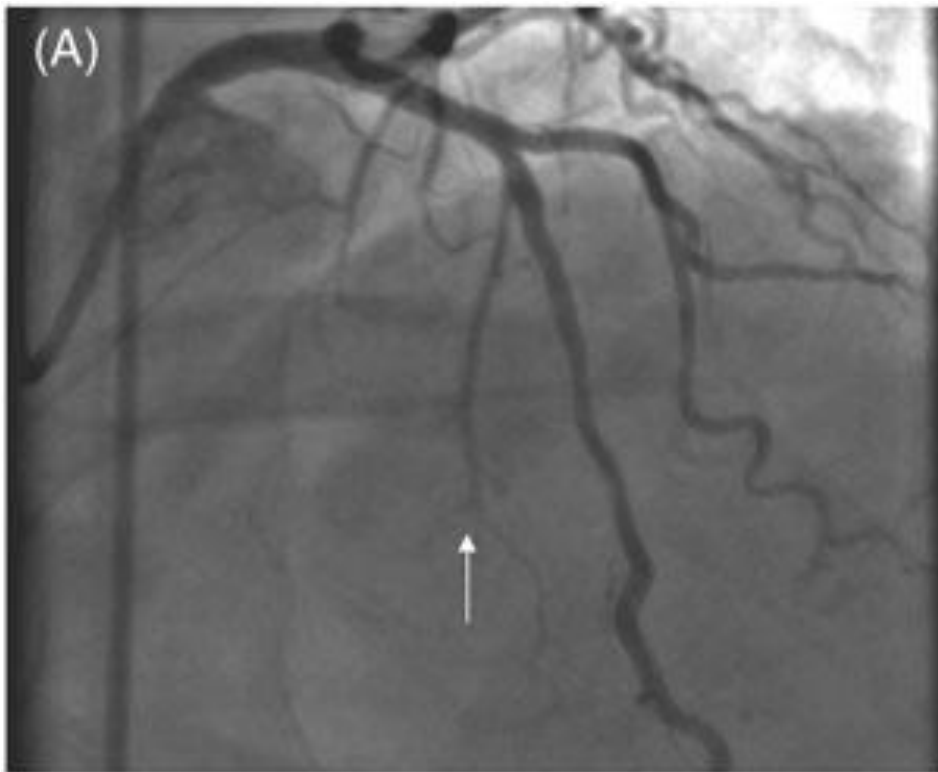
UZAVŘÍT V Odstupu!

Covered stent septal ablation for hypertrophic obstructive cardiomyopathy: initial success but ultimate failure resulting from collateral formation



UCPAT!

Non-surgical septal myocardial reduction by coil embolization for hypertrophic obstructive cardiomyopathy: early and 6 months follow-up

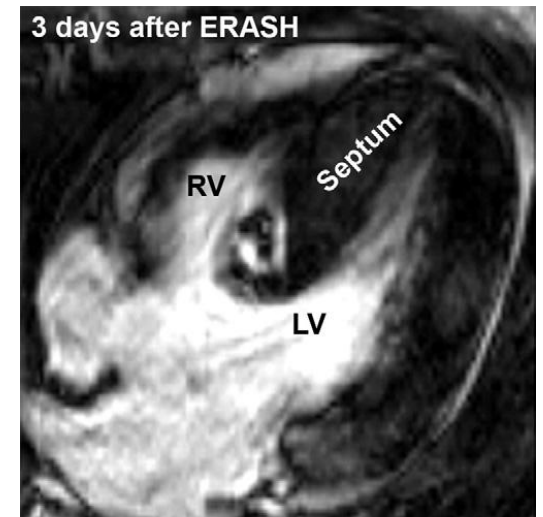
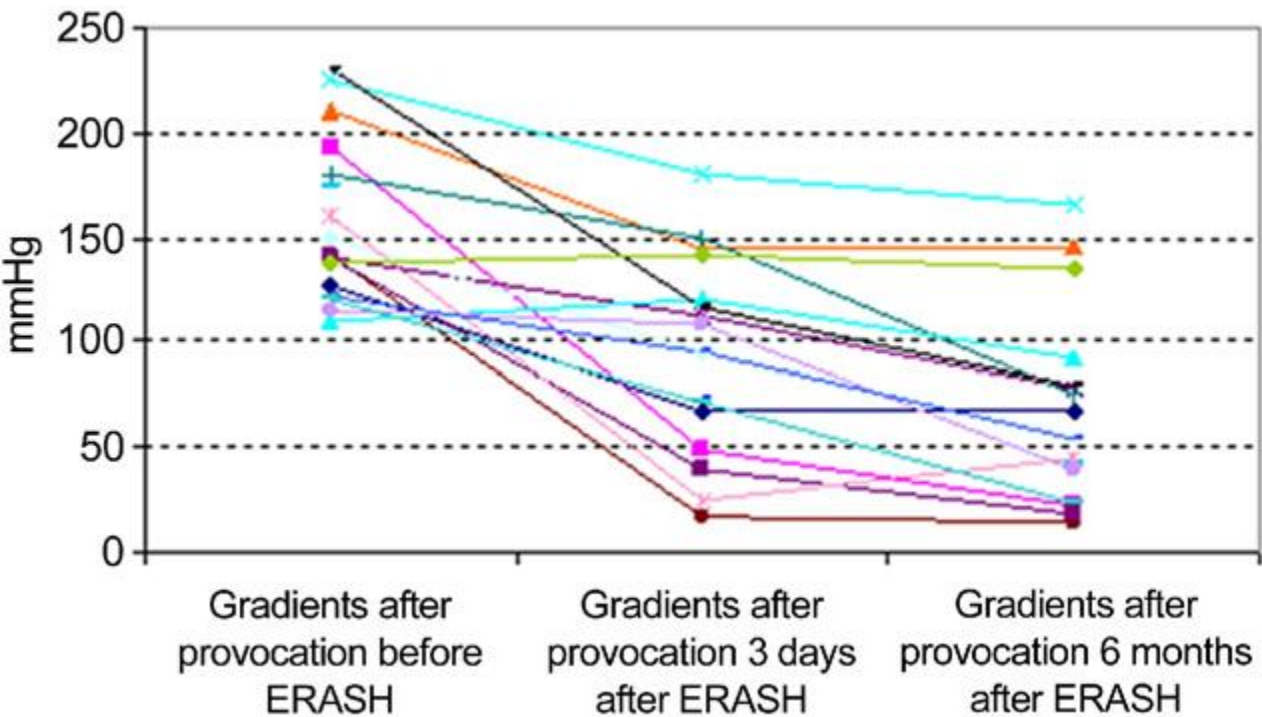


UVAŘIT!

ERASH

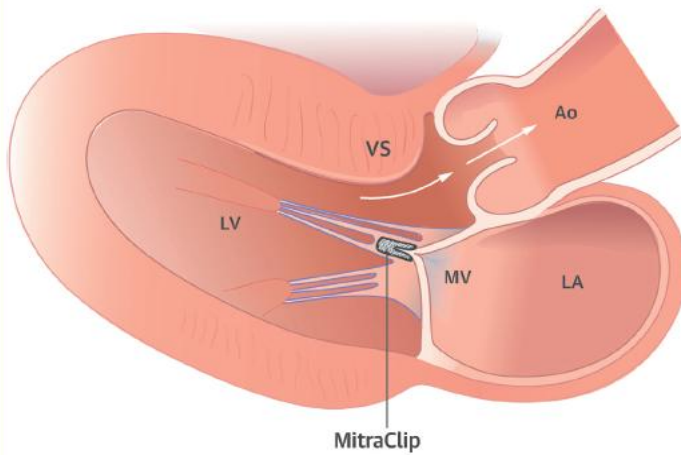
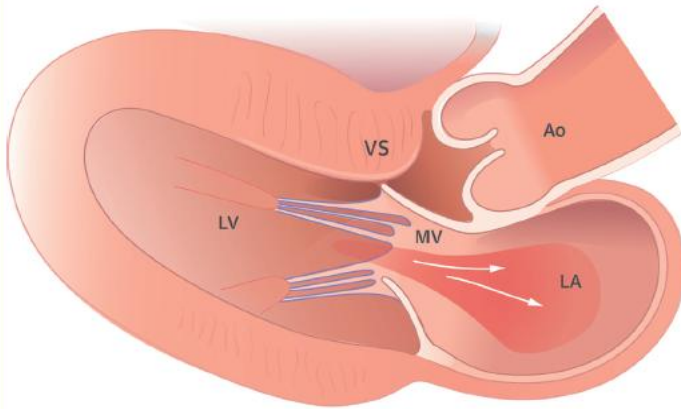
(Endocardial Radiofrequency Ablation of Septal Hypertrophy

Lawrenz T et al. JACC 2011)

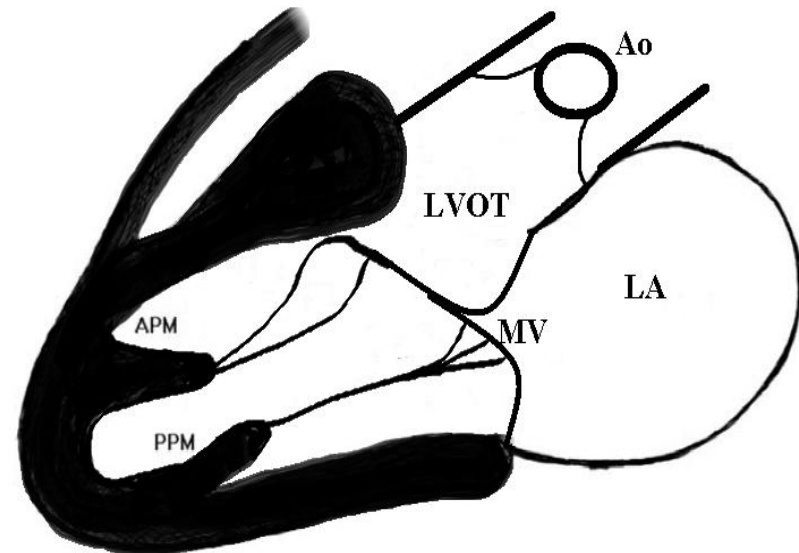
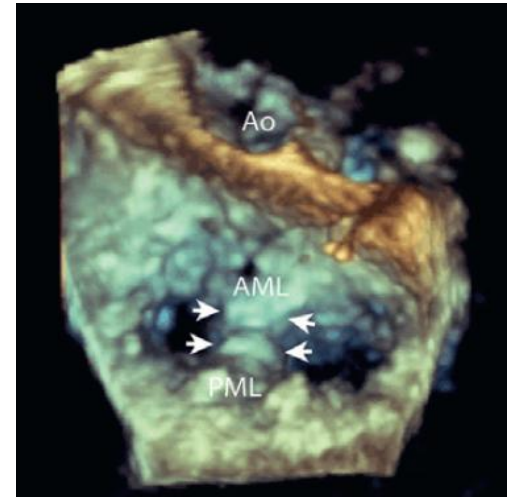


Mitraclip

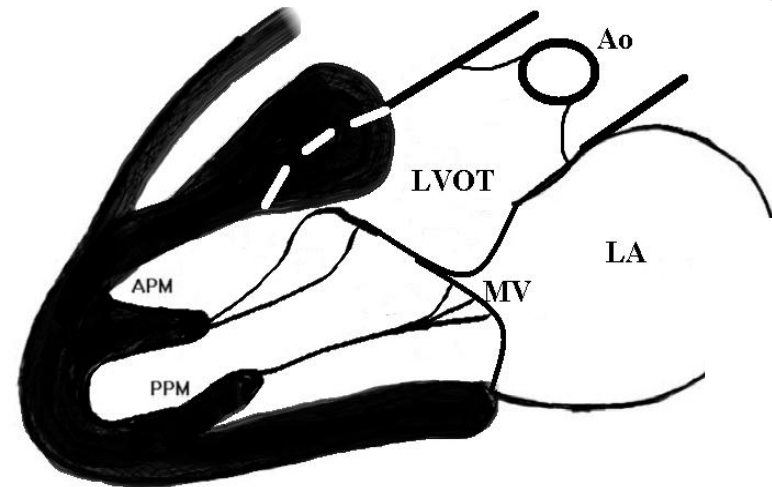
CENTRAL ILLUSTRATION Percutaneous Mitral Valve Plication in Hypertrophic Cardiomyopathy



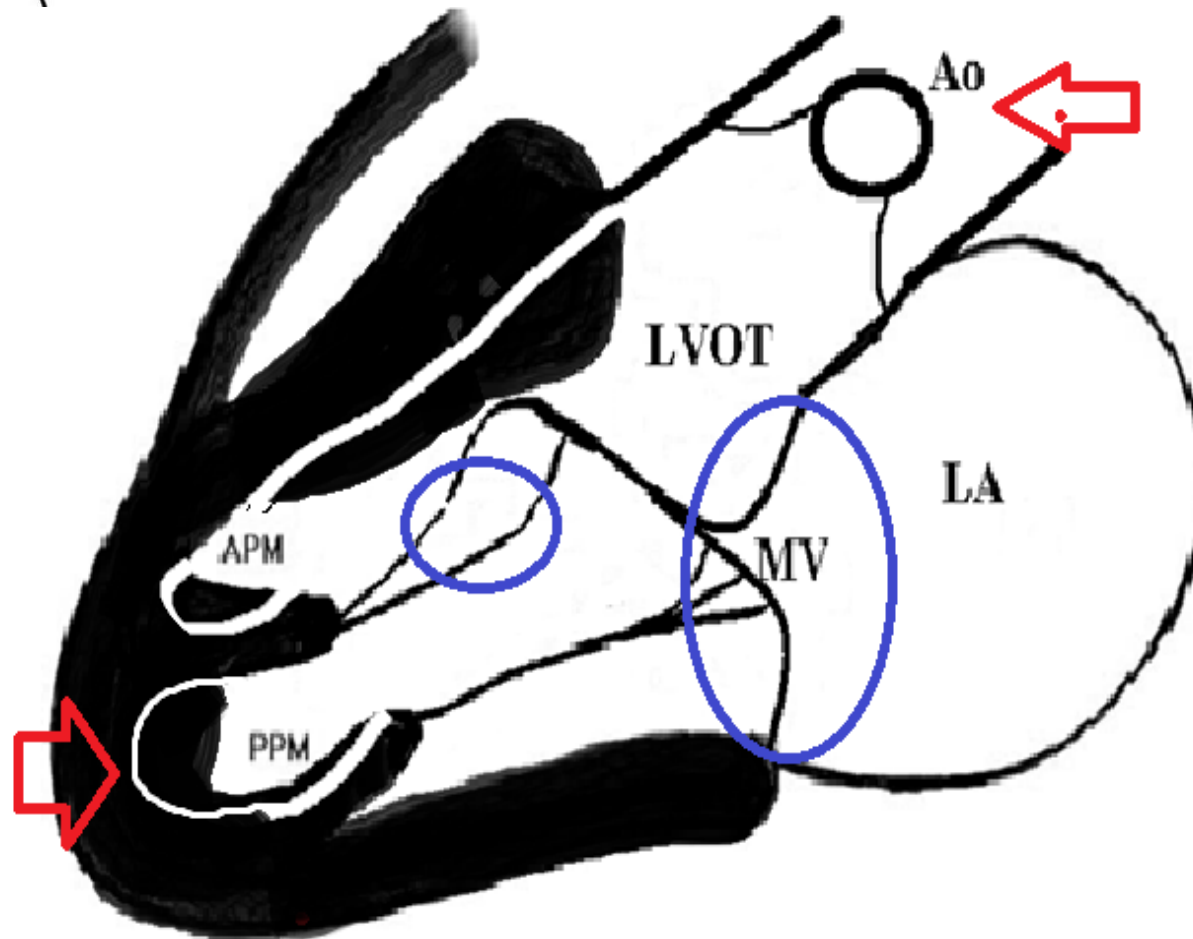
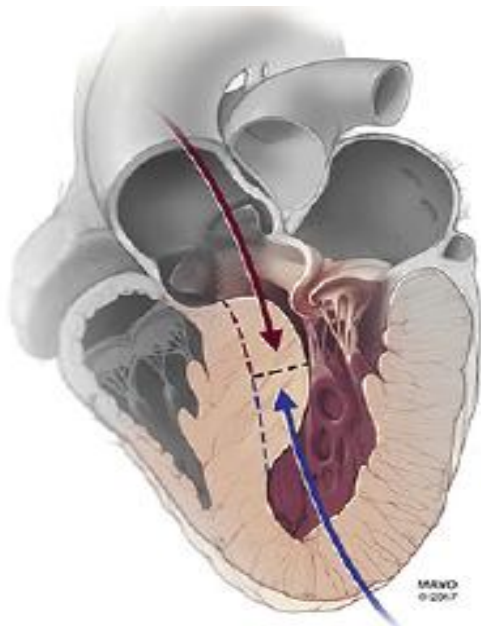
Sorajja, P. et al. J Am Coll Cardiol. 2016;67(24):2811-8.



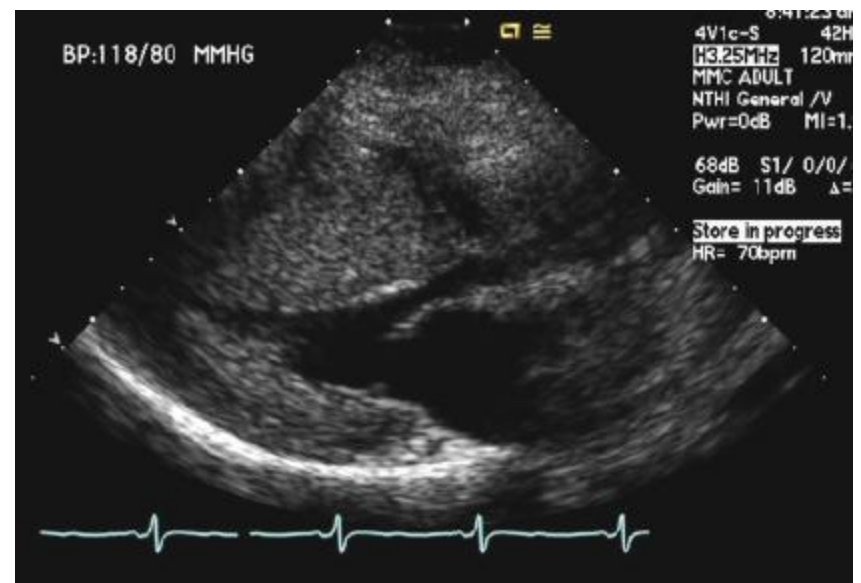
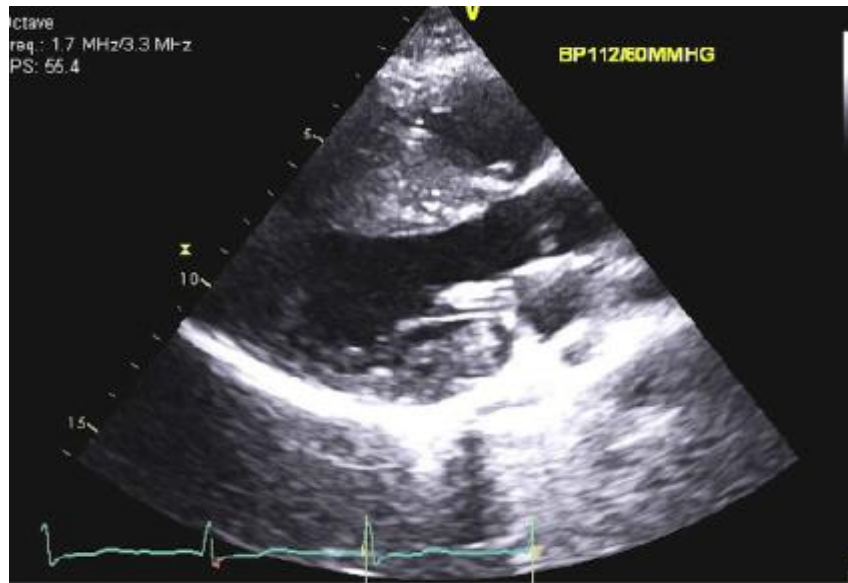
Chirurgická léčba



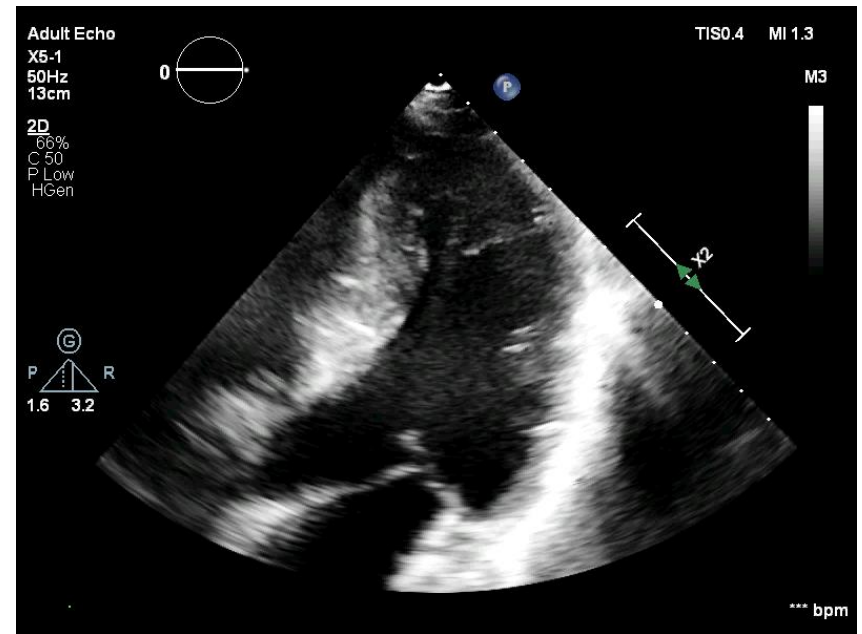
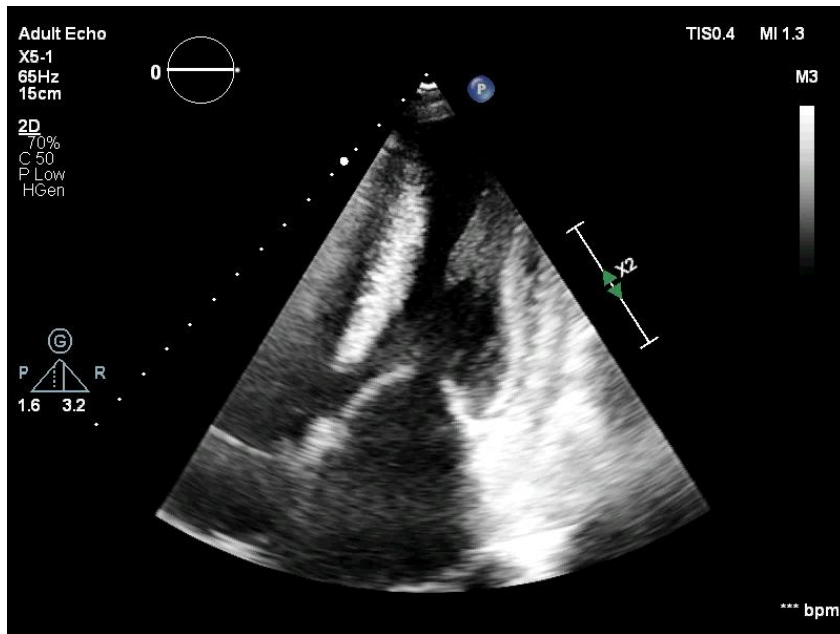
Morrow procedure



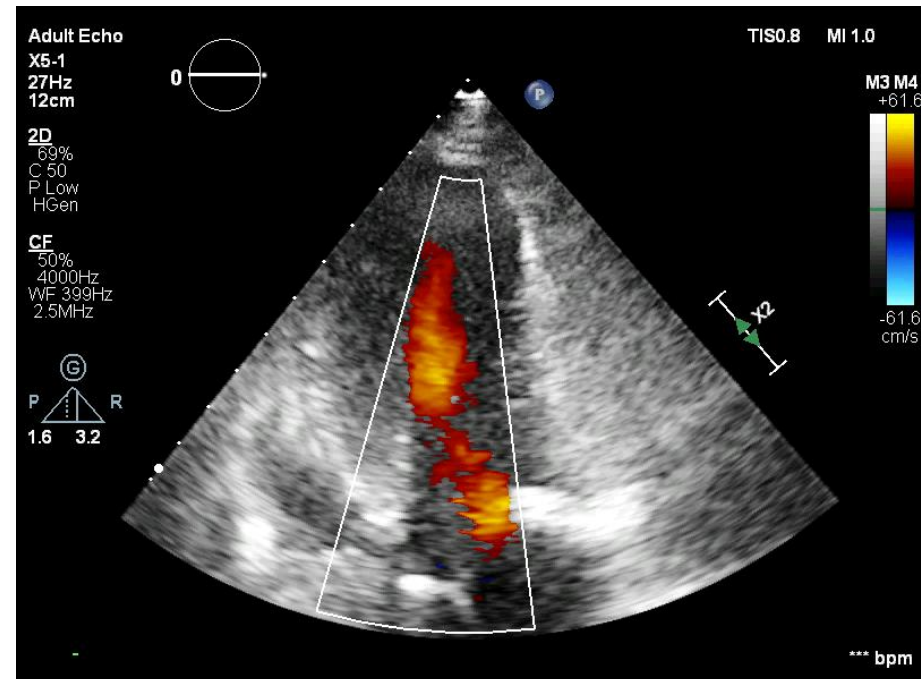
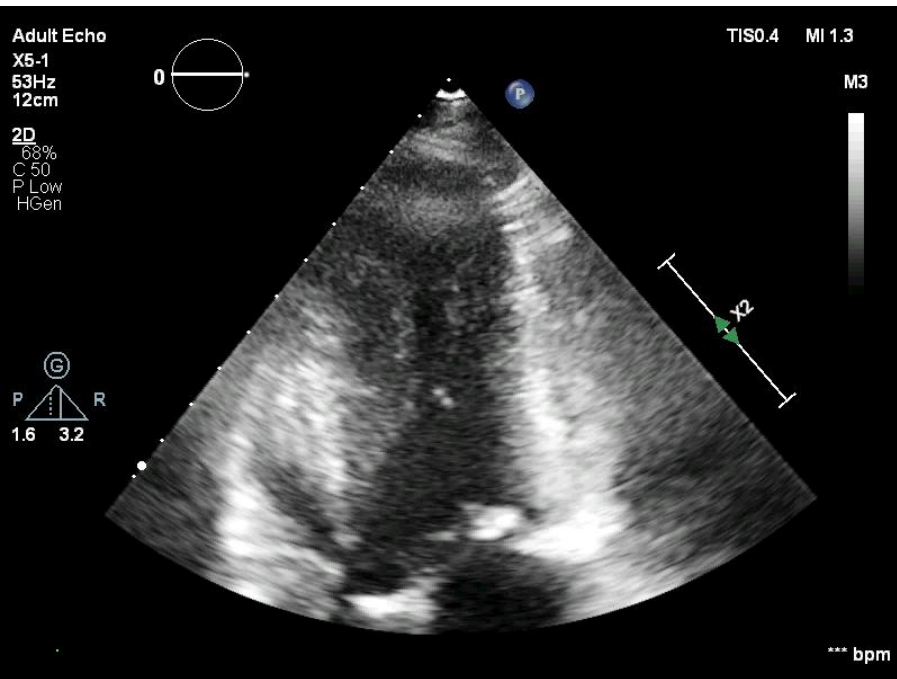
Kavitární obliterace



Mye versus Mye



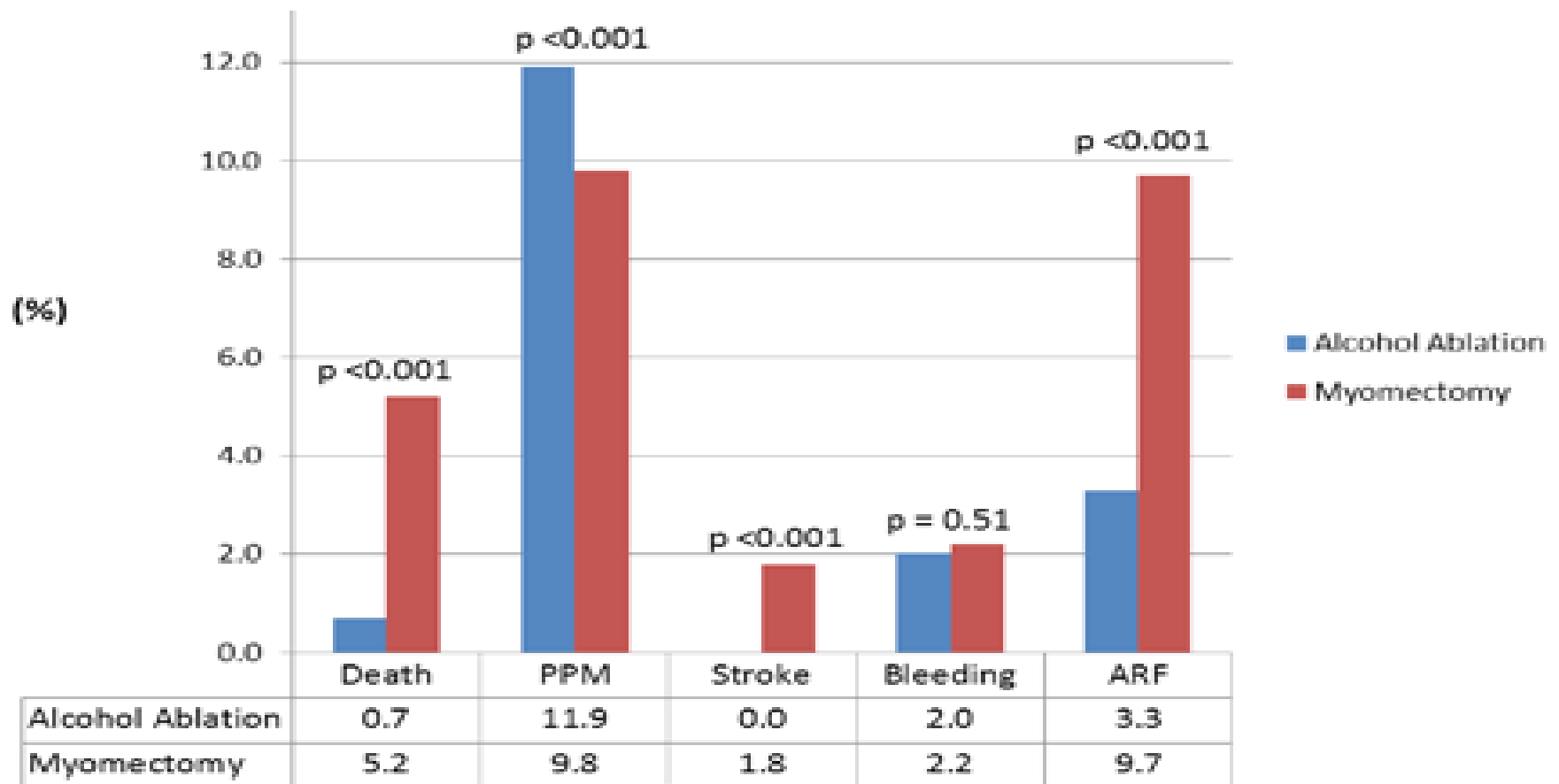
Uspokojivá ASA?



Septal Myectomy is Associated With Worse In-Hospital Outcomes than Alcohol Septal Ablation: Data From the Nationwide Inpatient Sample in the United States, 2003-2011

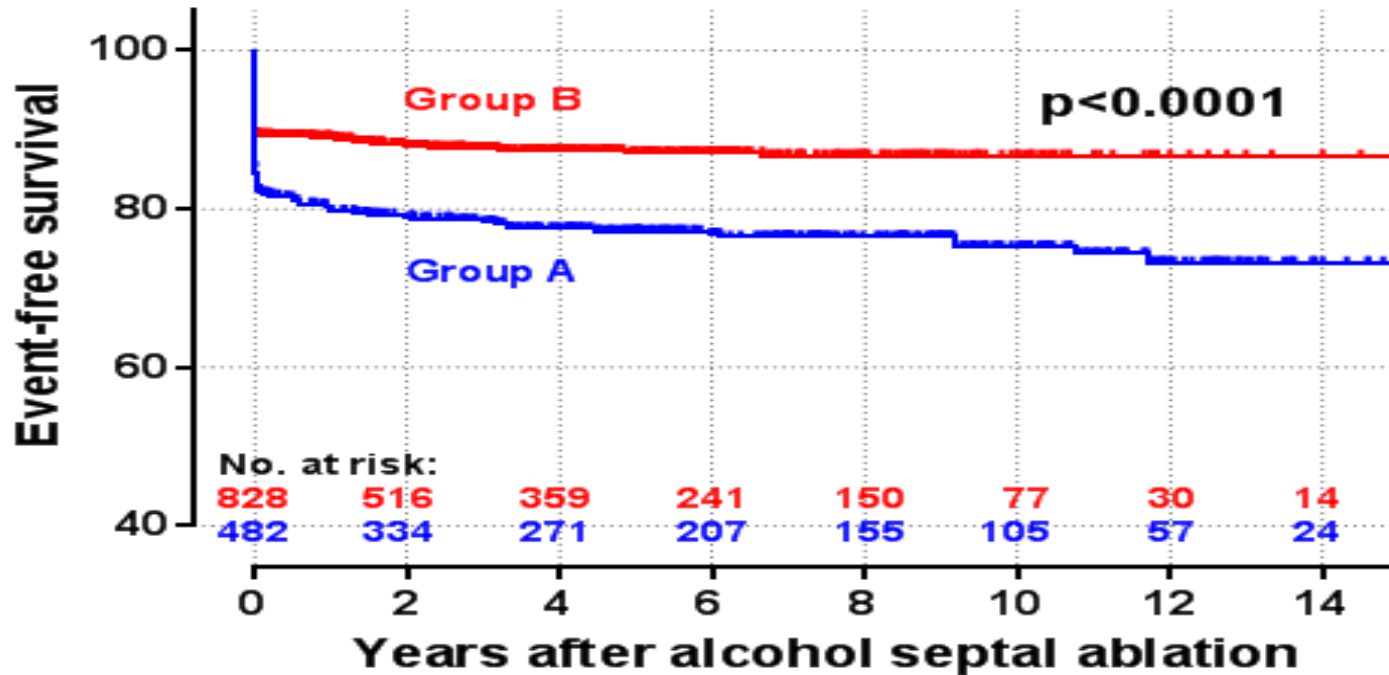
Fi

All pts. who were hospitalized for ASA (n=6.386) or MYE (n=4.862) in the Nationwide Inpatient Database from 2011 to 2013.



Sufficient expertise

Peri-procedural complications and PM



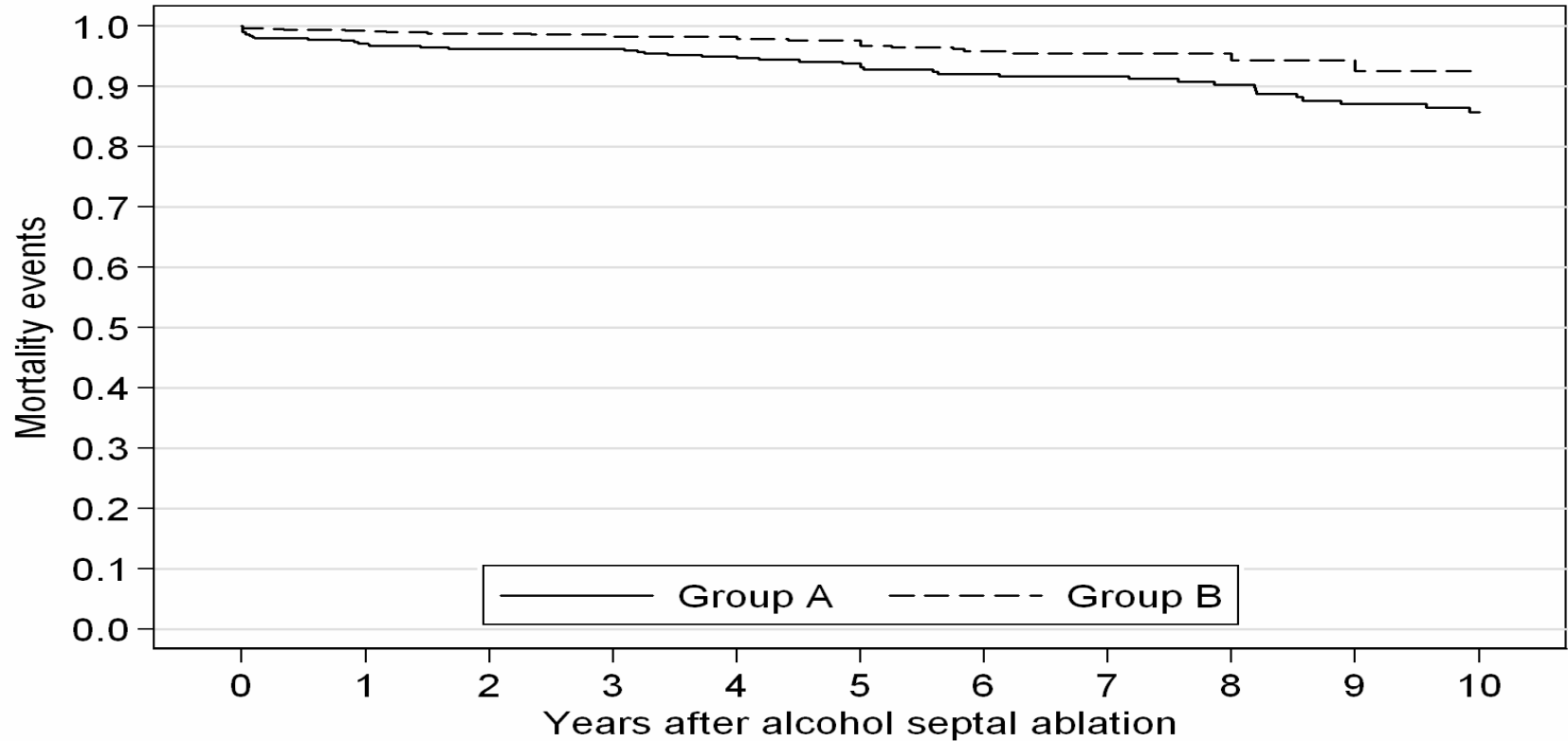
Group A 1-50 ASA interventions

Group B more than 50 ASA interventions

EP = VT/VF up to 30 days, death up to 30 days, tamponade up to 30 days, PM implantation

Sufficient expertise

CV mortality



No. at risk

828	688	579	491	398	337	267	214	158	104	79
482	440	414	386	349	309	271	240	201	169	138

Kaplan-Meier curves describing survival free of cardiovascular death in group A versus group B (adjustment for age, baseline pressure gradient, baseline septum thickness, and year of performed procedure) ($p < 0.01$).

Cardiovascular mortality events and post-ASA obstruction



Freedom from cardiovascular mortality events occurring after the first post-ASA check-up in patients with residual **LVOTO ≥ 30 mmHg and < 30 mmHg** (adjustment for age, sex, baseline LVOTO, and baseline septum thickness). **HR 2.95, 95% CI 1.26-6.91**

Outcome of Alcohol Septal Ablation in Mildly Symptomatic Patients with Hypertrophic Obstructive Cardiomyopathy

A Long-Term Follow-Up Study Based on the Euro-ASA Registry



Take-home messages

- **Diagnostika**
 - Kde je hypertrofie?
 - Tloušťka IVS
 - Abnormální PMs?
 - Délka cípů mitrální chlopně?
 - Patologie mitrální chlopně?
 - Jak rozsáhlý SAM?
- Subaortální / midventrikulární obstrukce?
- Kavitární obliterace

Take-home messages

- **Terapie**

- Zkušenost centra
- Maximální centralizace pacientů
- Liberalizace indikací k intervenci
- Tendence k eliminaci gradientu

PRACTICE MAKES DIFFERENCE!

Übung macht den Meistern!