První zkušenosti s ablací pulsním polem ve FN HK

„jde to i single use a bez anesteziologa“

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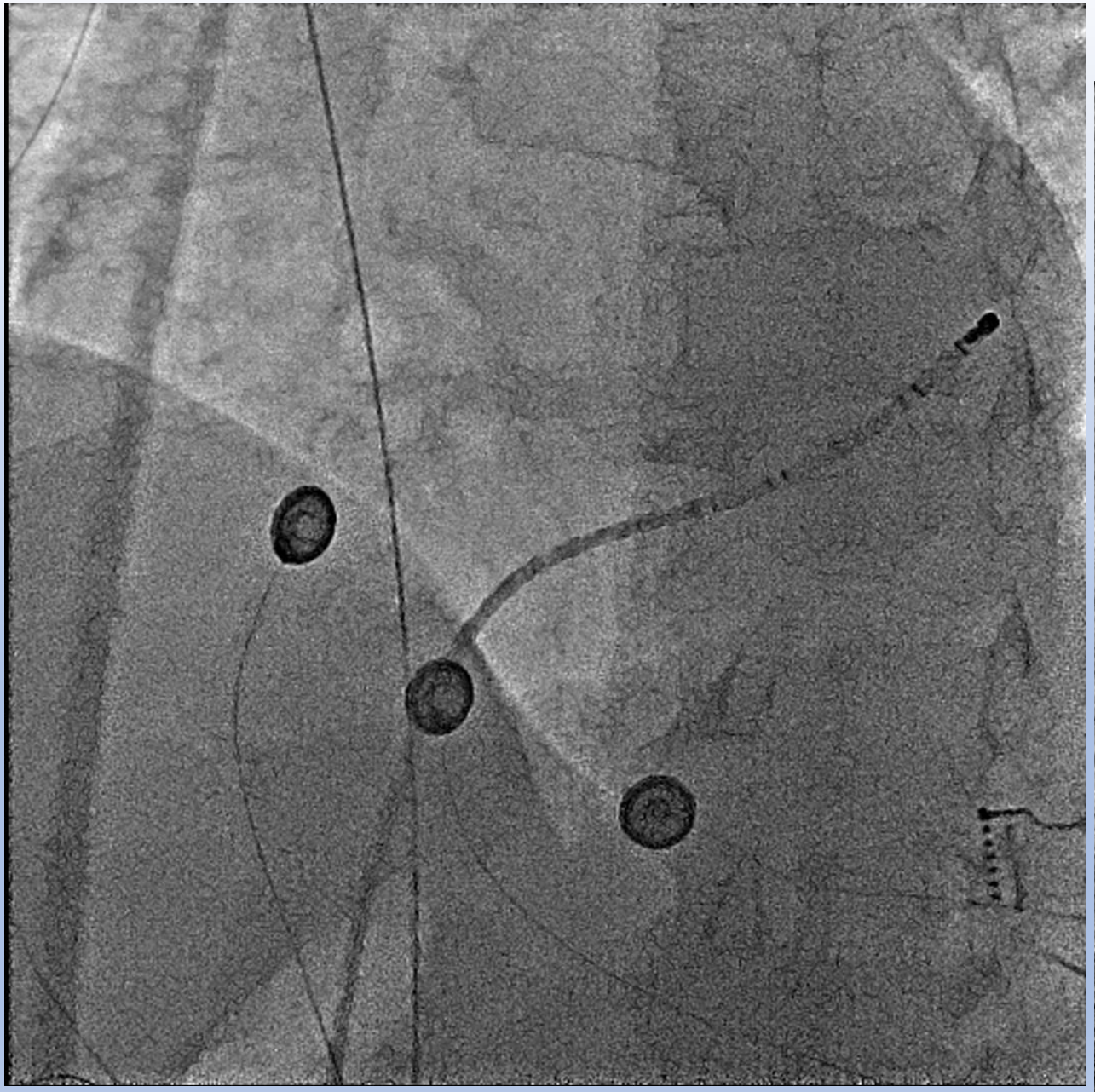
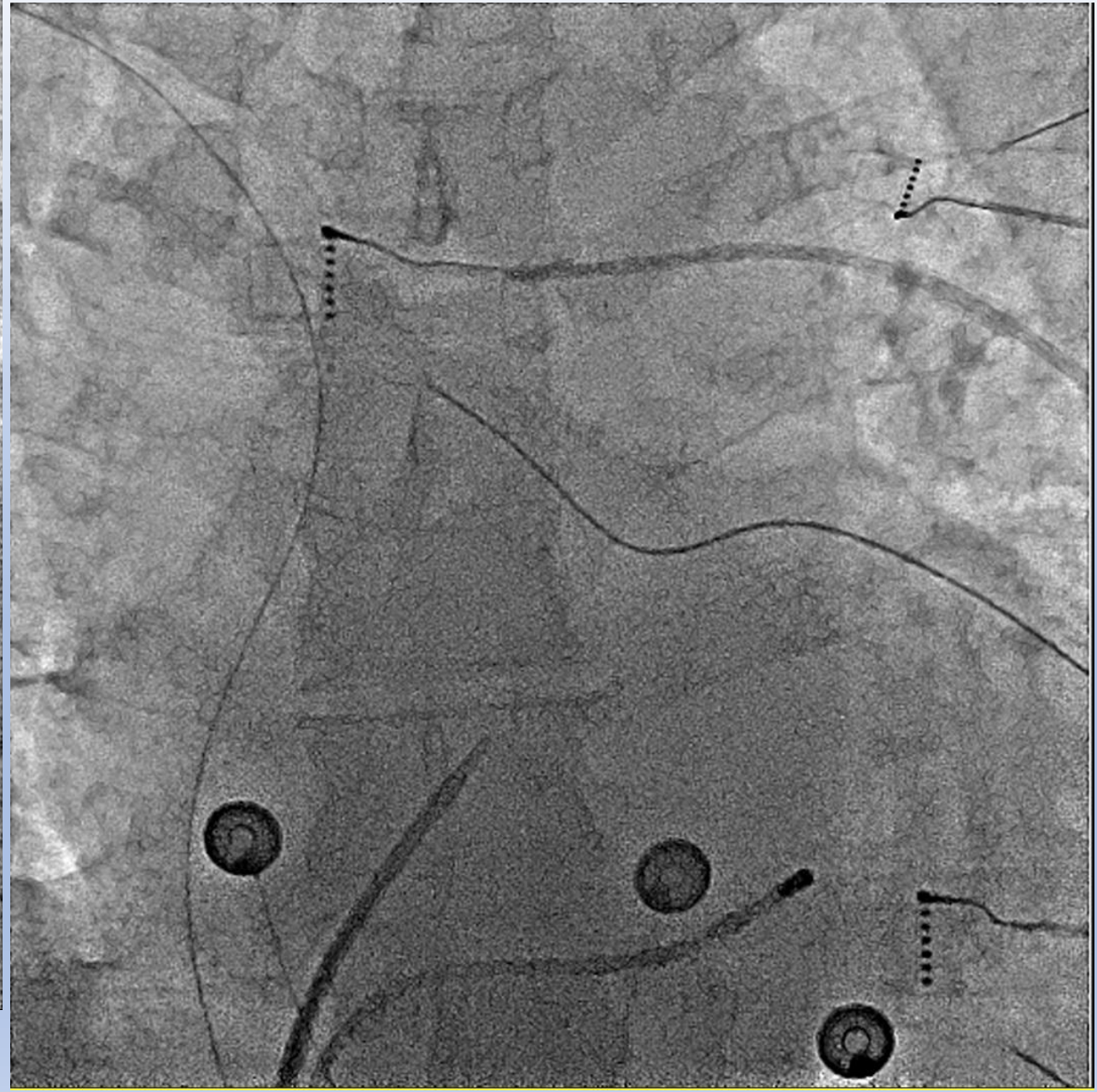
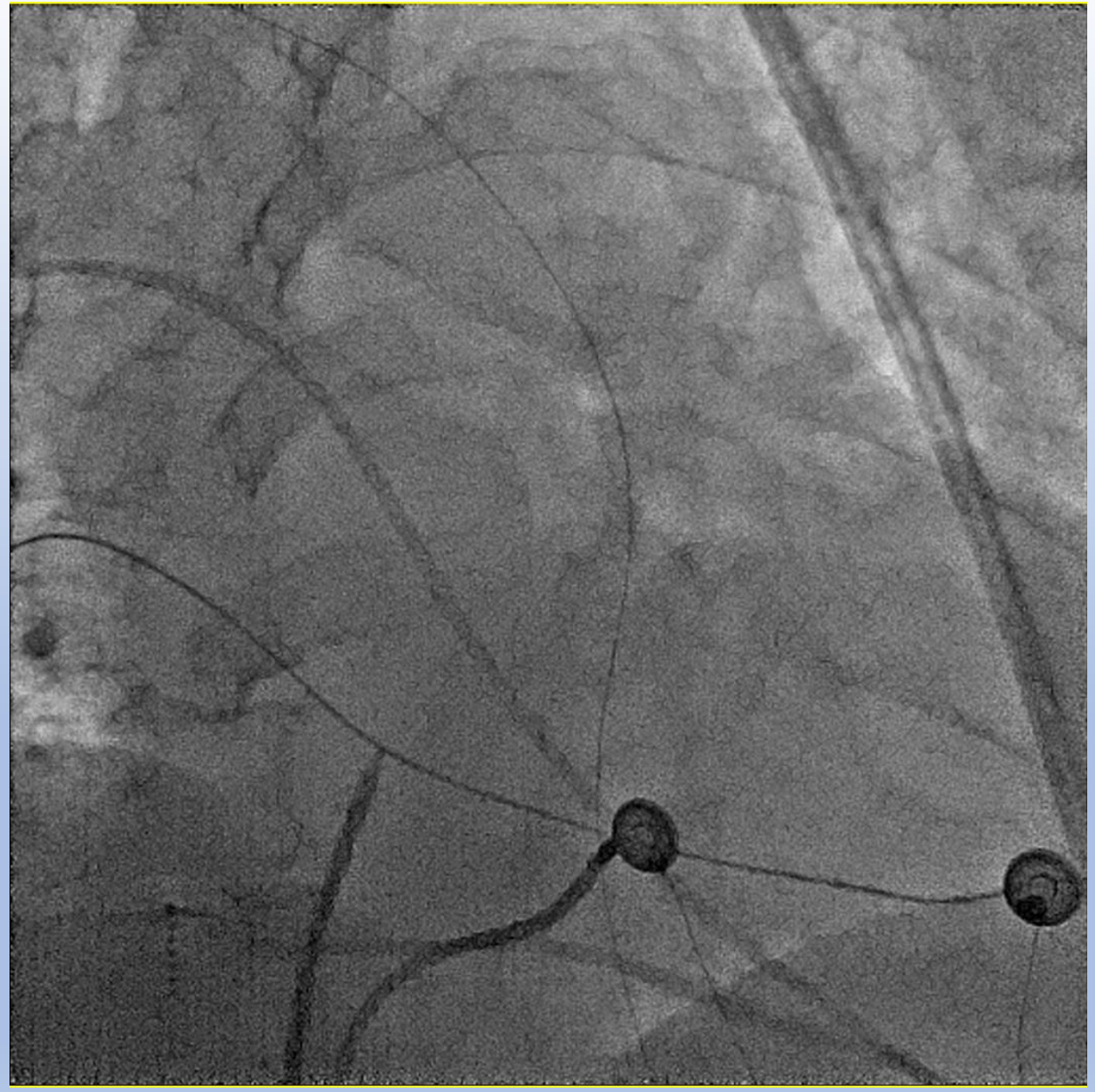
I. interní kardioangiologická klinika FN HK

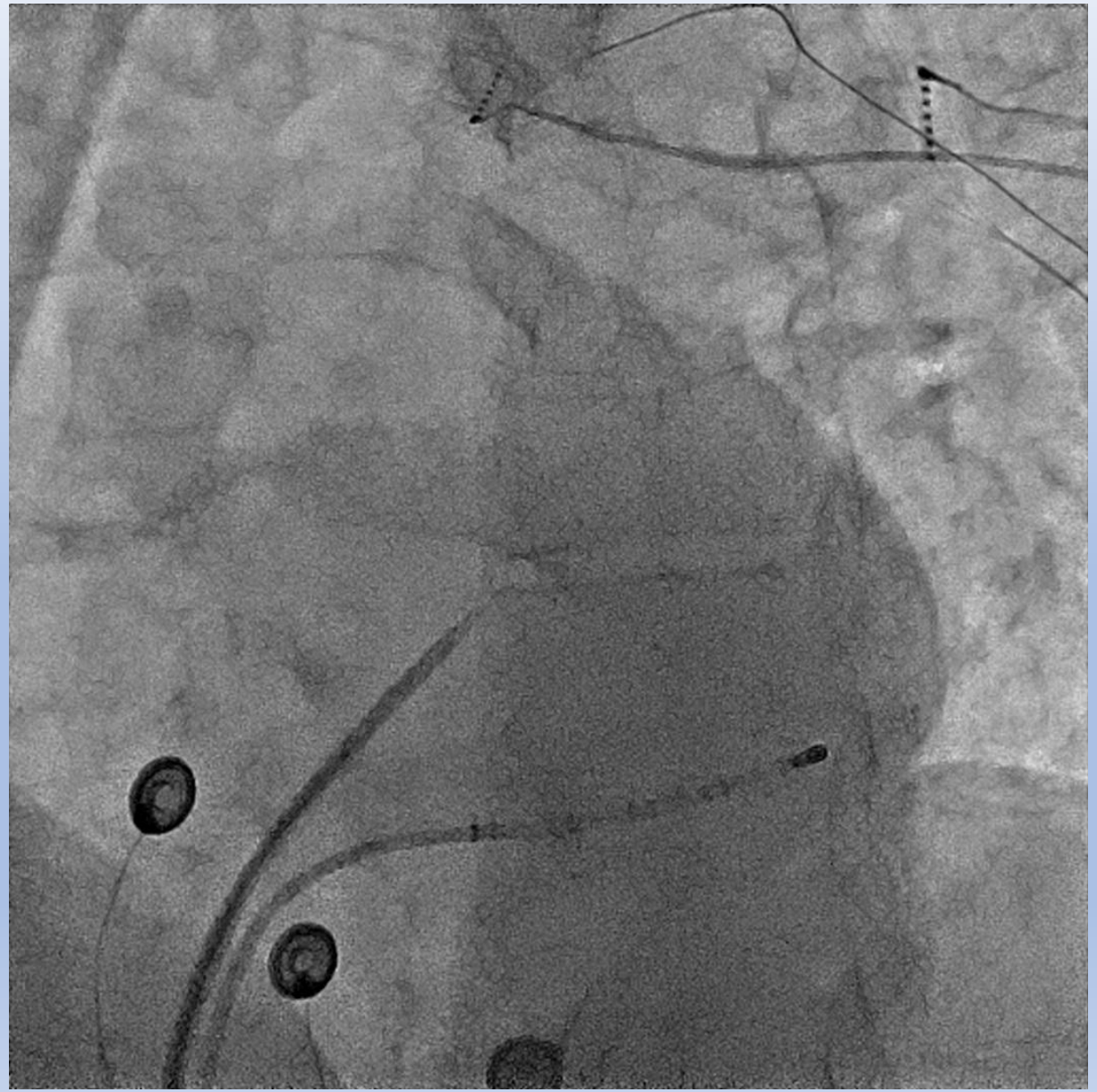
Postup FN HK

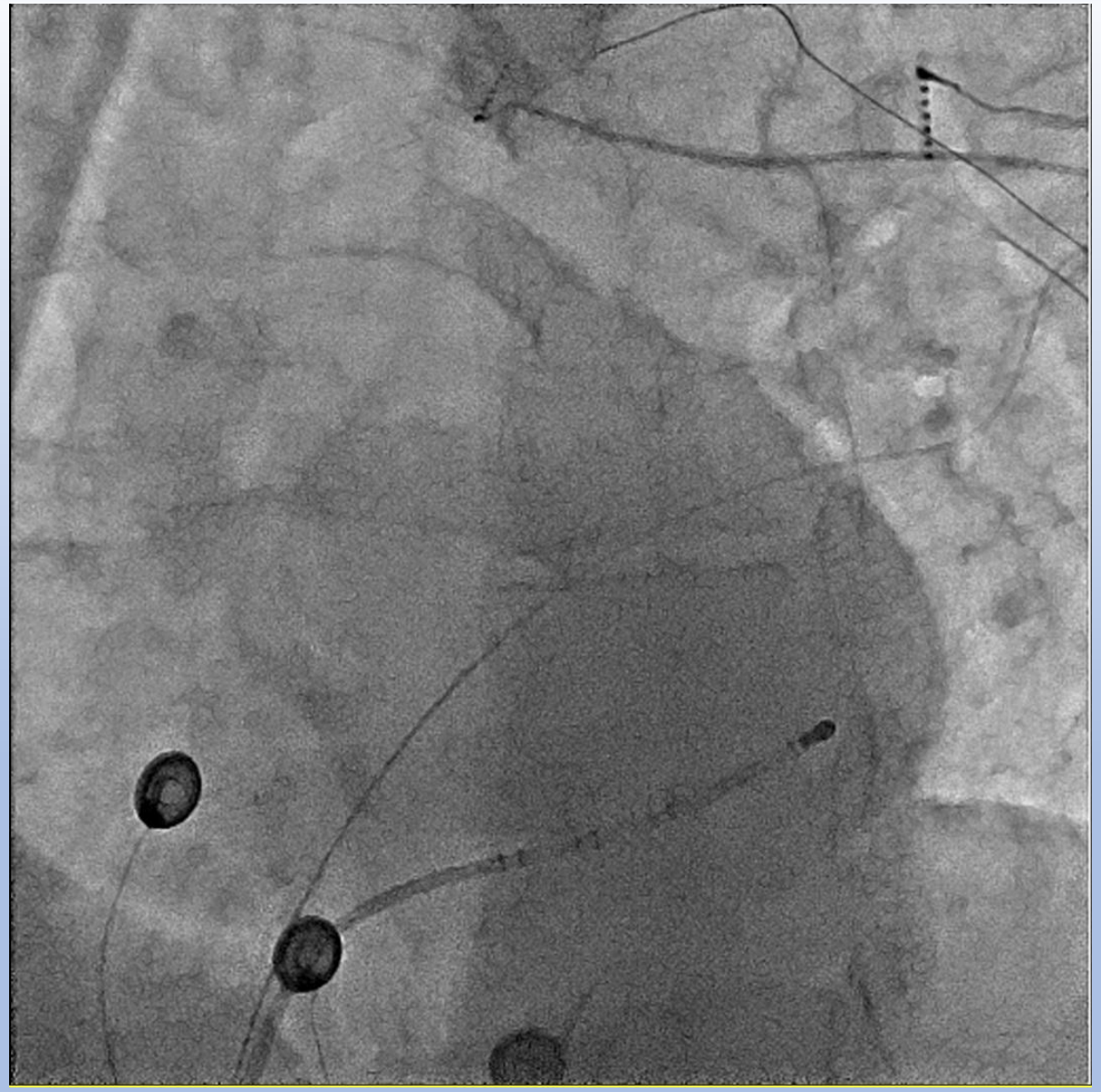
- 1. výkon 11/2023
- Preprocedurální MR/CT srdce
- Skiaskopická navigace
- Částečná podpora 3D systému CARTO (DECANAV®)
- Hluboká analgosedace vedená sedační EP sestrou
- v.fem.l.dx. 2x pod UZ kontrolou

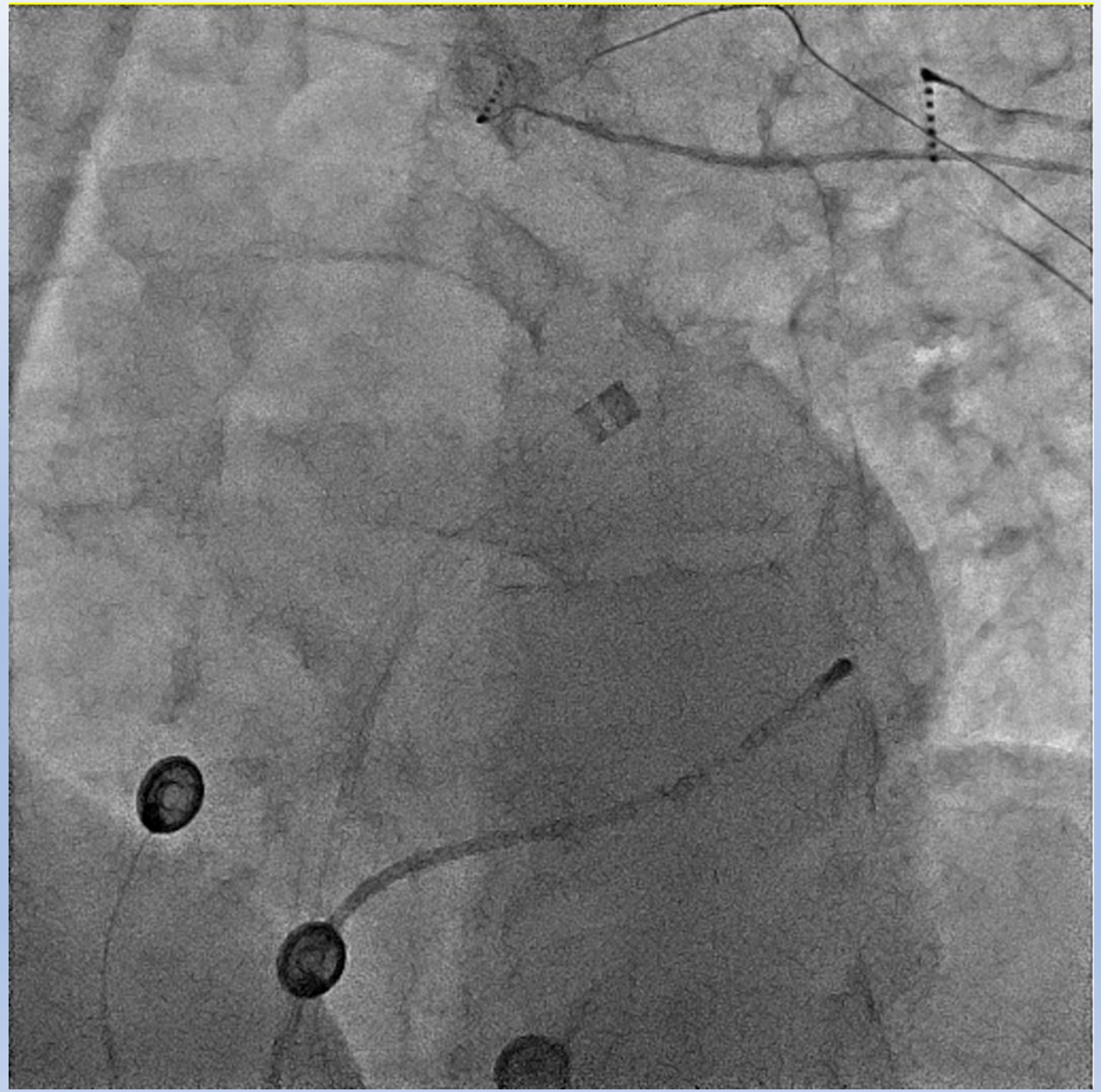


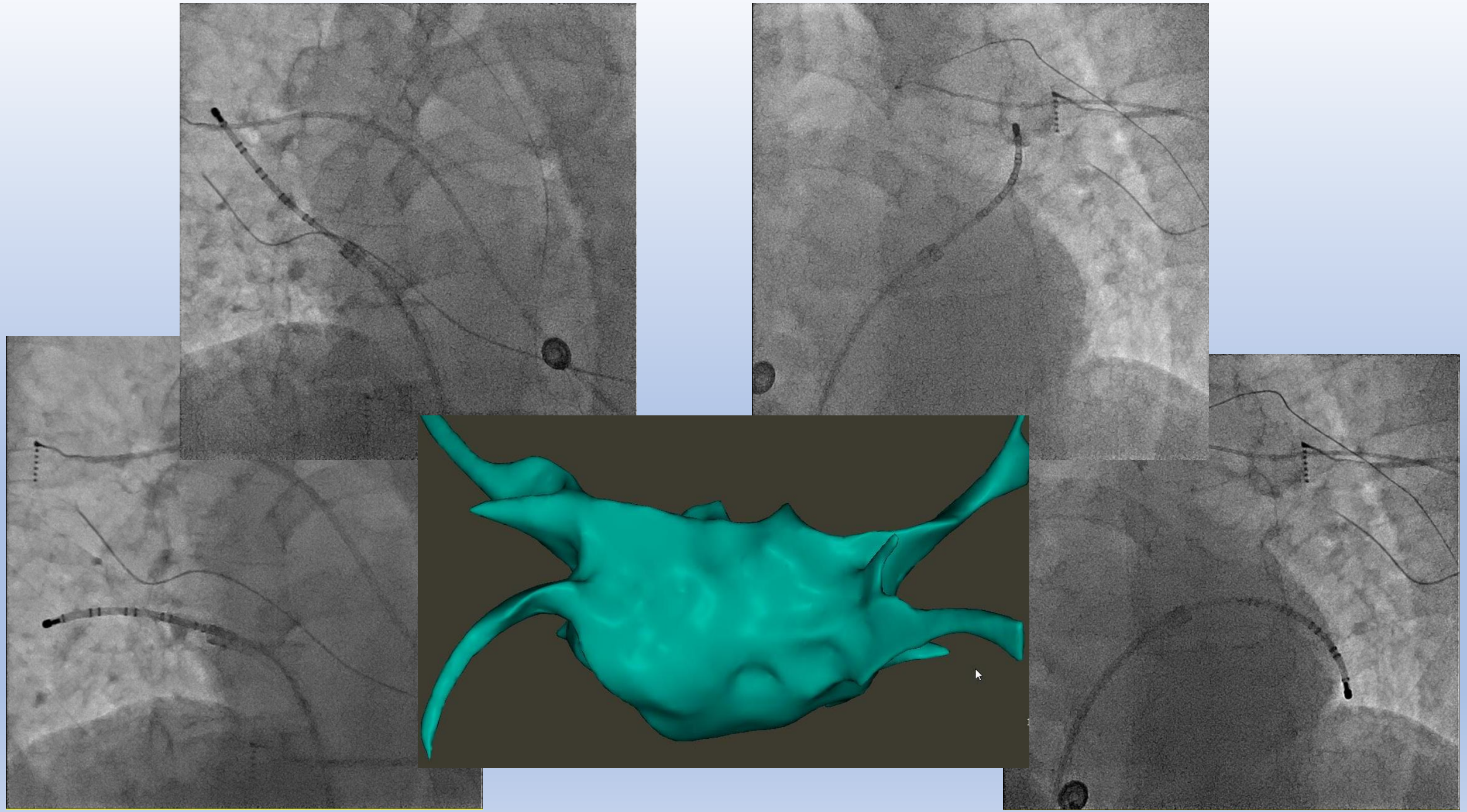


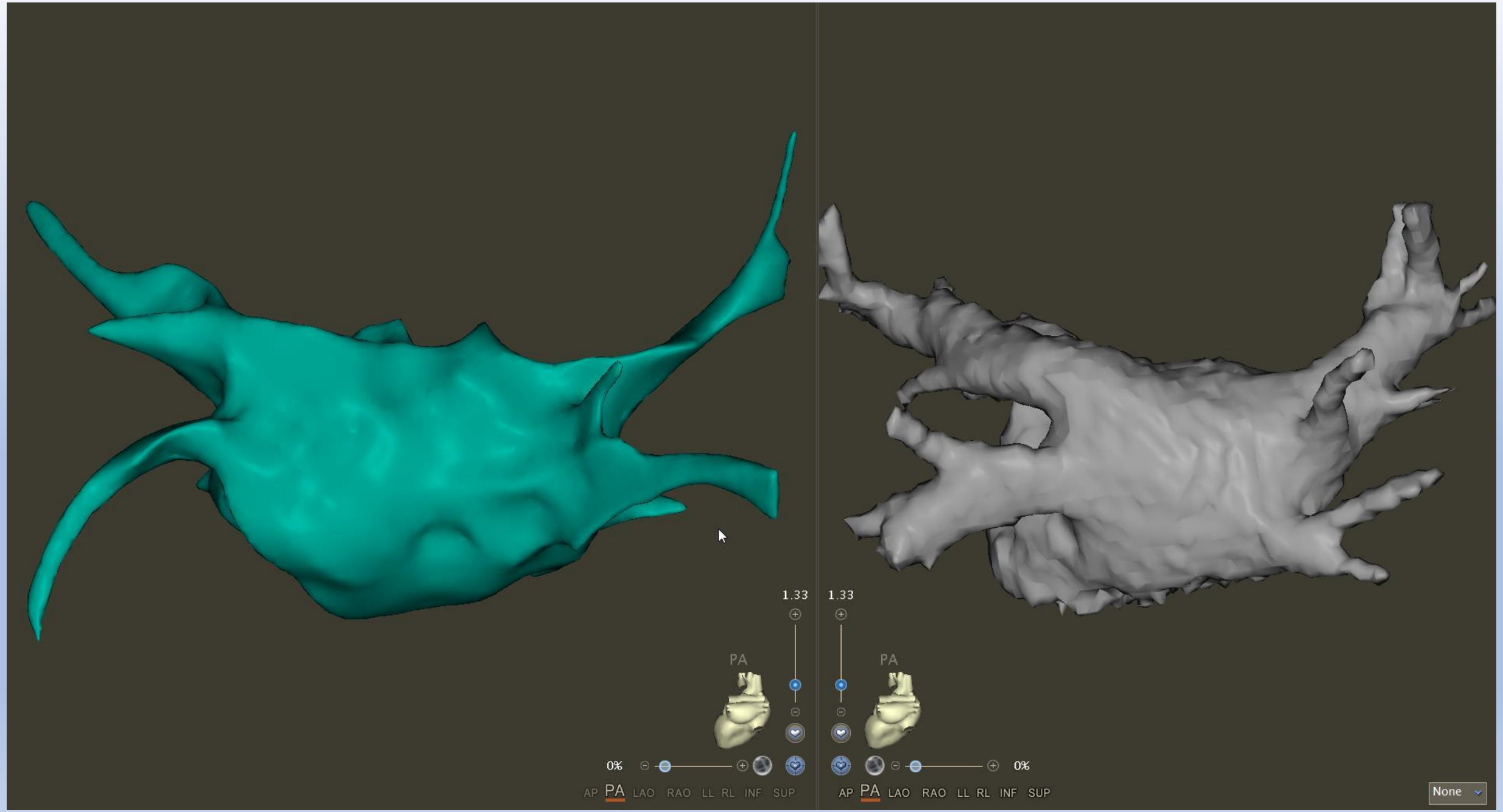








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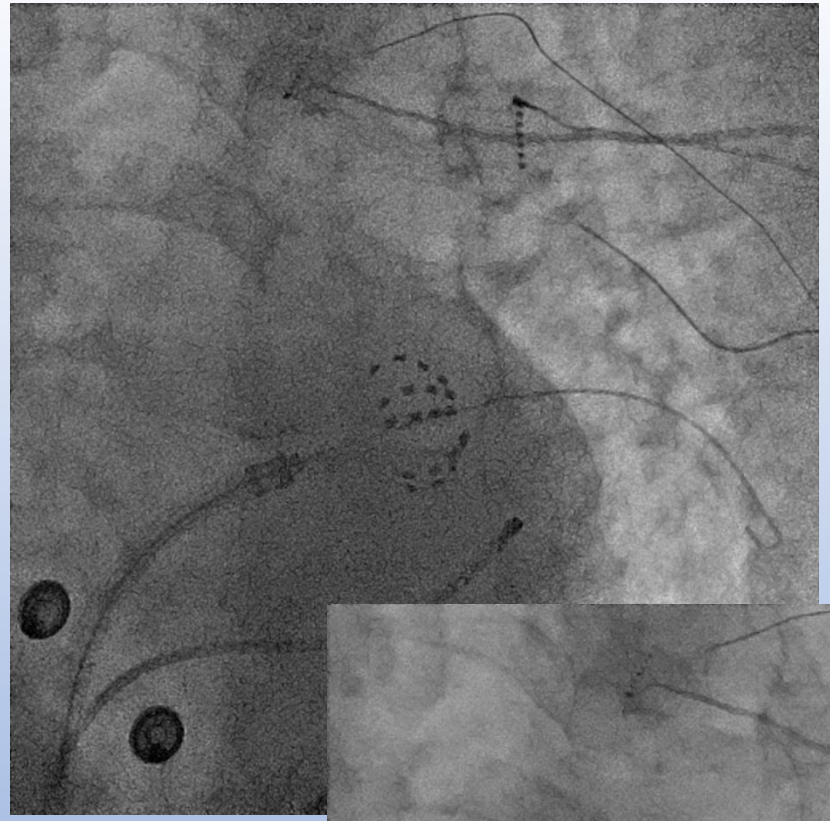
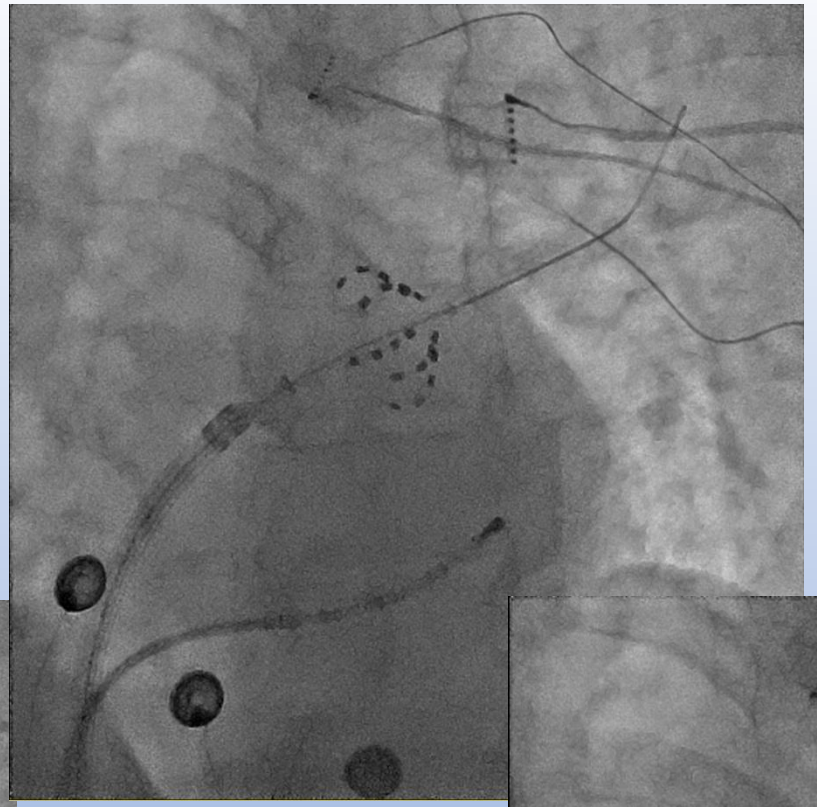
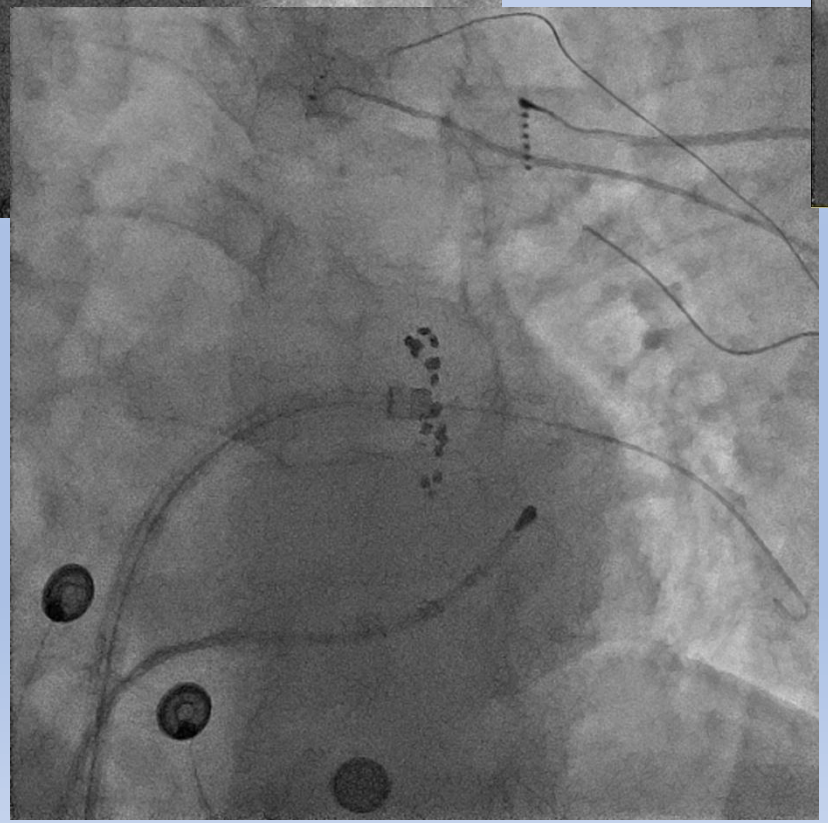
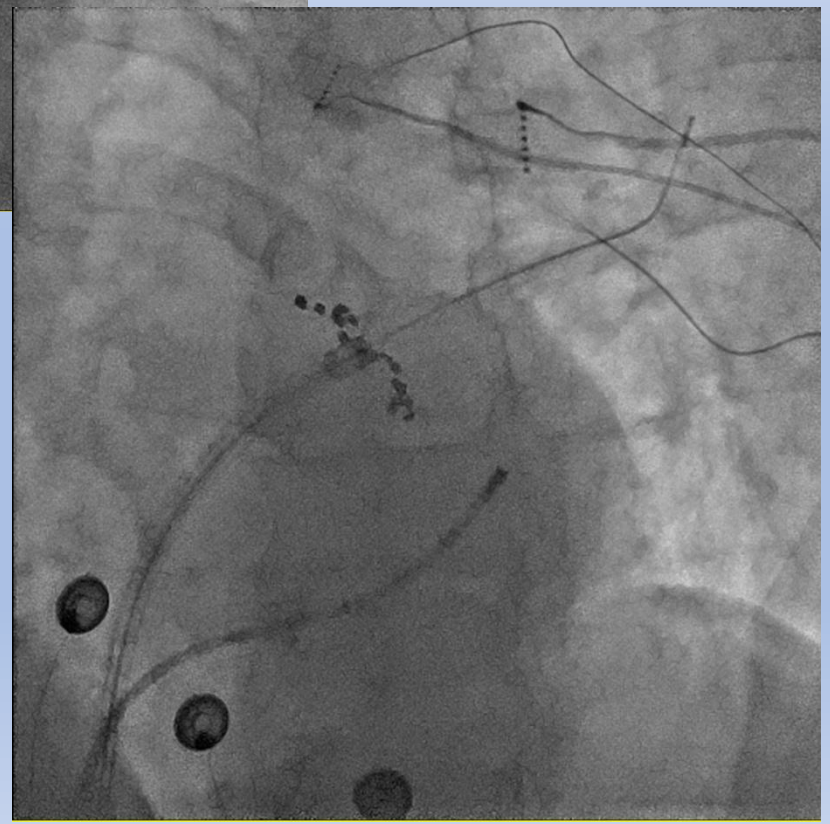

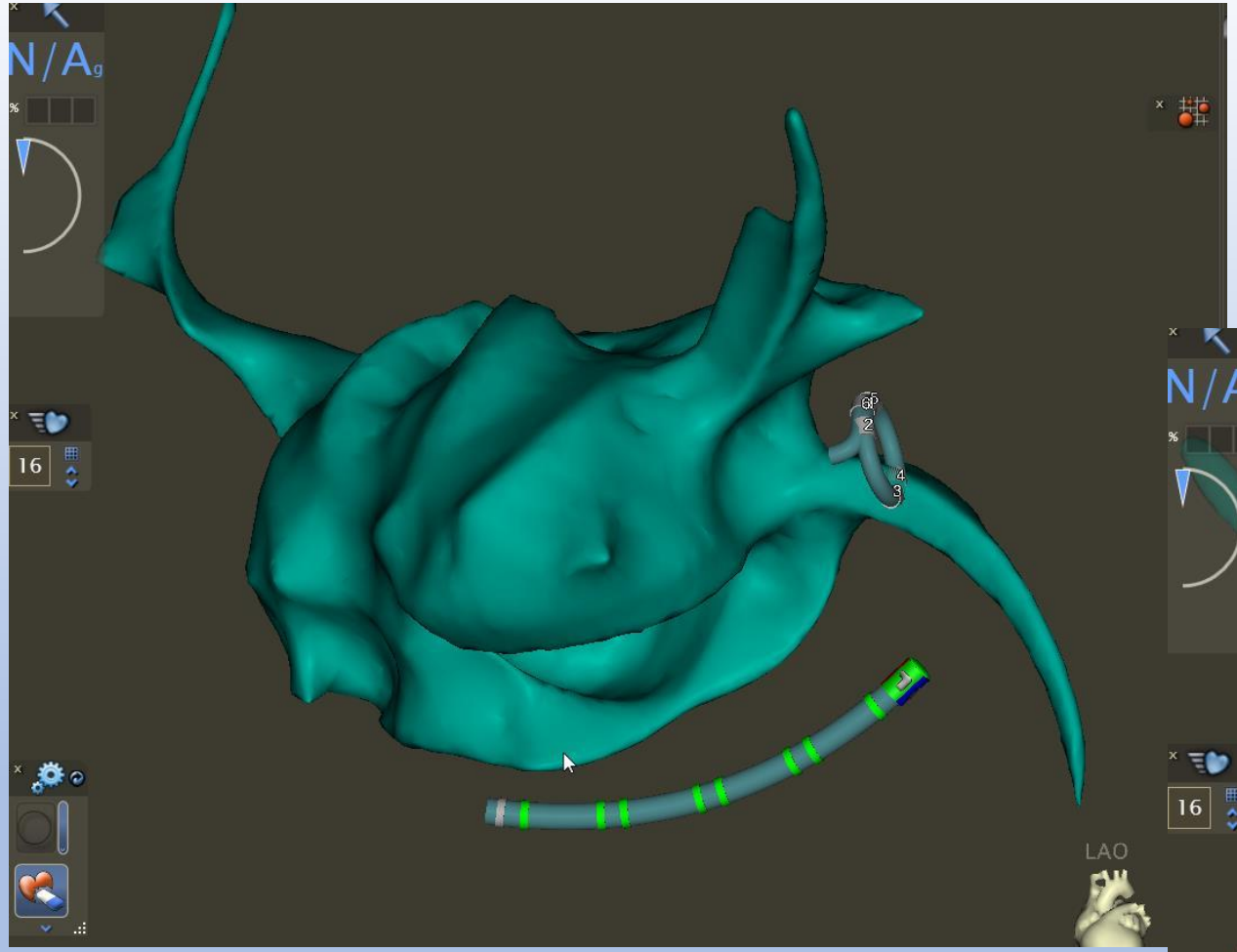
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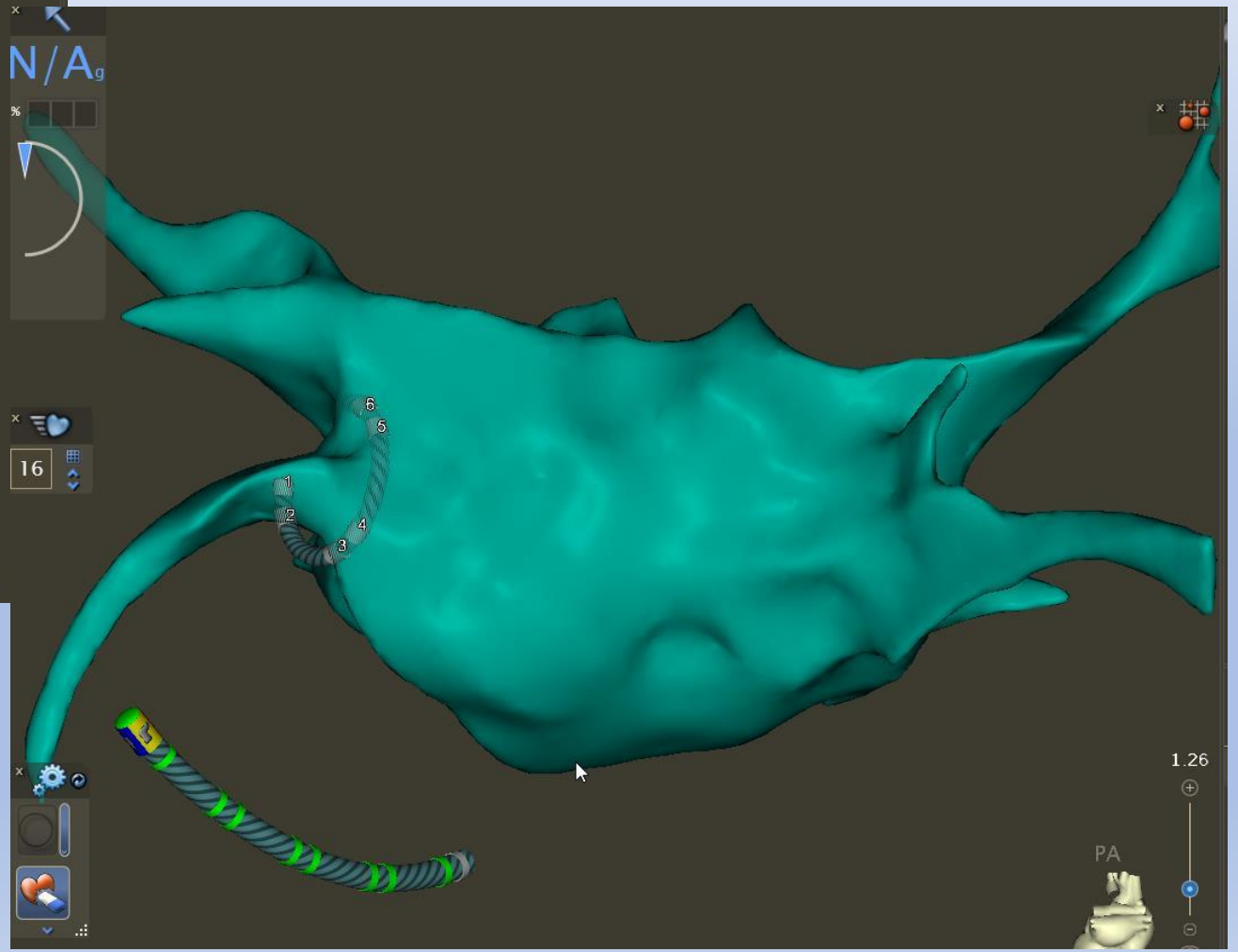
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Protokol analgosedace

Sedation regimen	**Induction 1** (after peripheral cannula insertion): • Midazolam 2,5mg i.v. • Paracetamol 1000mg/100ml inf. 250ml/hour • Hartmann 1000ml sol. 750-1000ml/hour • Sufentanil 5ug i.v. bolus followed by additional boluses 2-3ug (max dose 20ug within 30min) **Induction 2** (after femoral sheaths insertion) • Propofol 1,5-2mg/kg/hour (perfusor) • Noradrenalin 0,1-0,2mg/hour guided by the blood pressure (normotensive) **Maintenance** (after ablation catheter insertion) • Atropin 1mg i.v. • Propofol bolus 0,2-0,4mg/kg (before first application, Ramsay scale target 5-6 or MOAA/S scale 1-2) and increase of continual dose to 4-6mg/kg/hour • In case of insufficient level of unconsciousness additional boluses of propofol (10-20mg i.v.) • Stop the propofol administration when the electrophysiologist finished ablation

Protokol analgosedace

Monitoring set-up	• Intravenous cannula • Non-invasive blood pressure every 3 minutes • Oxygen saturation and respiratory frequency measure, capnography • Nasopharyngeal airway • 2-5 litres of oxygen on mask without reservoir
Work-flow	• Preprocedural prevention of bronchospasm and coughing -levodropropizinum 90mg p.o. (Levopront 30gtt) -methylprednisolon 40mg i.v. (Solu-Medrol) • Initiation of propofol and sufentanil bolus and hereafter starting at the infusion rate reaching sufficient level of sedation for placement of naso/oropharyngeal airway. • Infusion rate determined based on blood pressure measurements, oxygen saturation, respiration rate and level of unconsciousness.
Discharge approach	• Overnight stay in all patients, telemetry monitored standard unit
High risk patients	• Mild analgosedation and standard RF procedure is chosen in patients with severe respiratory/cardiovascular disease, prior sedation difficulties, BMI higher than 40

Soubor a výsledky

- 2024 - 152 pacientů (104 mužů, prům. věk 64 let)
- 86 s parox FS, 58 perzist FS, 8 dl.perzist FS
- Izolace PV, ev. + zadní stěna, ev. + Mi/CT isthmus
- Prům. doba výkonu 81 min (50-150)
- Prům. počet aplikací 76 (36-125)
- Prům. skia čas 19 min (8,5-39,4), dávka 539uG/m^2 (71-2070)
- U 1 pacienta rozvoj srdečního selhání po výkonu (terminace perzist FS s ROK a TKMP), zaléčeno konzervativně

Soubor a výsledky

- ***FU minim 6 měsíců***
- Recidiva u 5 pacientů (**6%**) s parox FS, 3x reablace (1x pro FS, 2x pro ST)
- Recidiva u 11 pacientů (**19%**) s perzist FS, 5x reablace pro ST (3 čekají na reablaci)

Závěr

- Ablace FS pulsním polem v hluboké analgosedaci pod skiaskopickou navigací je proveditelná s minimem komplikací a v krátkodobém sledování dosahuje výborných výsledků