

# **A Case of Prosthetic Tricuspid Valve Failure**

# Chief Complaint

M/49

Facial and lower extremity edema

Onset : 6DA

Associated symptom : dyspnea on exertion

# Present Illness

1996: Diagnosed as Ebstein's anomaly with TR

2000. 12: Chest discomfort (+)

2004. 11: Exertional dyspnea → CAG : 3VD

2004. 12: CABG & TVR (St. Jude 33mm)

2005. 2: , ,

# Physical Findings

V/S) 130/80 – 90 – 24 –36.5

JVP 12 cmH<sub>2</sub>O

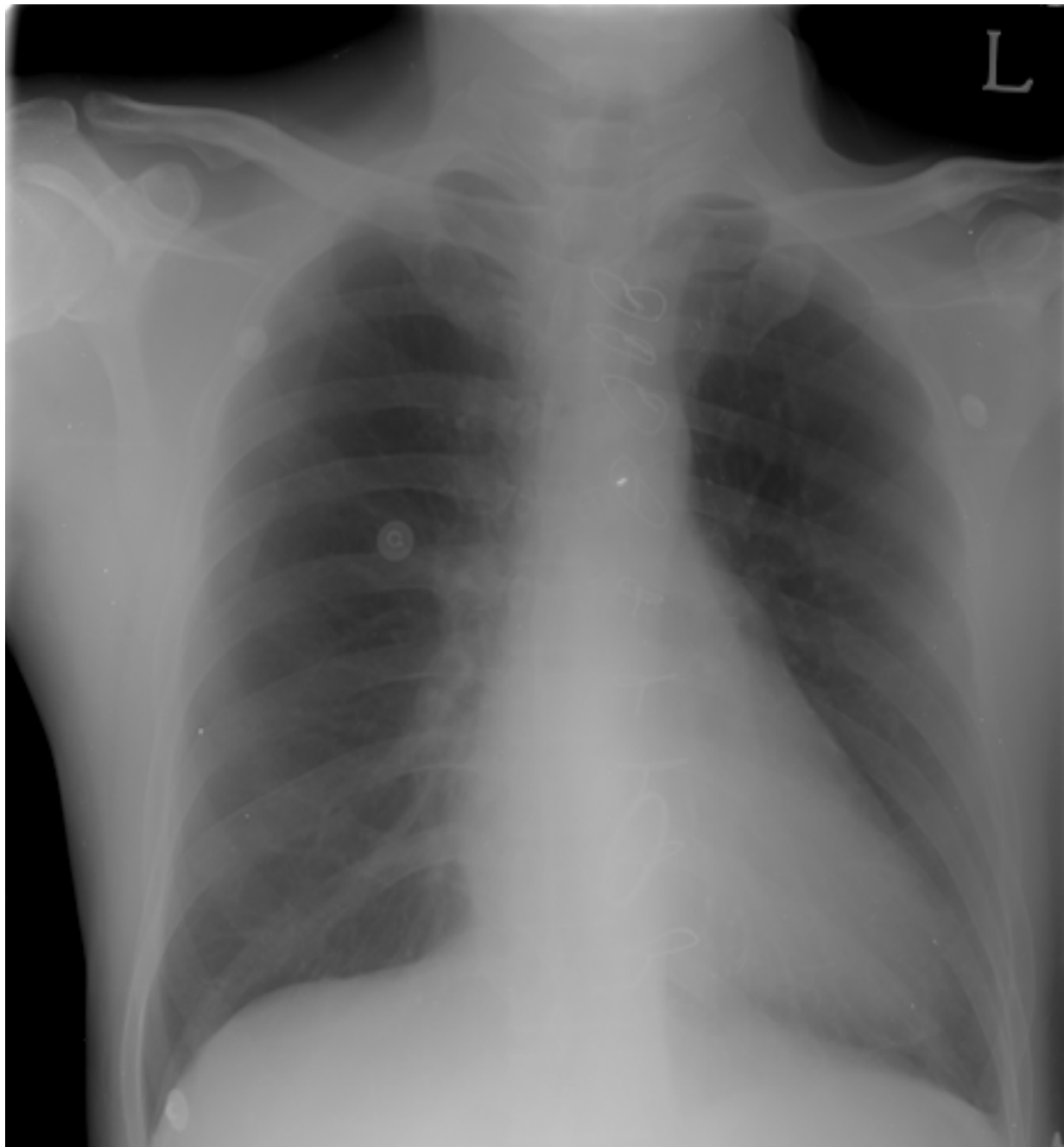
RHB without murmur,

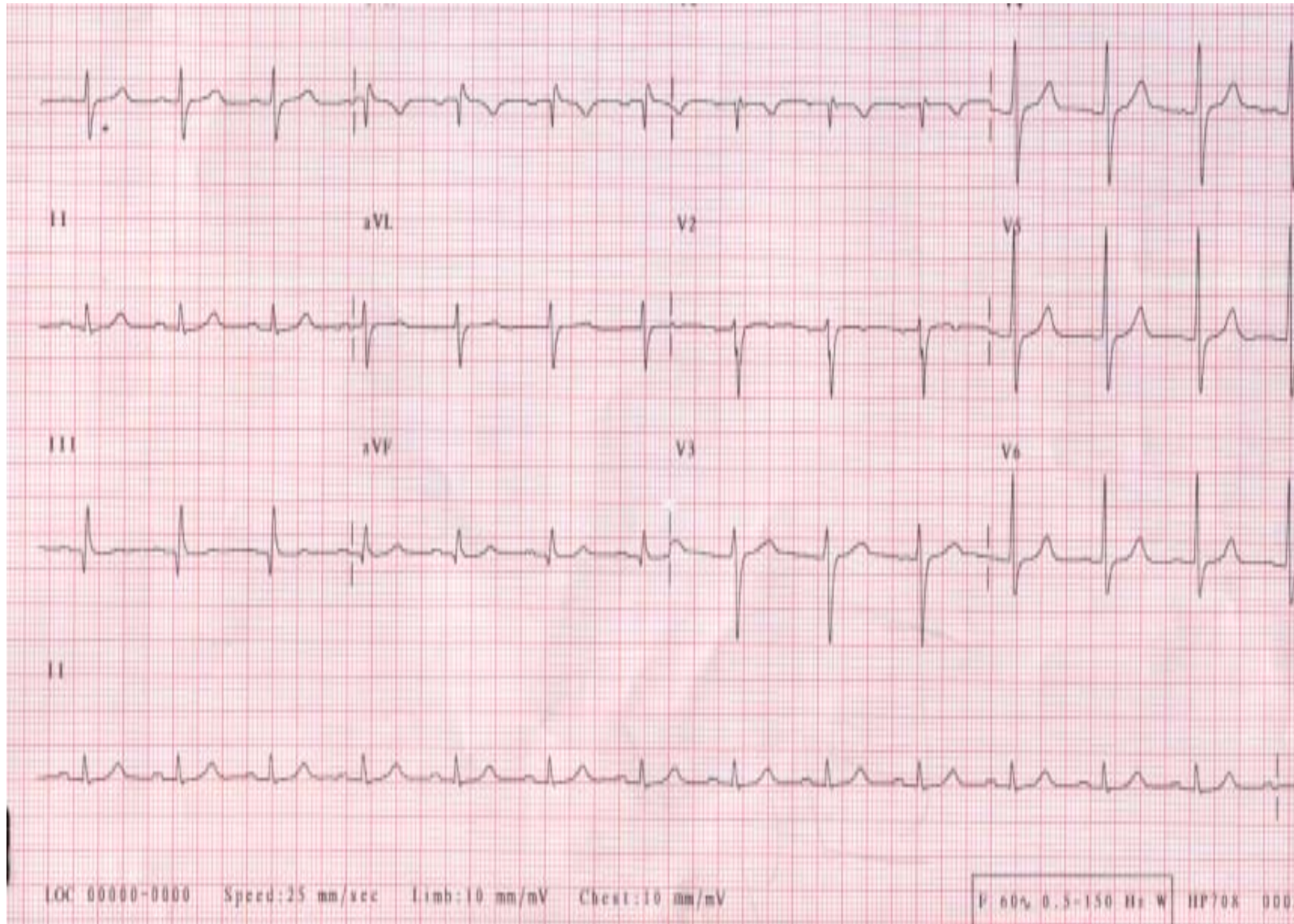
Prosthetic opening click (-)

Crackles (-)

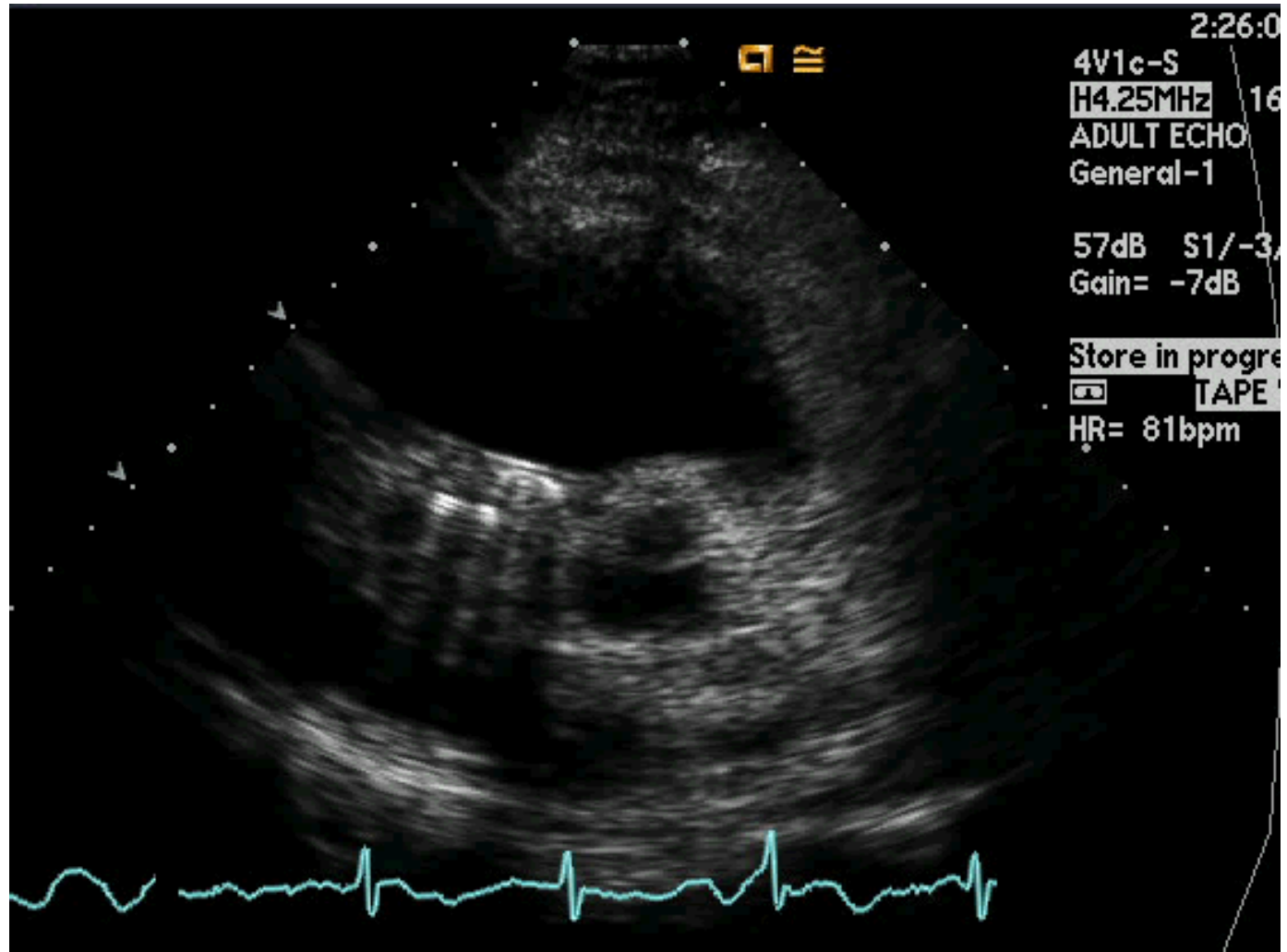
Shifting dullness (+)

Pitting edema (+/+)

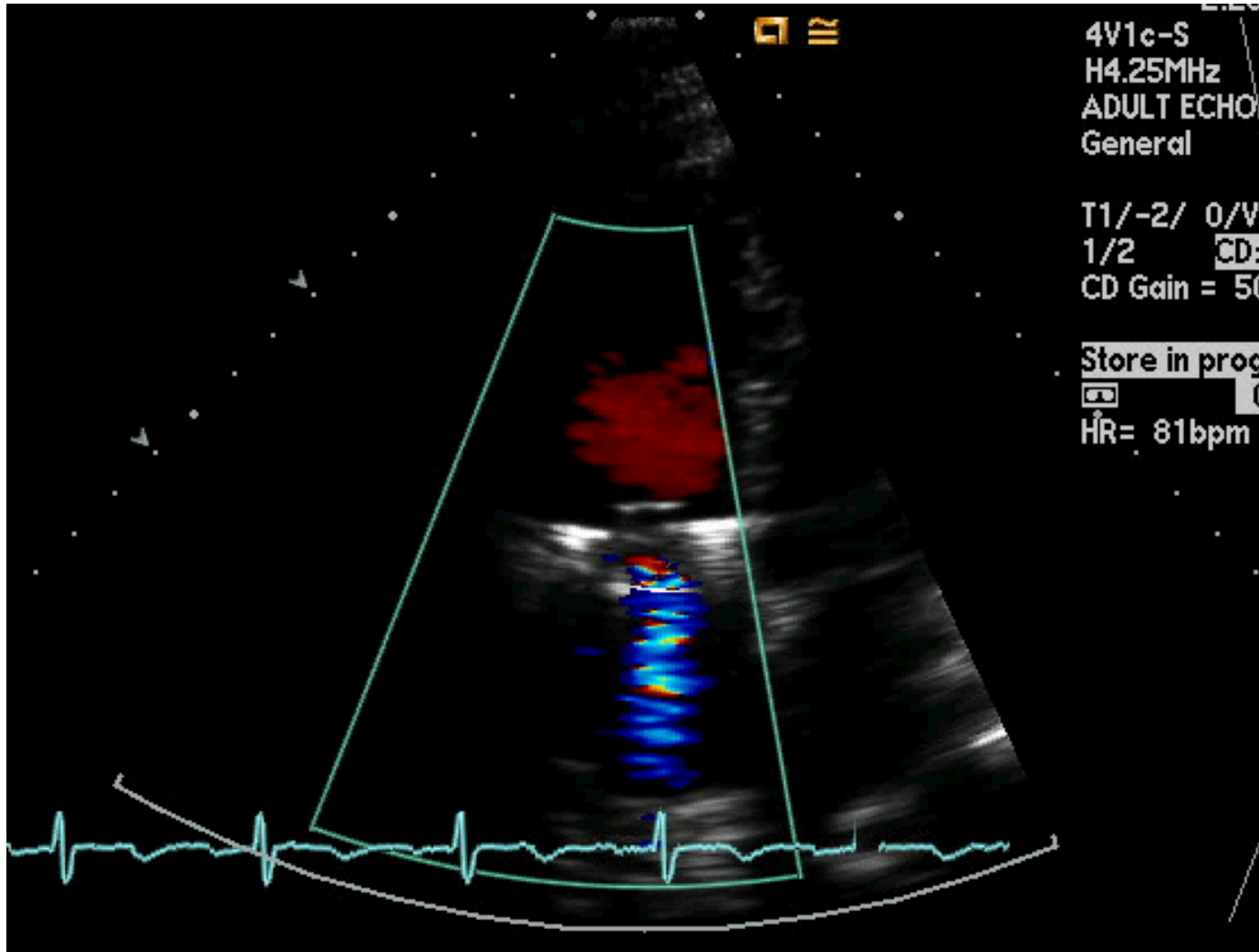




# 2004.12 (Postop)

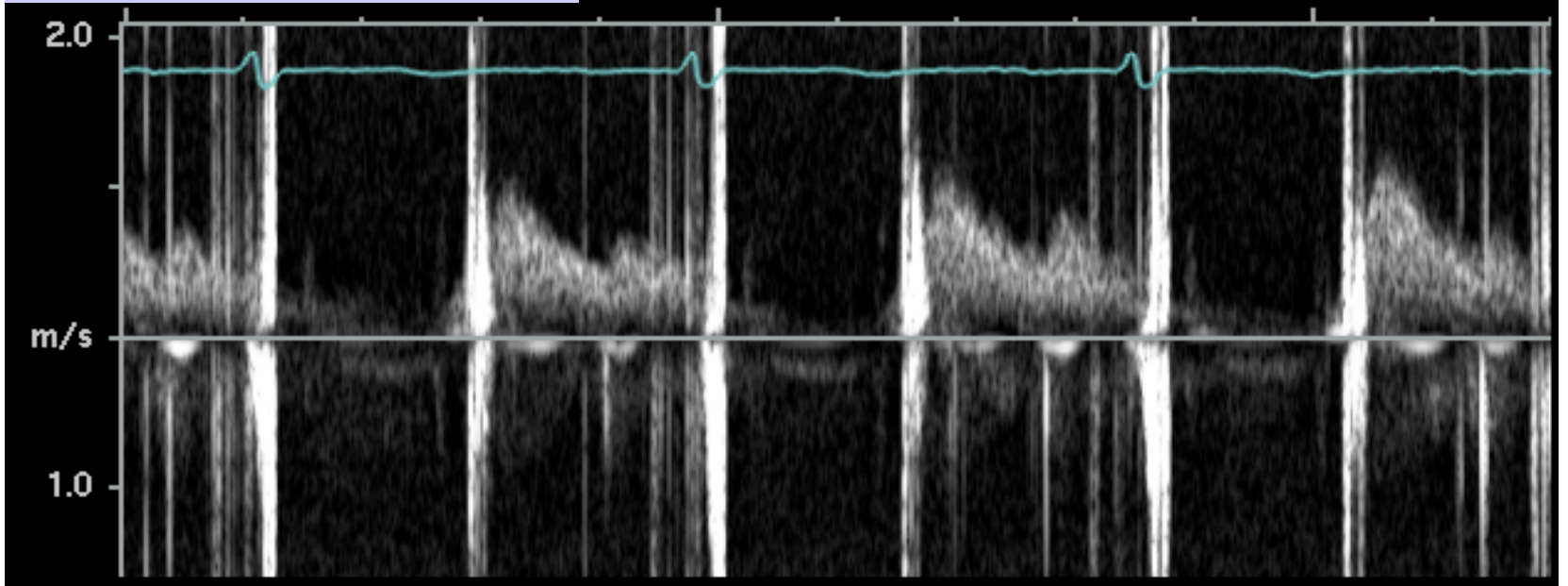
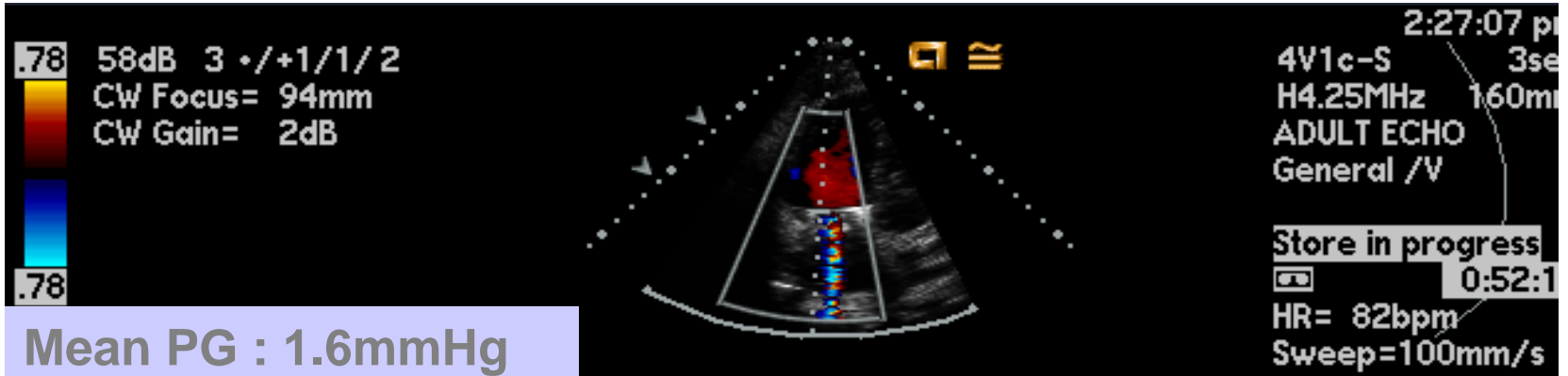


# 2004.12 (Postop)

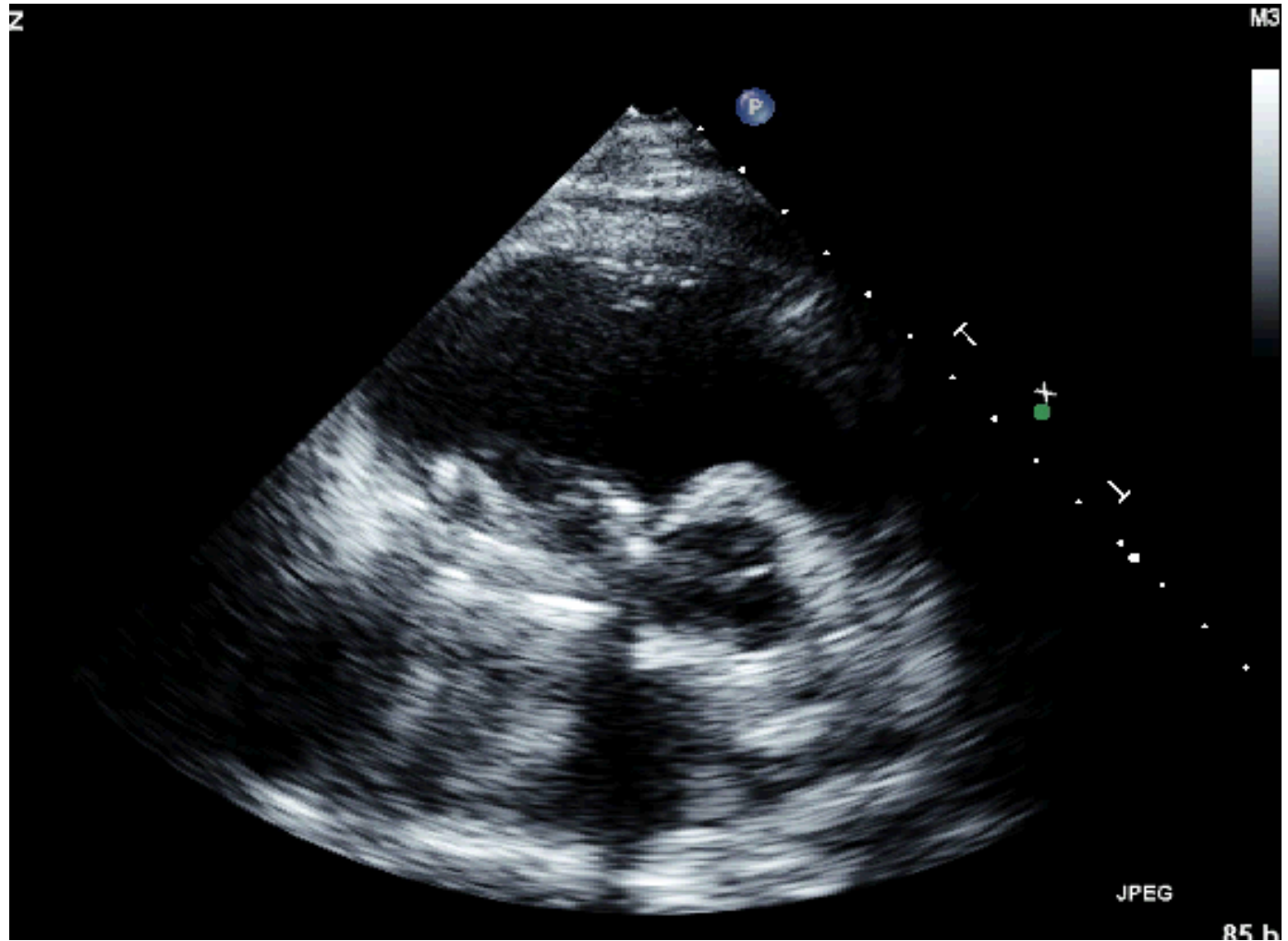




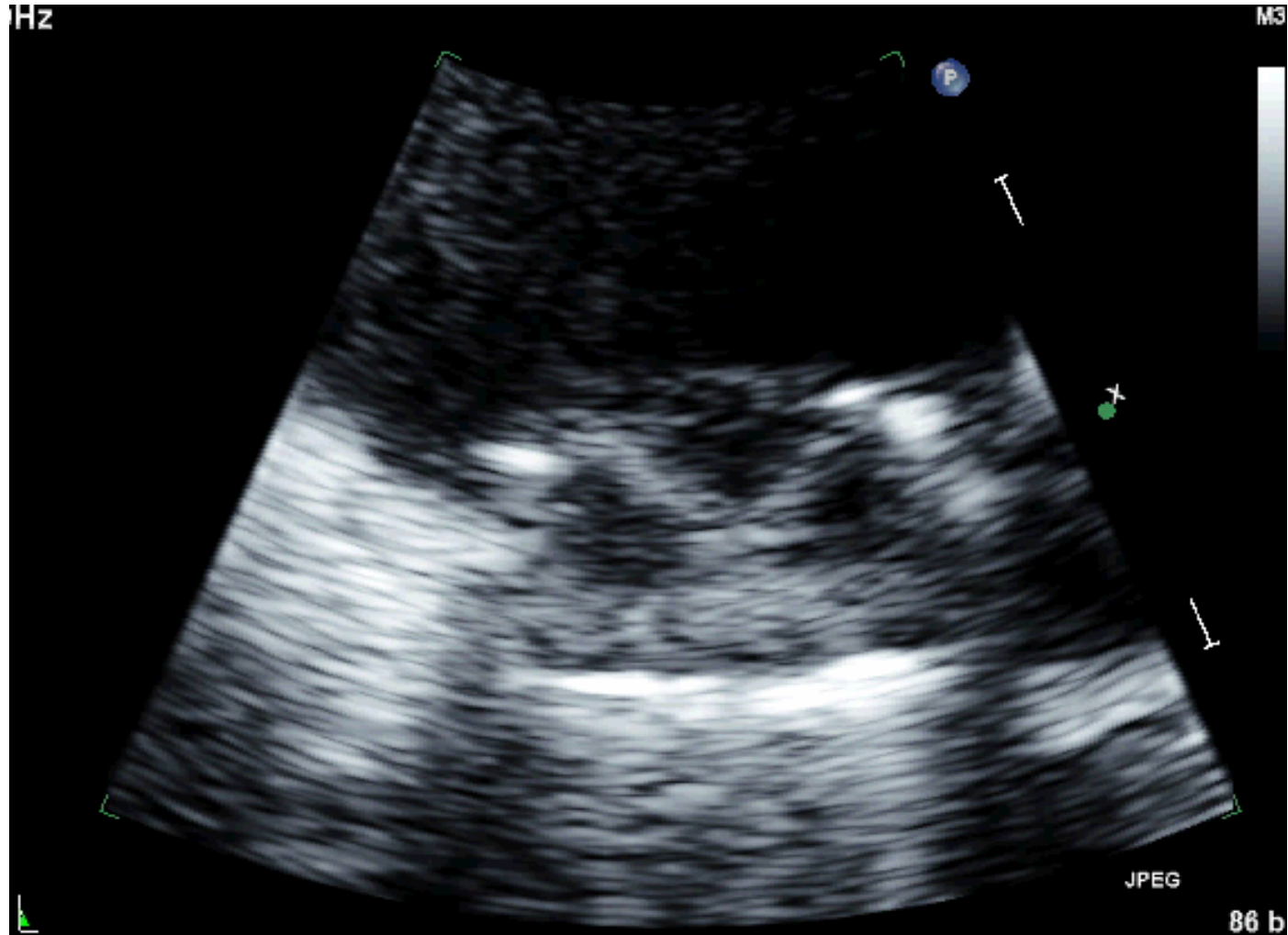
# 2004.12 (Postop)



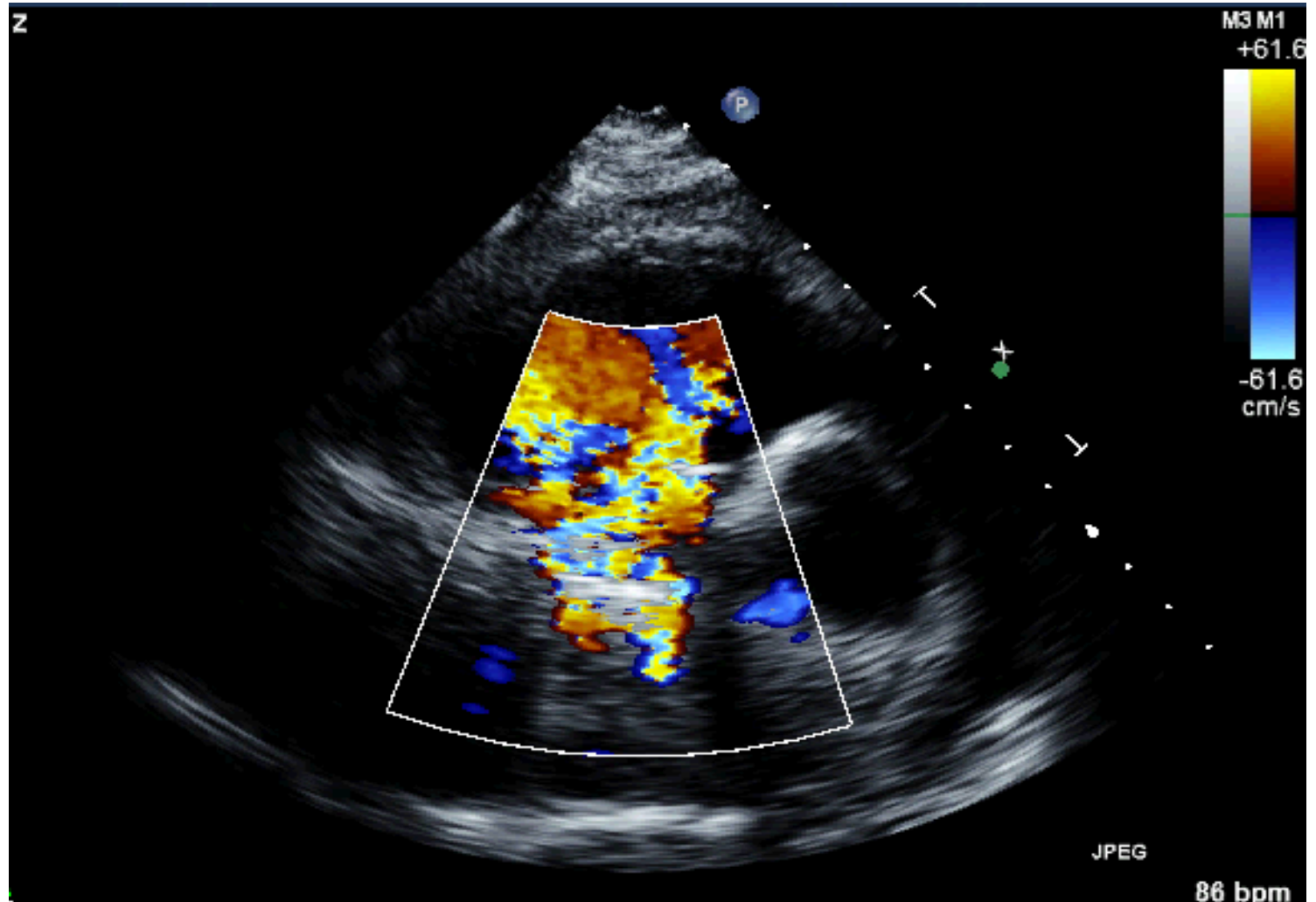
# 2005. 2 (OPD)



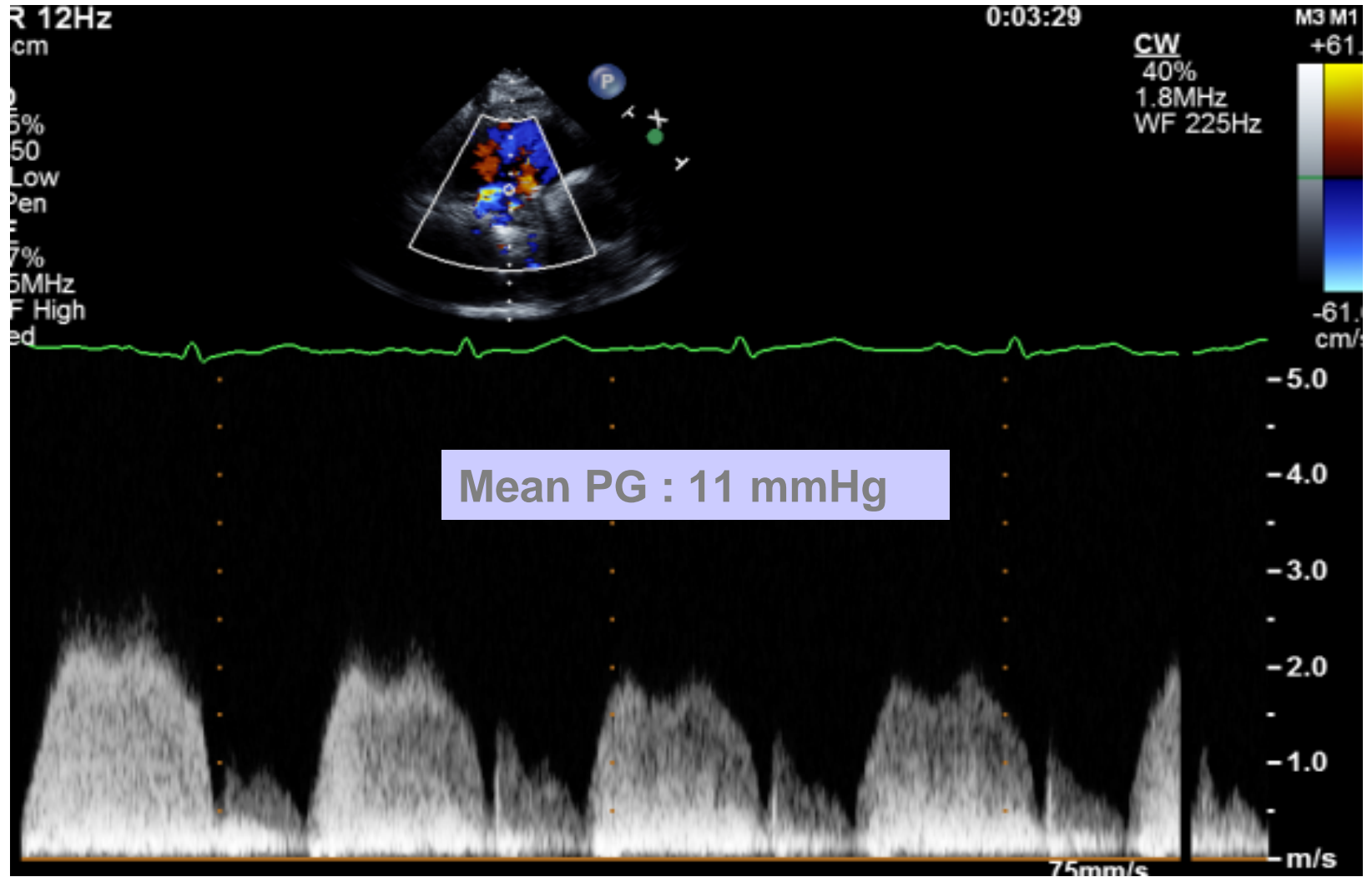
# 2005. 2 (OPD)

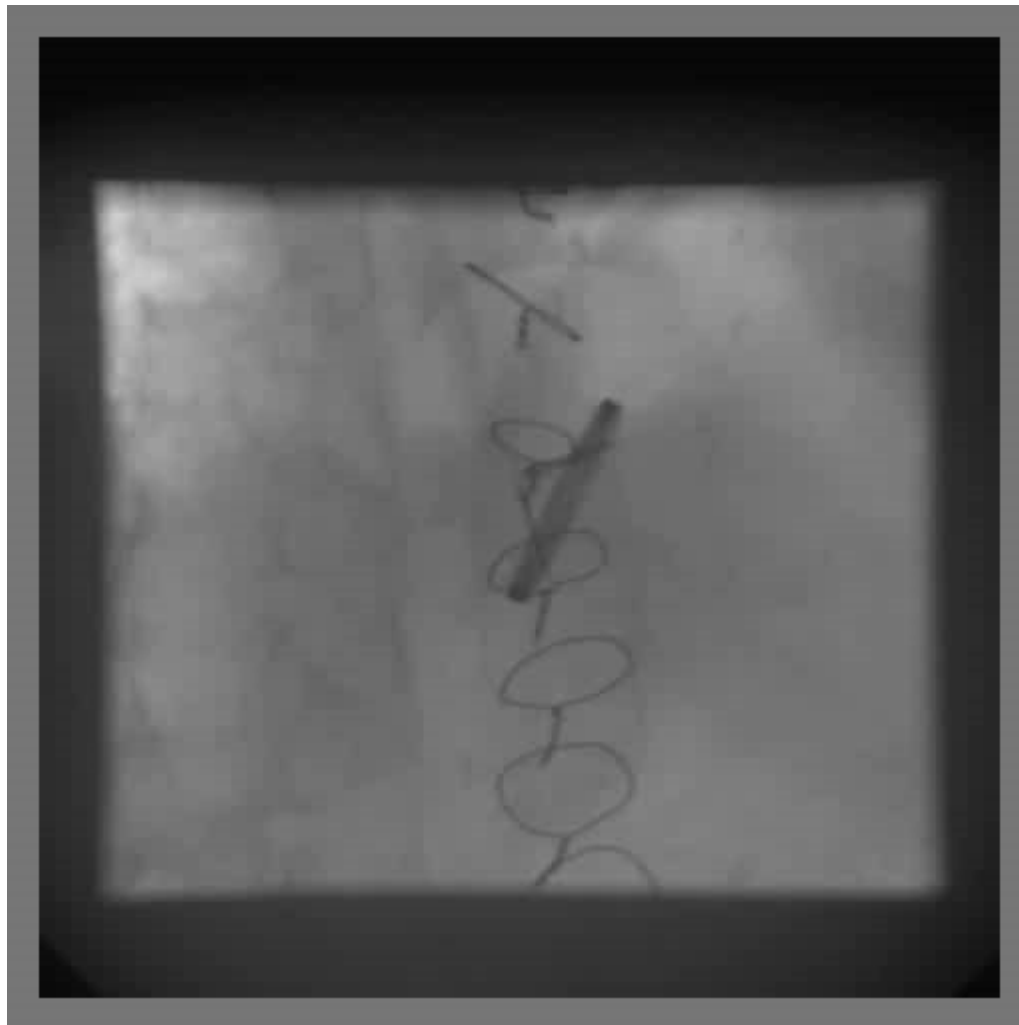


# 2005. 2 (OPD)



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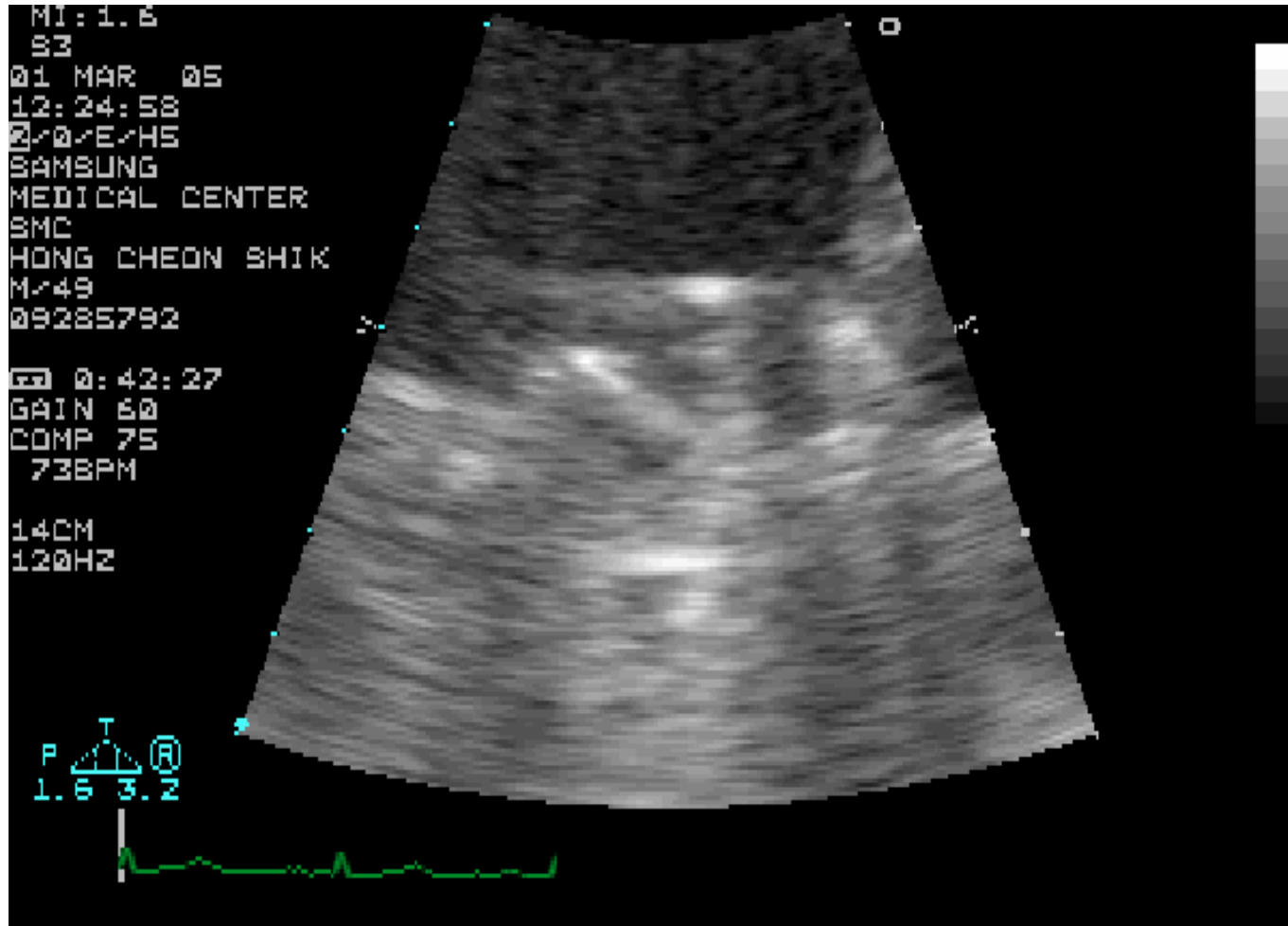
# Hospital D1

**Urokinase 500,000 U loading over 20min**



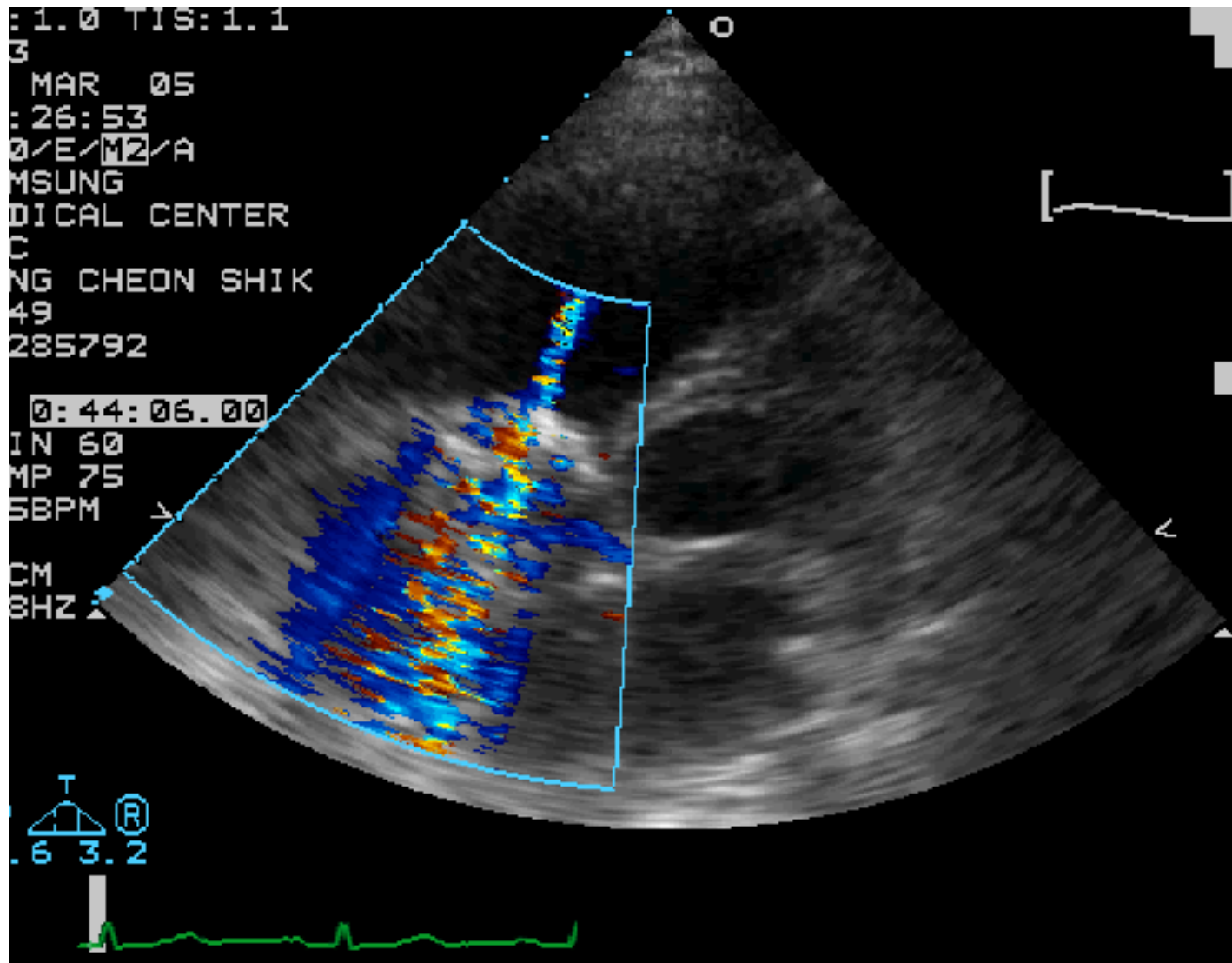
**IV 2,500,000 U infusion over 12hr**

# Hospital D2

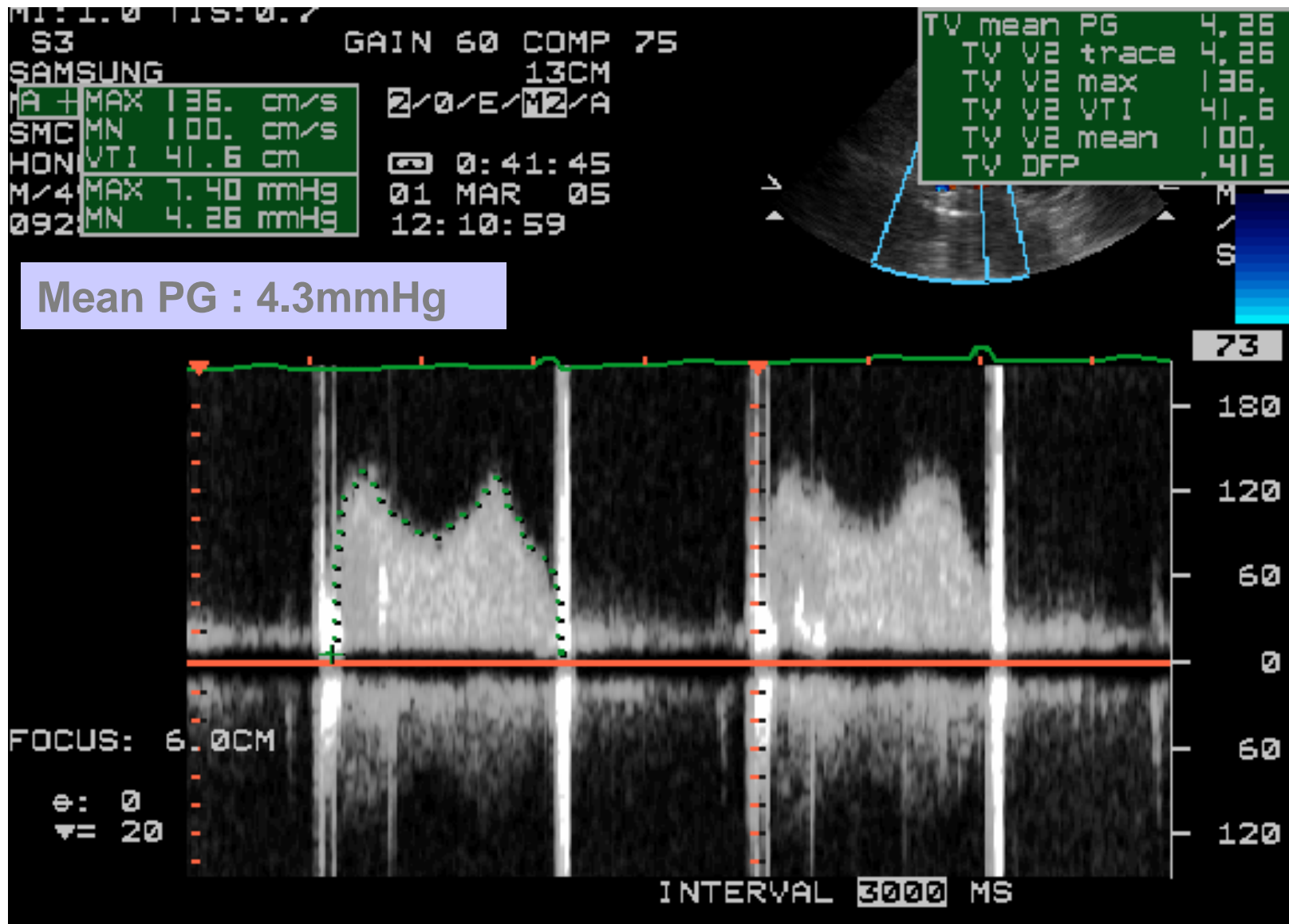




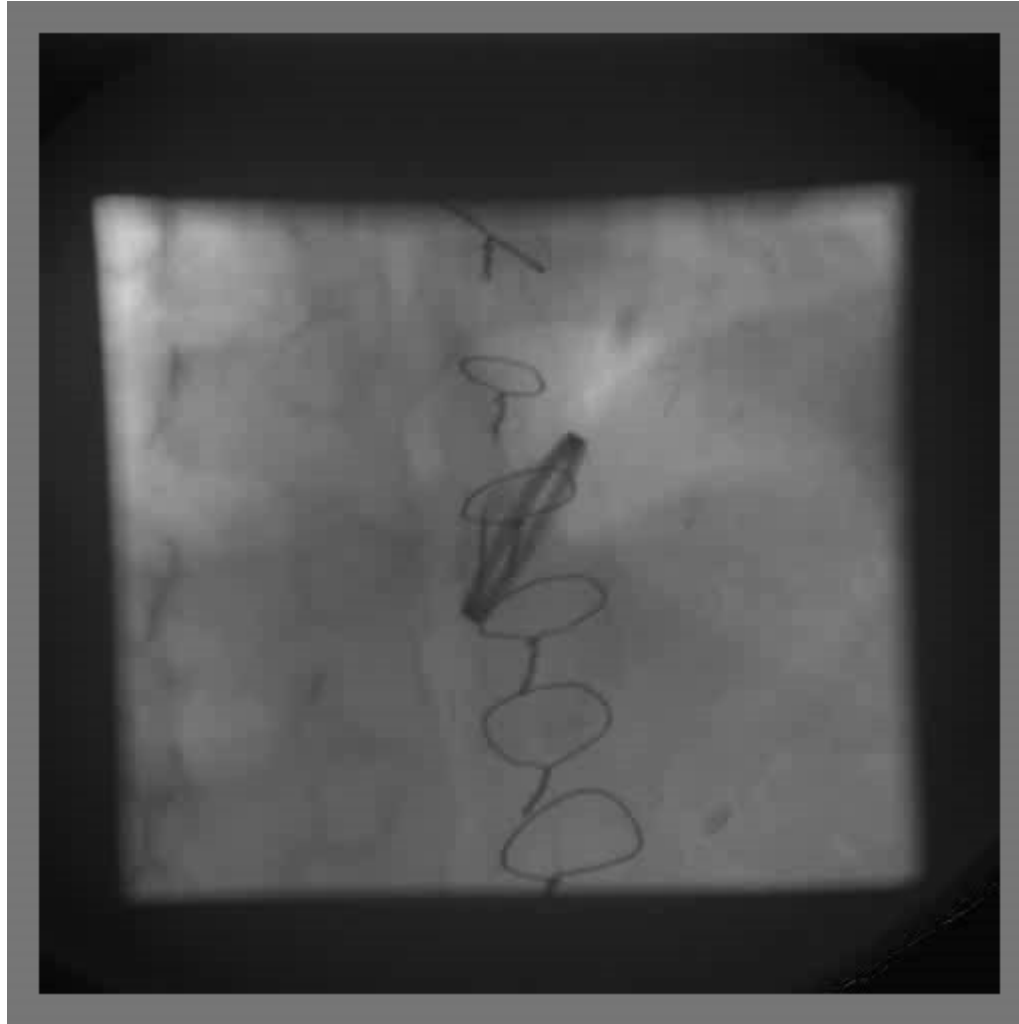
# Hospital D2



# Hospital D2



# Hospital D3



# Hospital D3

Repeat thrombolysis with Urokinase

# Hospital D4



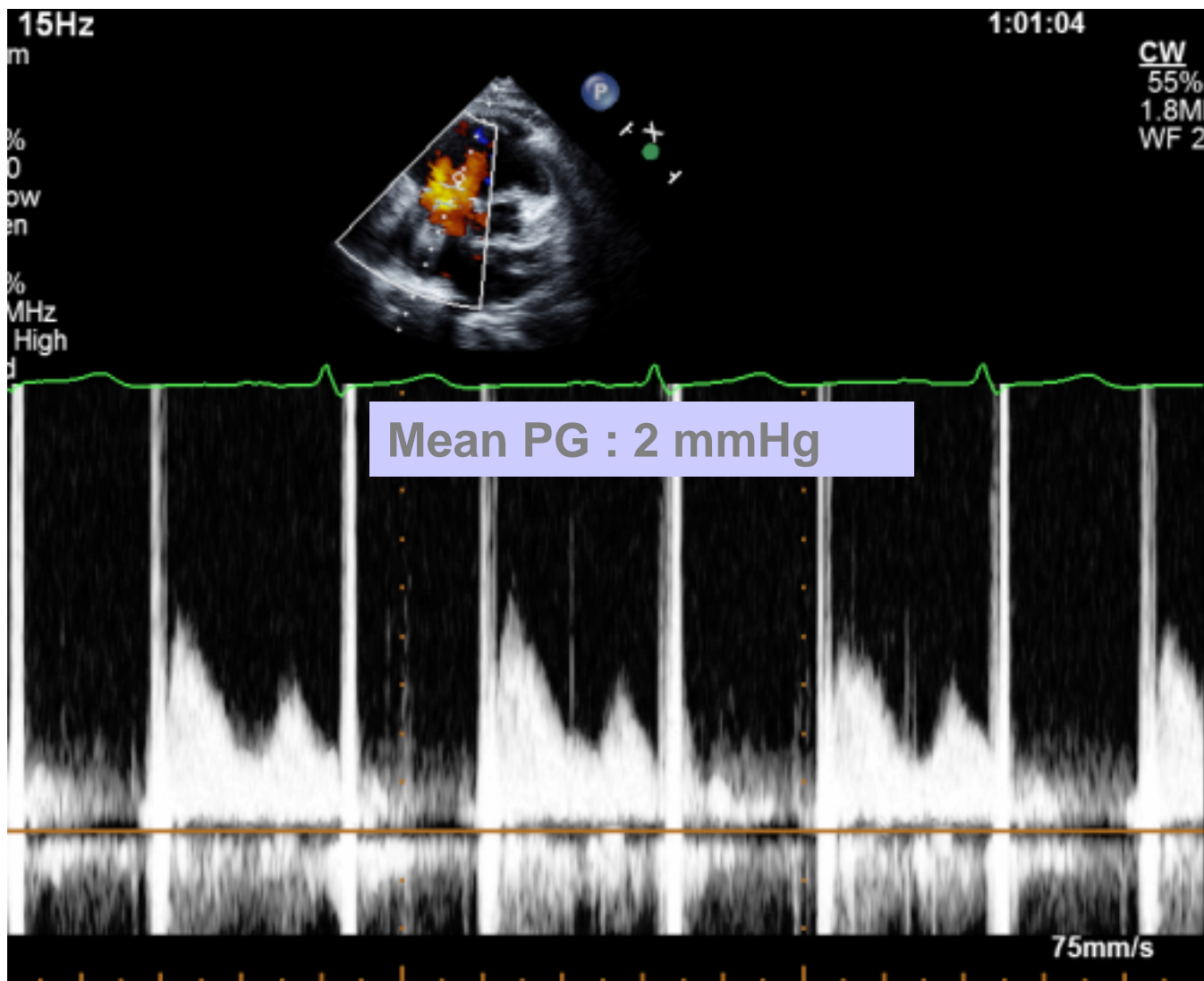
# Hospital D4



# Hospital D4

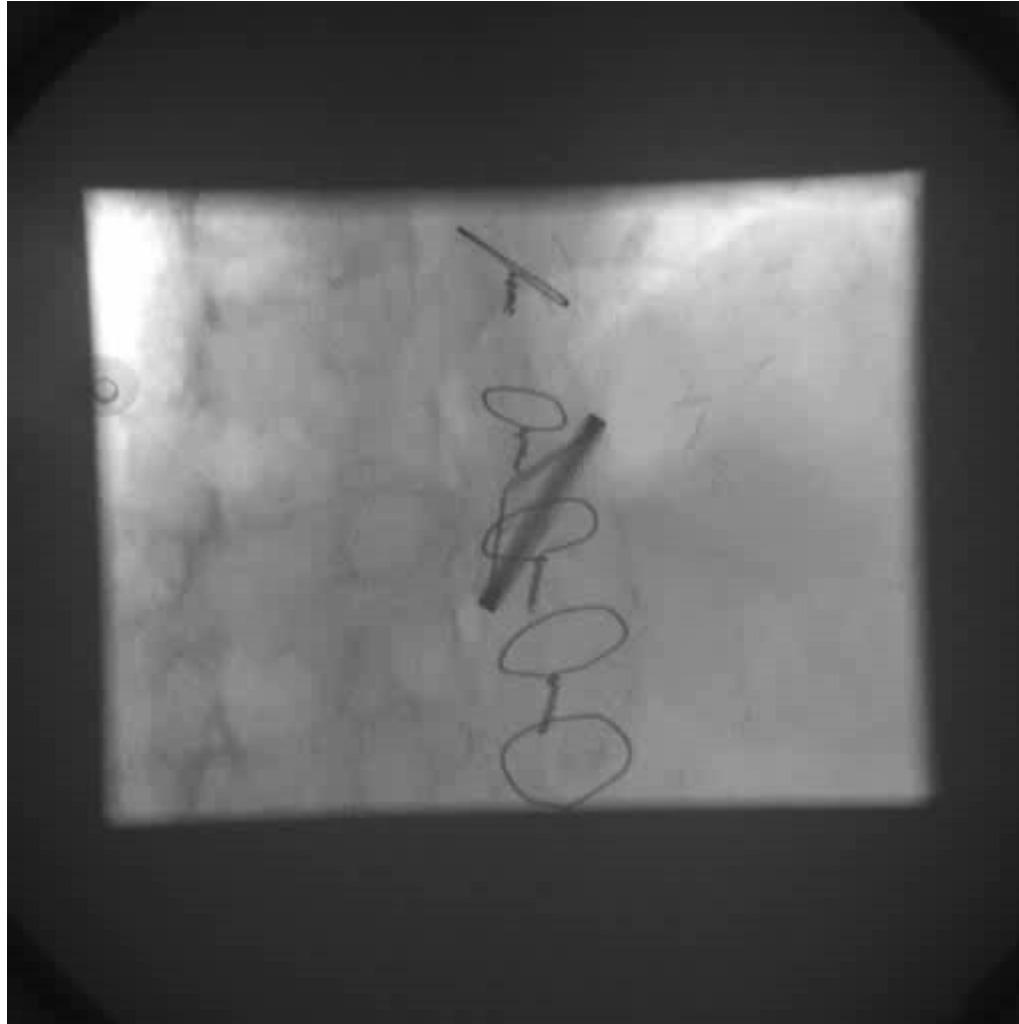


# Hospital D4





# Hospital D4



# Prosthetic Valve Thrombosis

## Incidence

- Annual incidence: 0.1%-5.7%
- 4~8.6% within 5 years of implantation
- 13% in 1 year for tricuspid prosthesis

# Diagnosis

## Clinical presentation

Dyspnea

Metalic click

JVP

Pulmonary congestion

Poor peripheral perfusion

Systemic embolization

## Assessing valve function

Cinefluoroscopy

TTE & TTE

Doppler echocardiography

# Therapy

## Medical Treatment

### Heparinization

Nonobstructive thrombosis 63%

### Thrombolysis (UK, streptokinase, t-PA)

Alternative to surgery

Thrombembolic risk: 0-20%

Stroke rate: 5-10%

Major bleeding: 5-10%

## Surgery

Traditional treatment

Mortality: 35% in critically ill patient

# Therapy

Right -sided PVT: Thrombolytic therapy

Left - sided PVT : Surgery

Critically ill patients

Immediate surgery is not available

Contraindication to surgery

Small thrombus

**→ Thrombolysis**

Korean Circulation J 1991

1994

2001

Korean J Thoracic Cardiovasc surg 2002