

5 6 7
JUN 2019

On sort des sentiers battus

L'interventionnel dans le congénital

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Hémodynamique et CardioVasculaire Interventionnel

L'Institut du Thorax

CHU Nantes



L'interventionnel dans le congénital



1966

When others were closing the holes in heart
this man became famous for creating one!



William Rashkind

De la coronarographie mais attention...



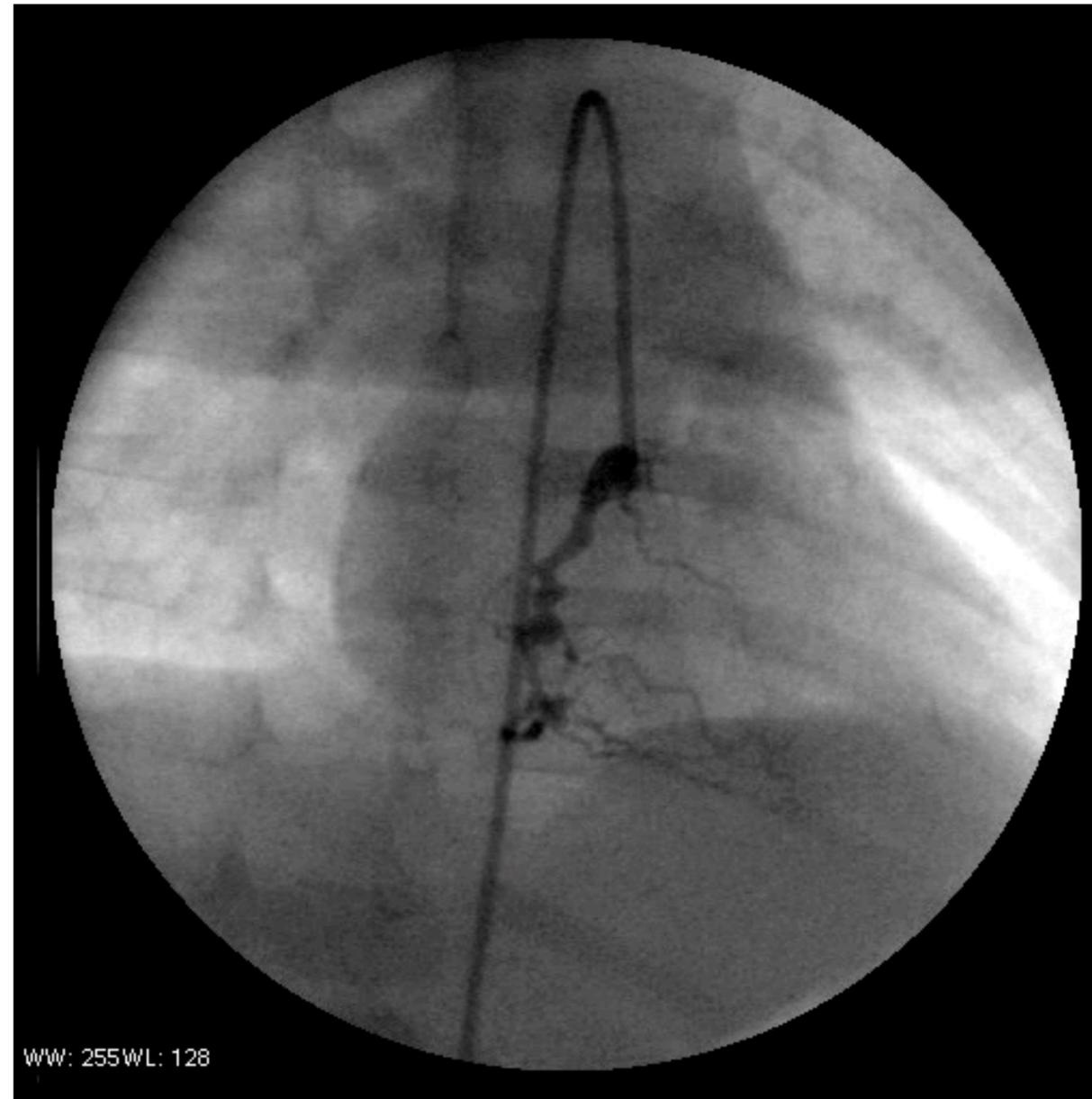
- la taille du désilet = taille de la fémorale
- Fémorale de l'enfant plus petite qu'une radiale adulte...
- Aucune sonde n'est faite pour la pédiatrie
- Hors AMM le plus souvent...
- Artères fragiles
- Cœur fragile
- On peut faire un KT gauche par voie droite

(FOP, CIA, CIV...)

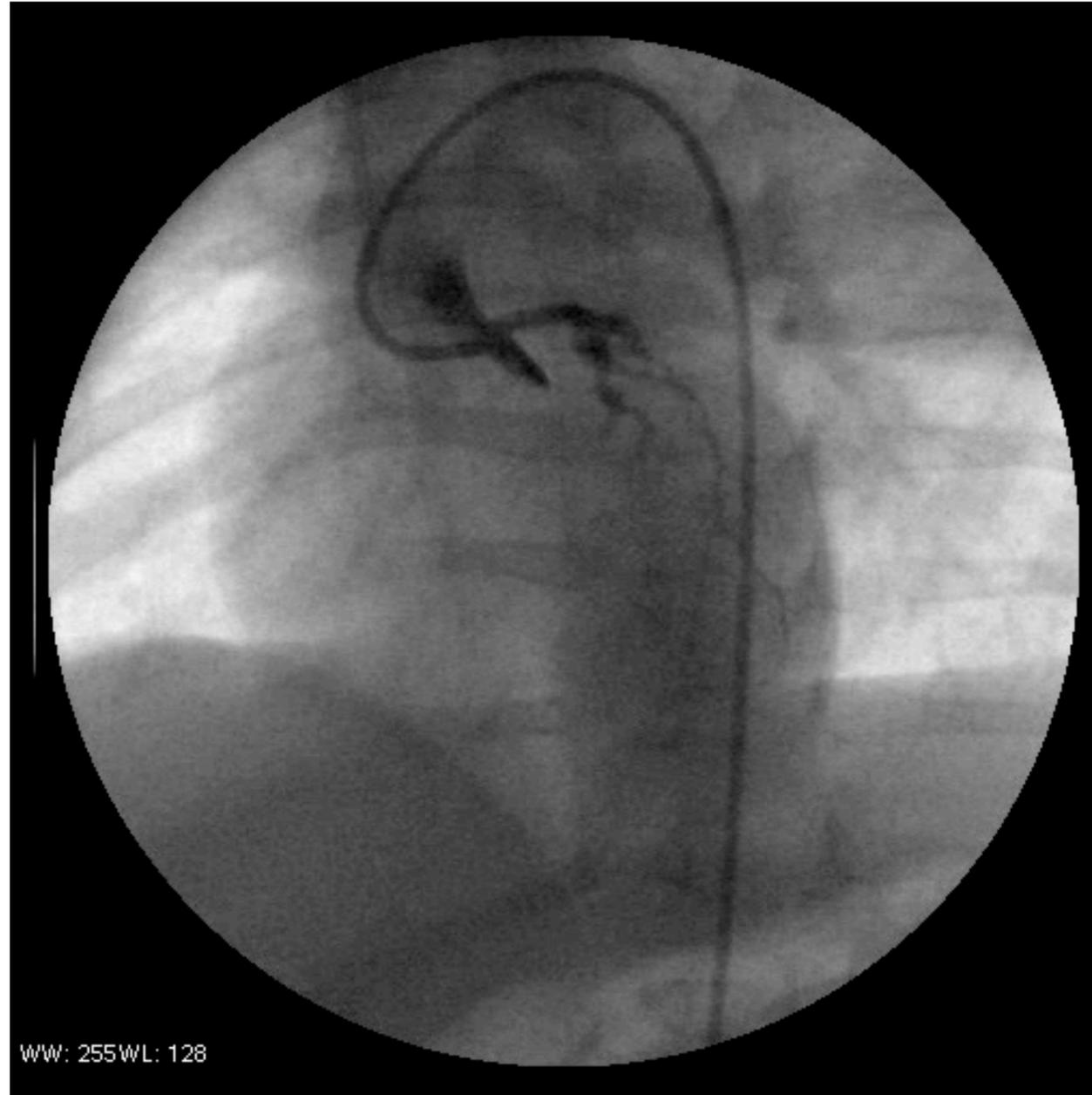
- Garçon
- 4 mois
- Altération VG
- TDRV...



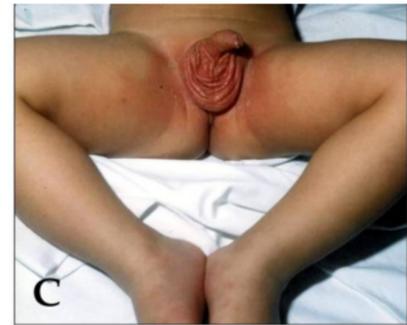
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- Garçon
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- Altération VG
- TDRV...



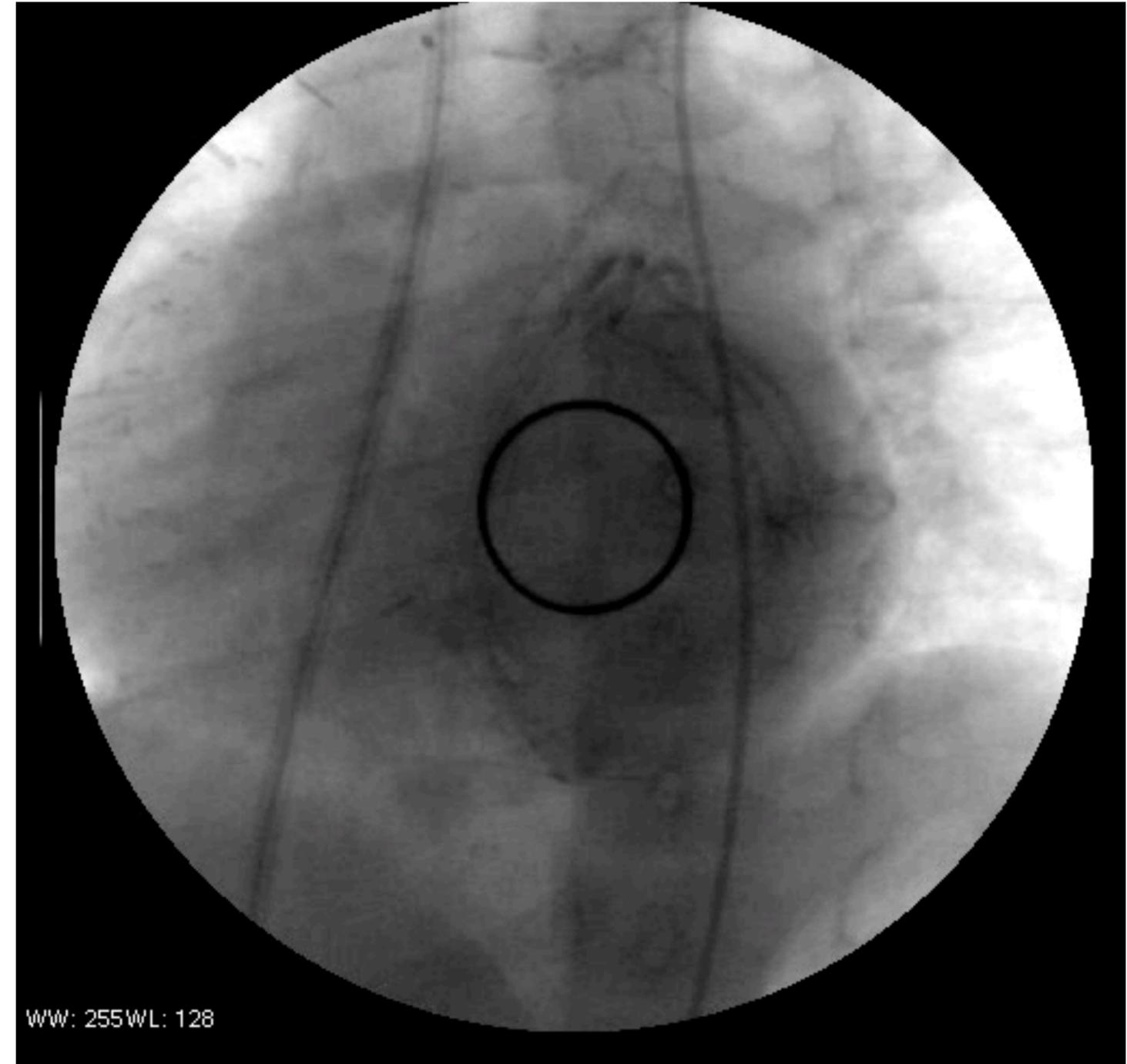
- Maladie de Kawasaki....
 - « syndrome lympho-cutanéomuqueux ou adéno-cutanéomuqueux »)
 - Maladie infantile,
 - Origine immunologique
 - Vascularite fébrile touchant les artères de moyen et petit calibre
 - Forte fièvre plus de 5 jours résistante aux antipyrétiques
 - AEG



De la coronarographie de PAC ! (2 ans Kawasaki...IM)



De la coronarographie de PAC ! (2 ans Kawasaki...IM)



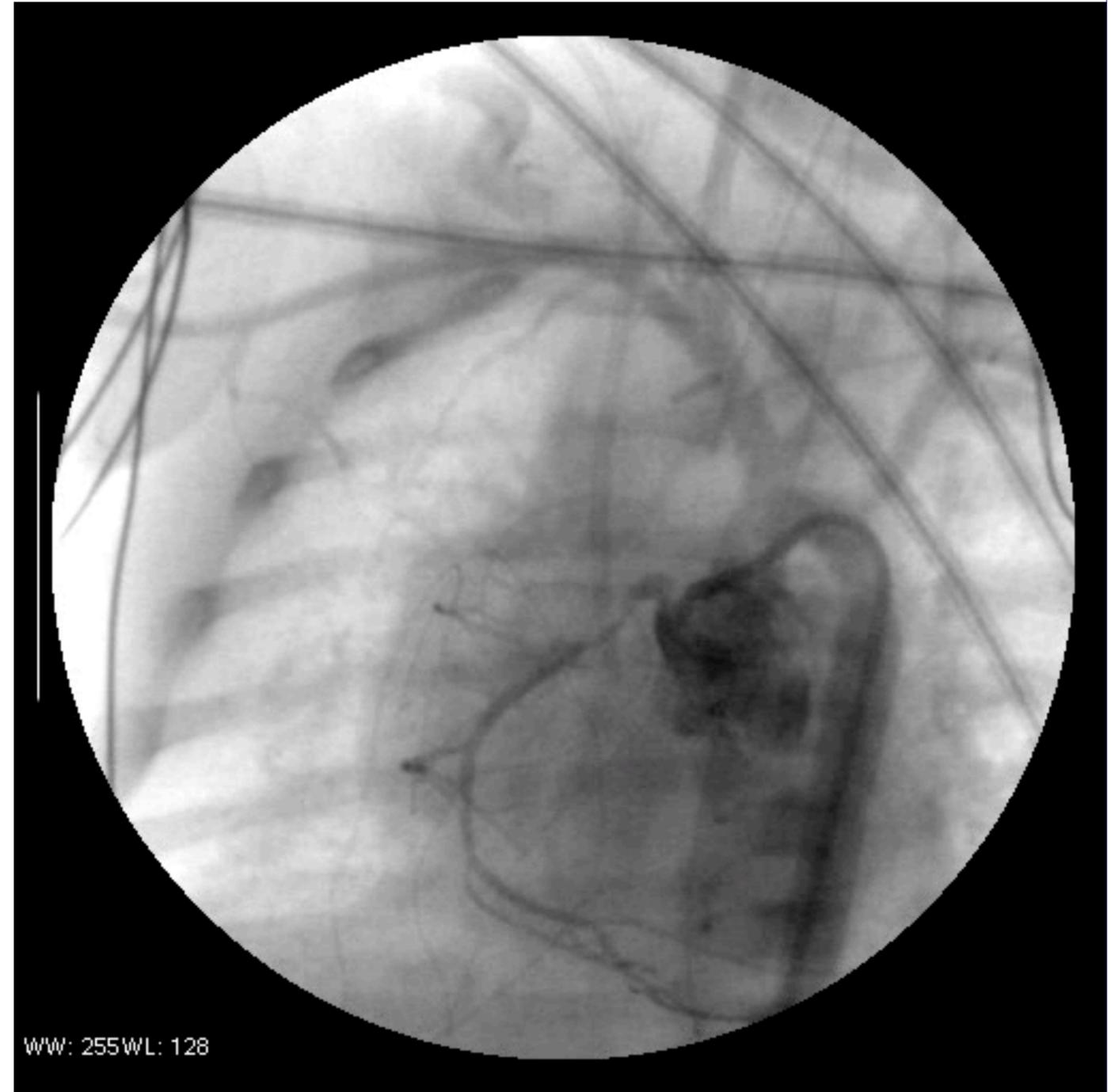
WW: 255WL: 128

De l'angioplastie !



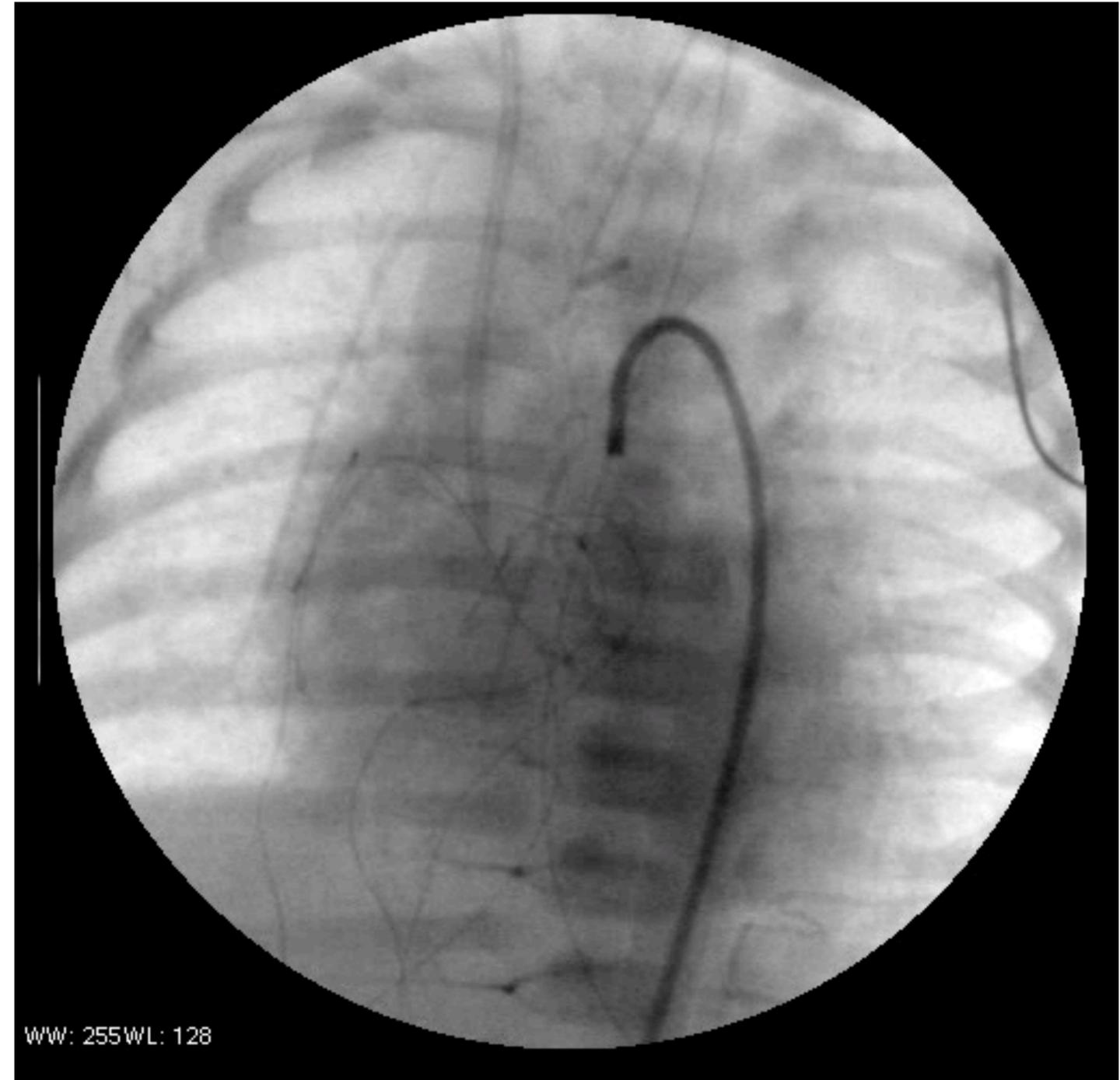
- Liam
- < 3 semaines, 3 Kg
- Transposition des gros vaisseaux
- Switch artériel
- Evolution simple
- J2 : dégradation hémodynamique
- Oligurie...
- ECG : sus décalage ST en inférieur avec miroir

De l'angioplastie !

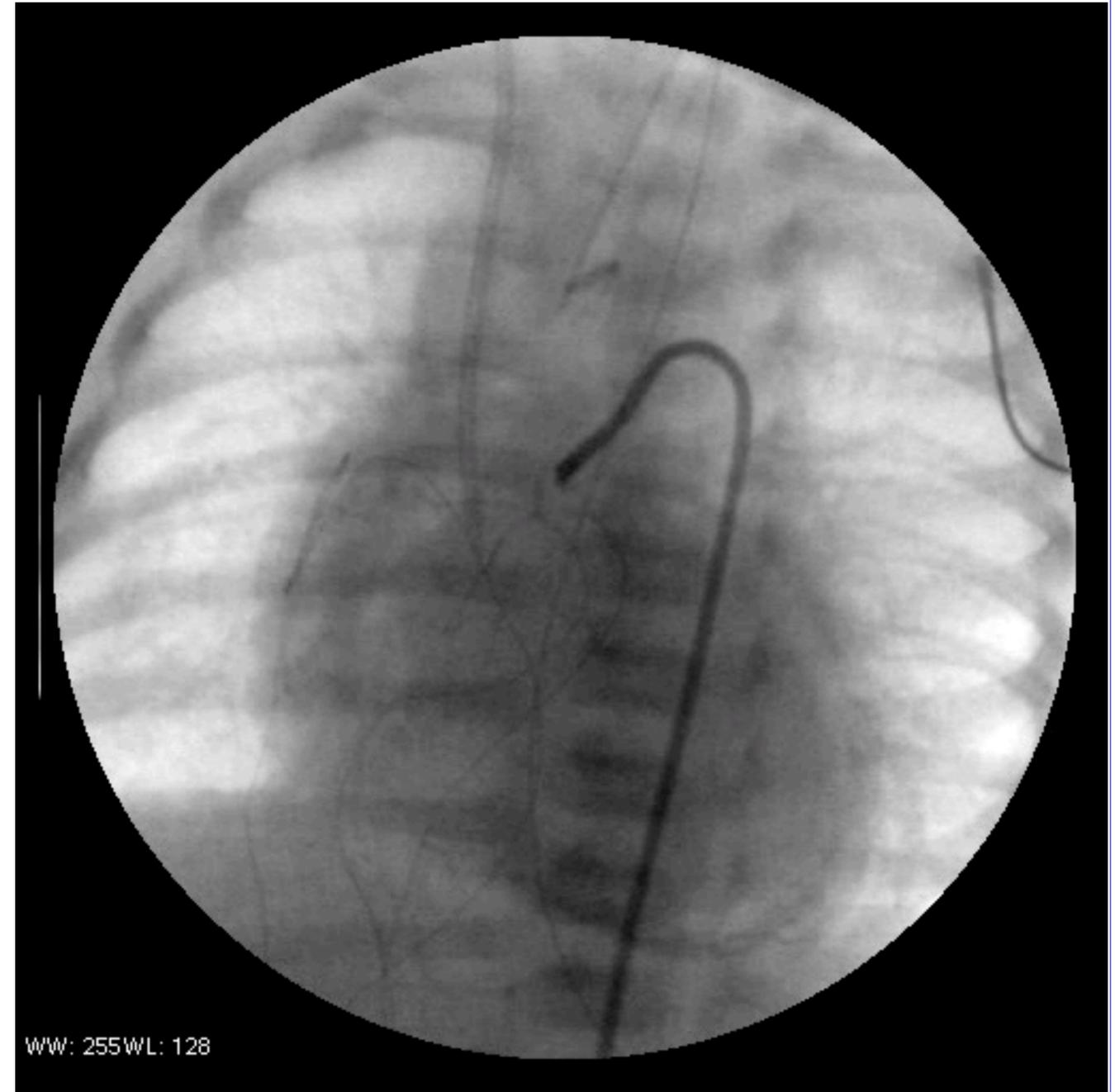


www: 255WL: 128

De l'angioplastie !



De l'angioplastie !

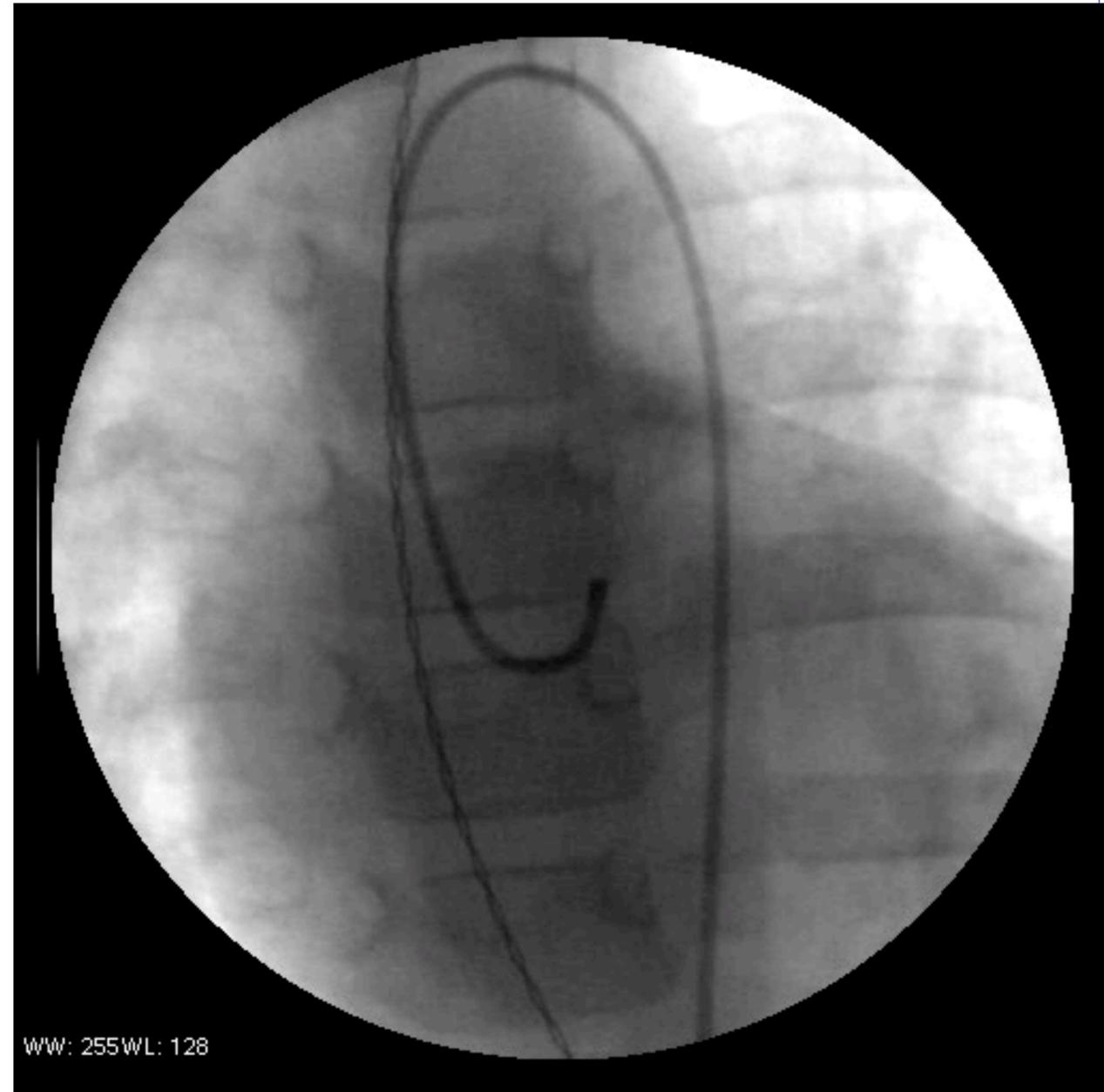


WW: 255 WL: 128

De l'angioplastie !

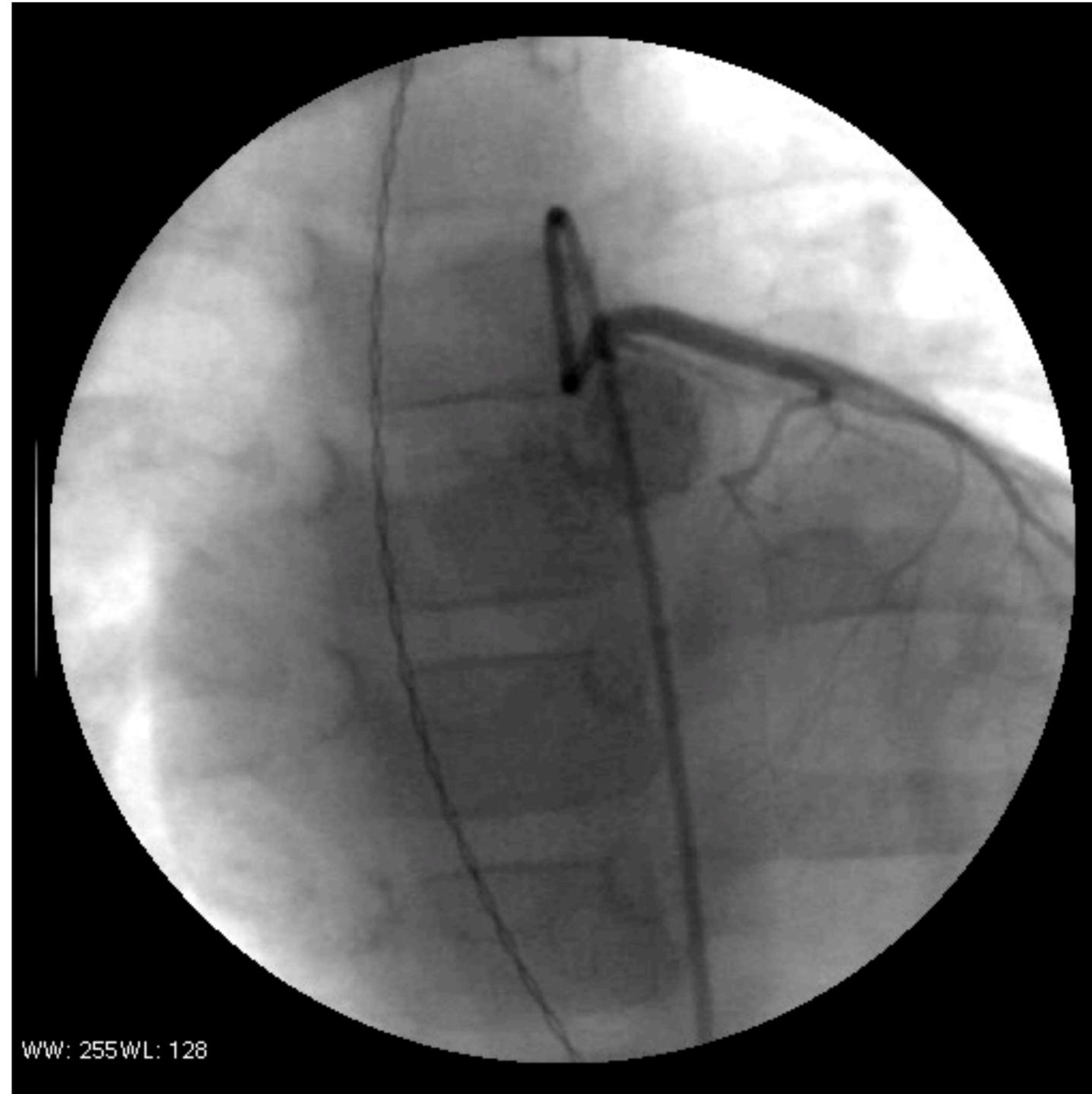


De la FFR !



WW: 255WL: 128

De la FFR !



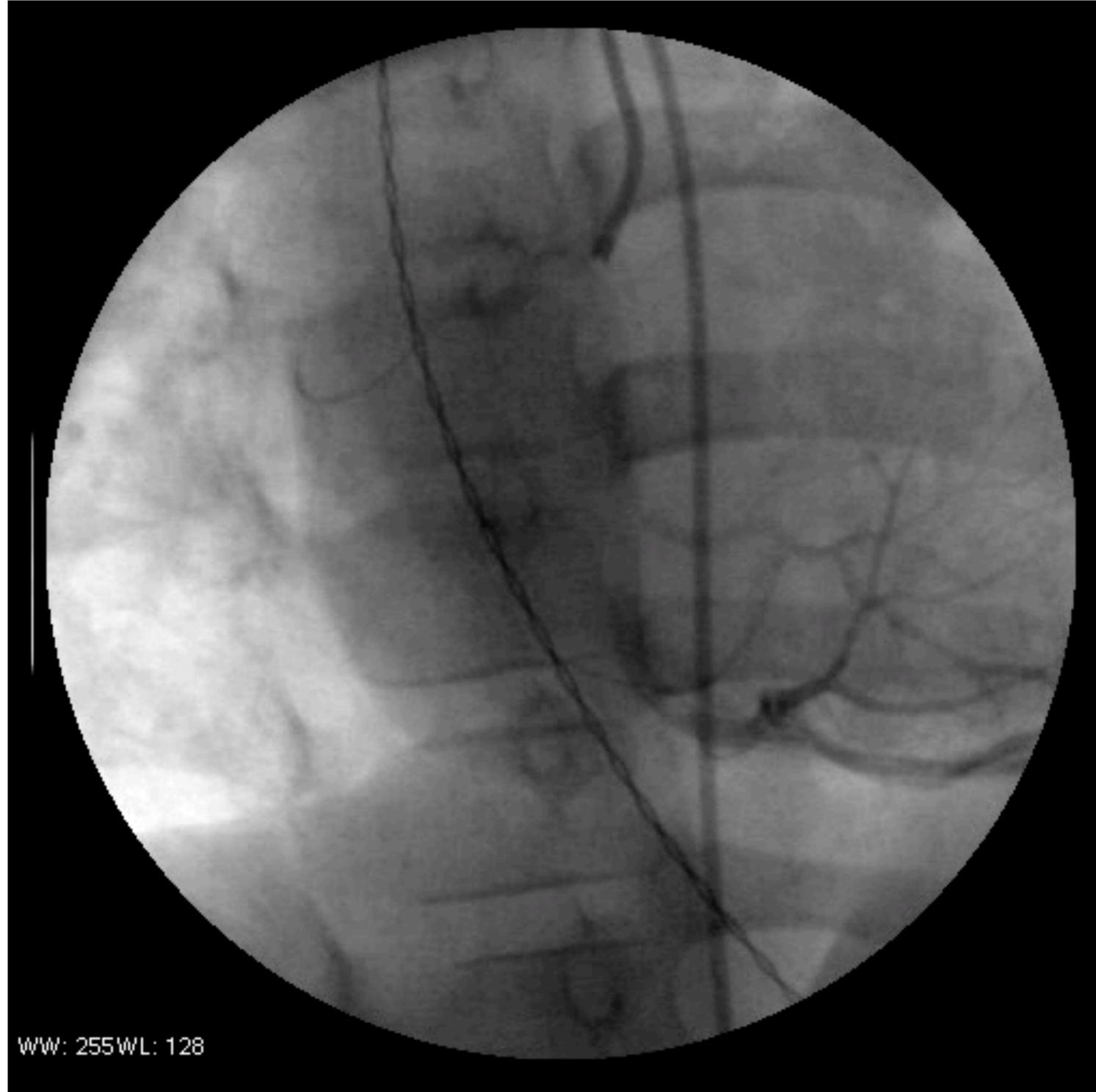
WW: 255 WL: 128



De la FFR !



0.90 sous
Adénosine



WW: 255 WL: 128

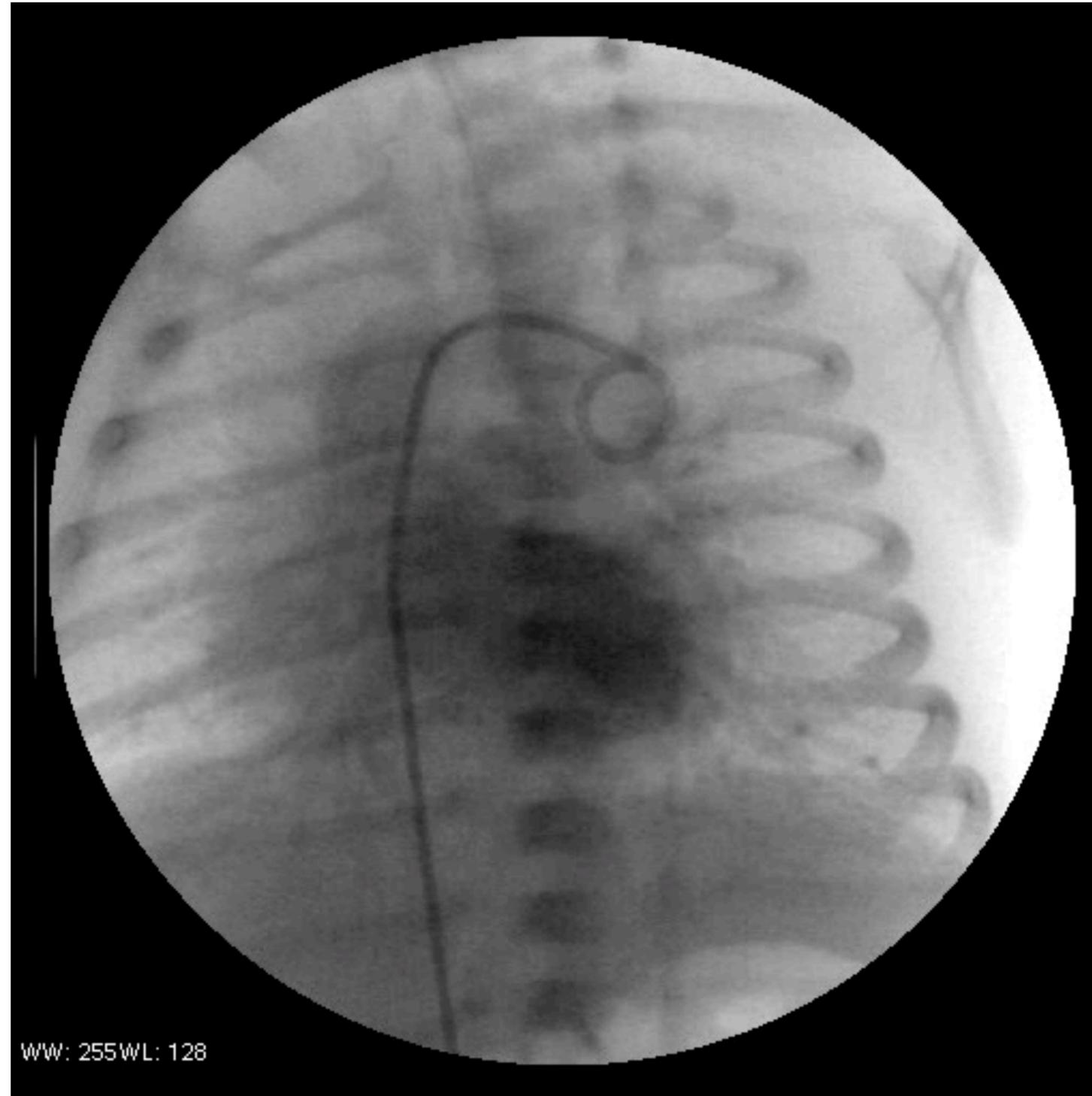


De la FFR sans AMM...

APSO...

Quelles pressions
dans les
MAPCA ?

FFR



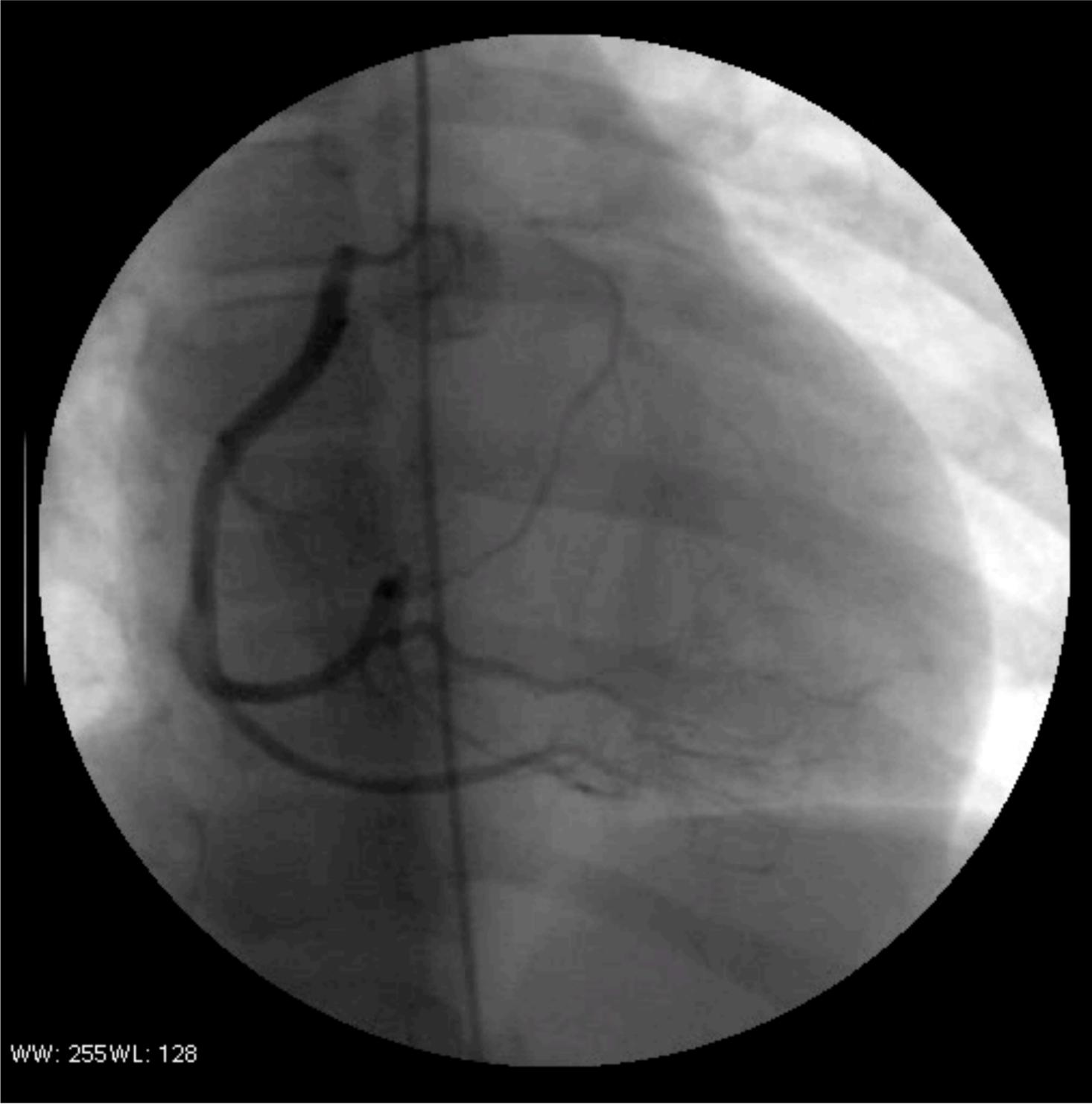
WW: 255WL: 128



Perdus ? Cas clinique 1

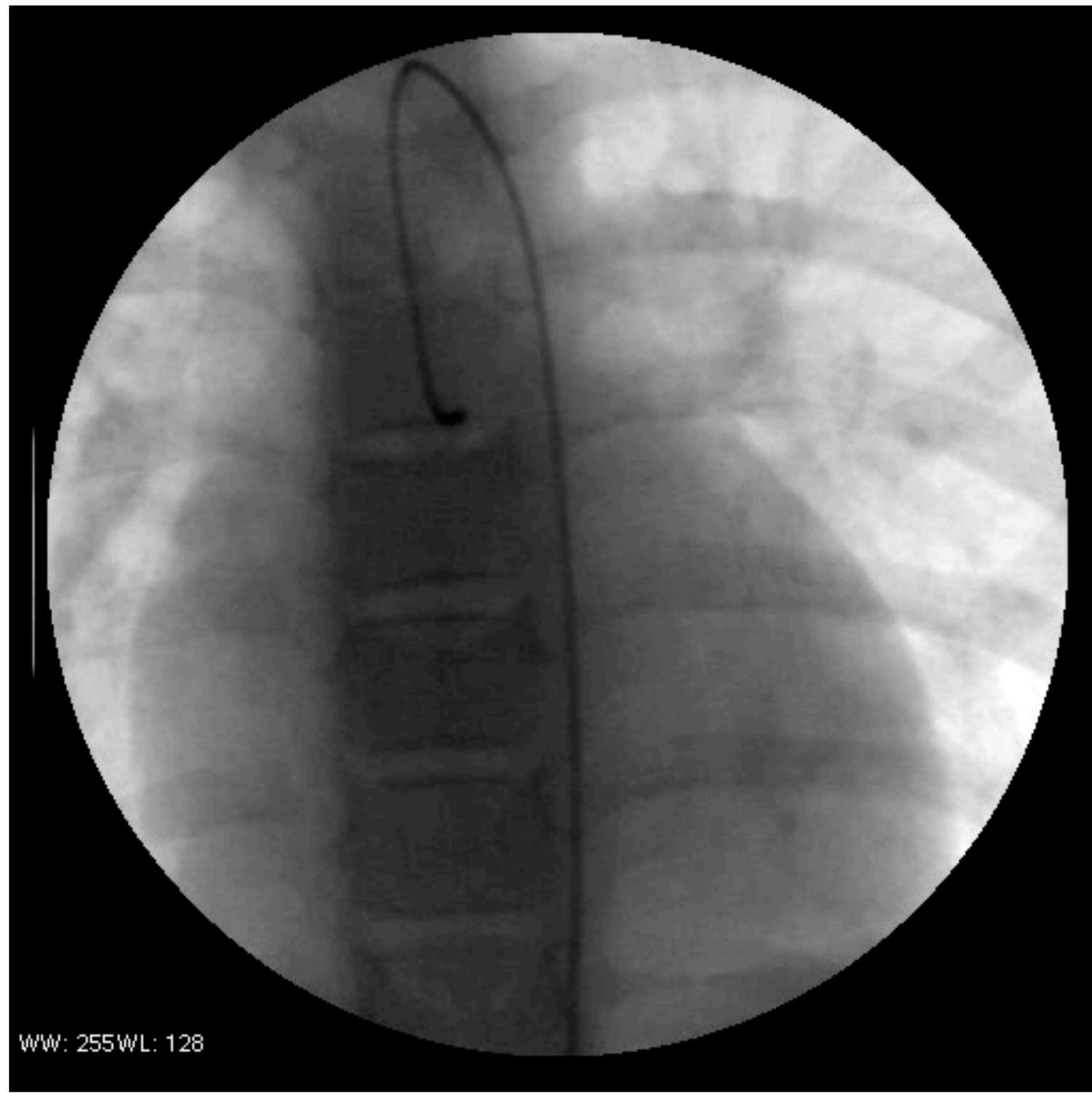
- Manon 9 ans
- Modifications ECG pendant une anesthésie pour appendicectomie et ESV
- Coroscanner : pas d'anomalie d'implantation (mauvaise qualité)
- Malaises avec PDC au sport
- DPC à l'effort
- EE positive
- Coro





WW: 255WL: 128





WW: 255WL: 128



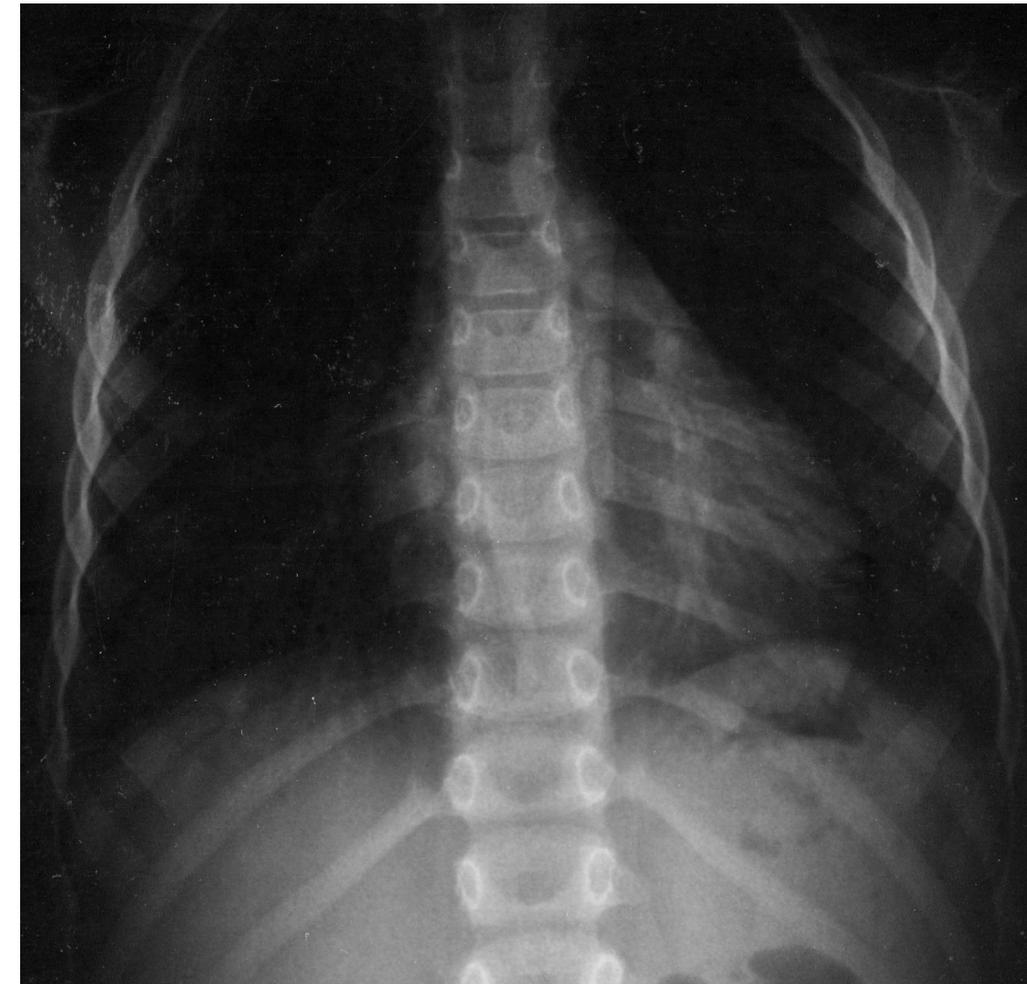


WW: 255WL: 128

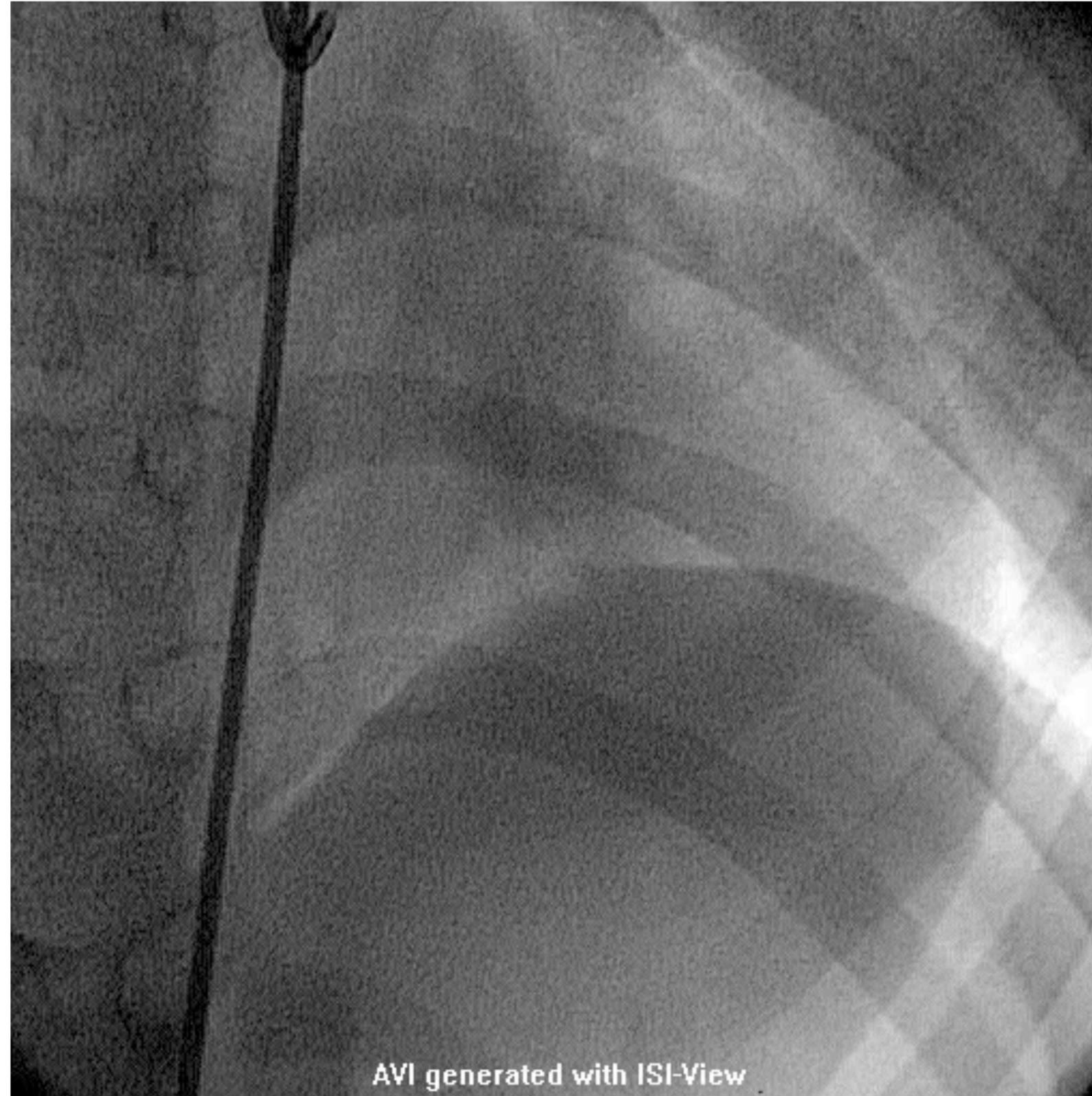


Perdus ? Cas clinique 2

- Florian
- 8 ans
- Souffle continu précordial...
- ETT : grosse coronaire en antérieur...
- Malaises au sport Sans PDC
- EE ...bof
- Coro



$Q_p/Q_s = 2$



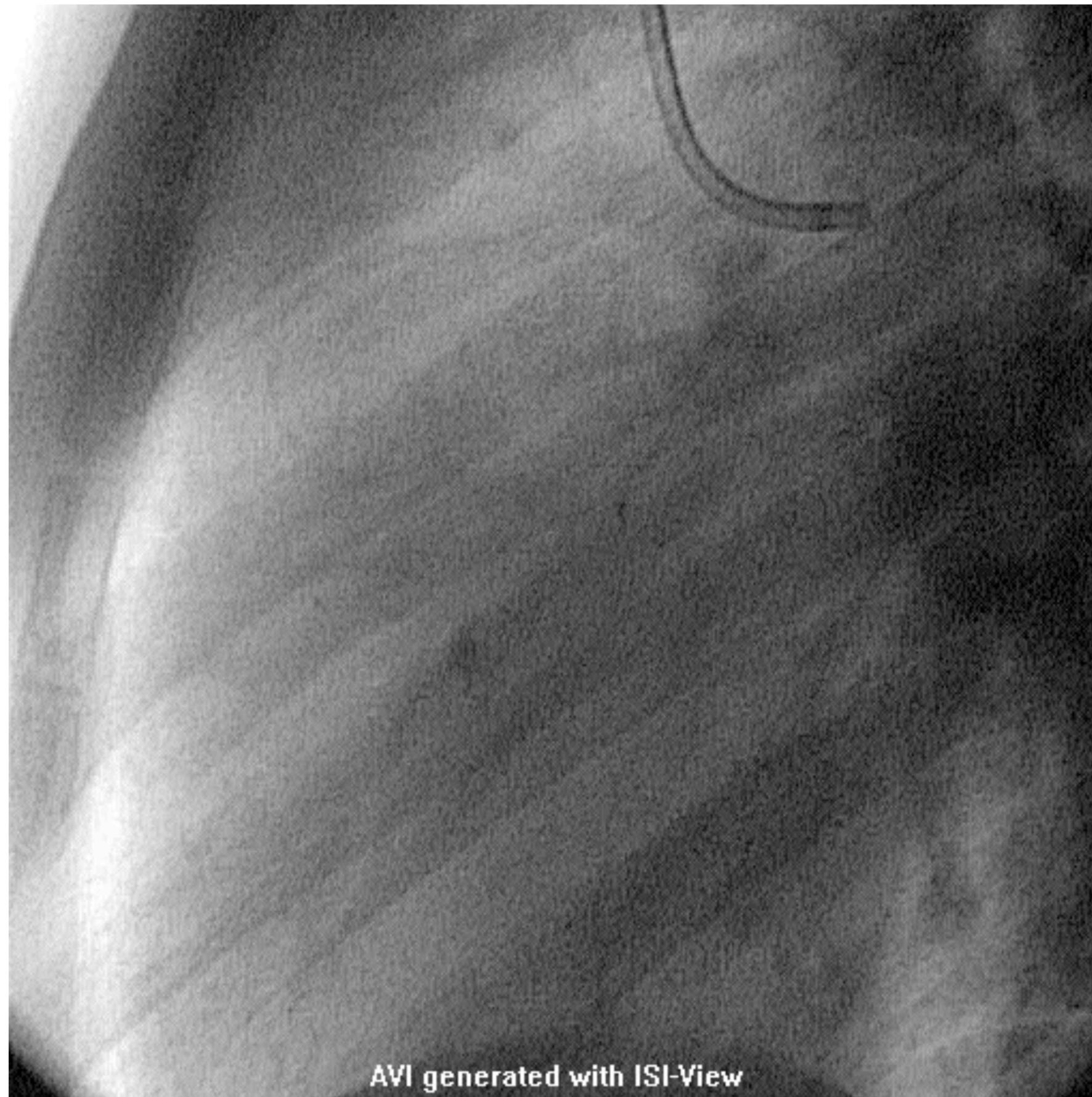
AVI generated with ISI-View

CENTRE HOSPITALIER
UNIVERSITAIRE DE NANTES

serm

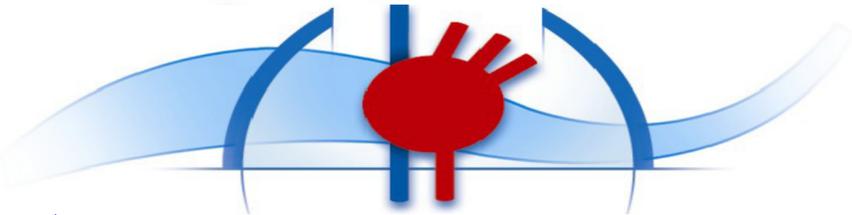

UNIVERSITÉ DE NANTES

Fistule distale

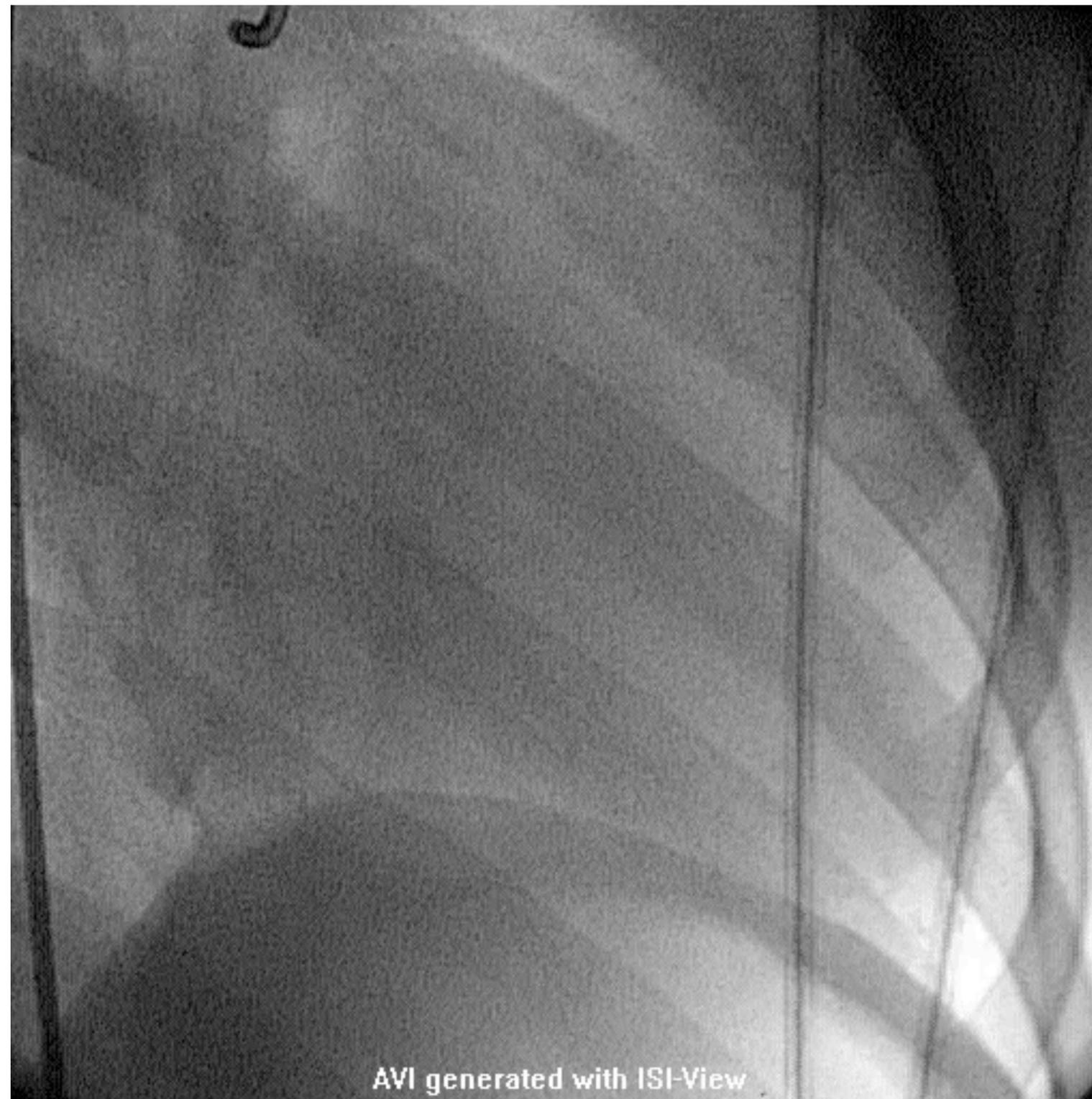


AVI generated with ISI-View

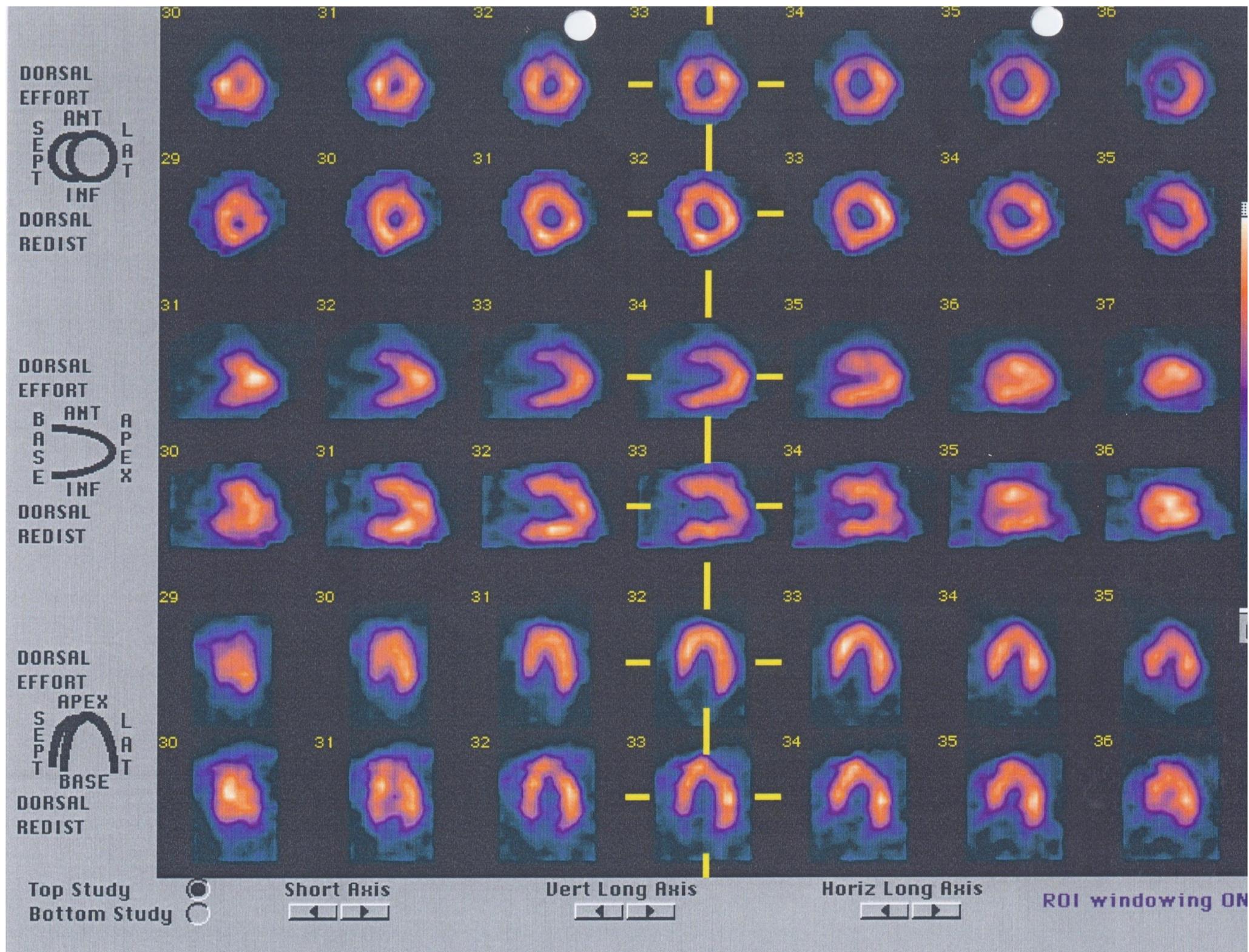
nsERM



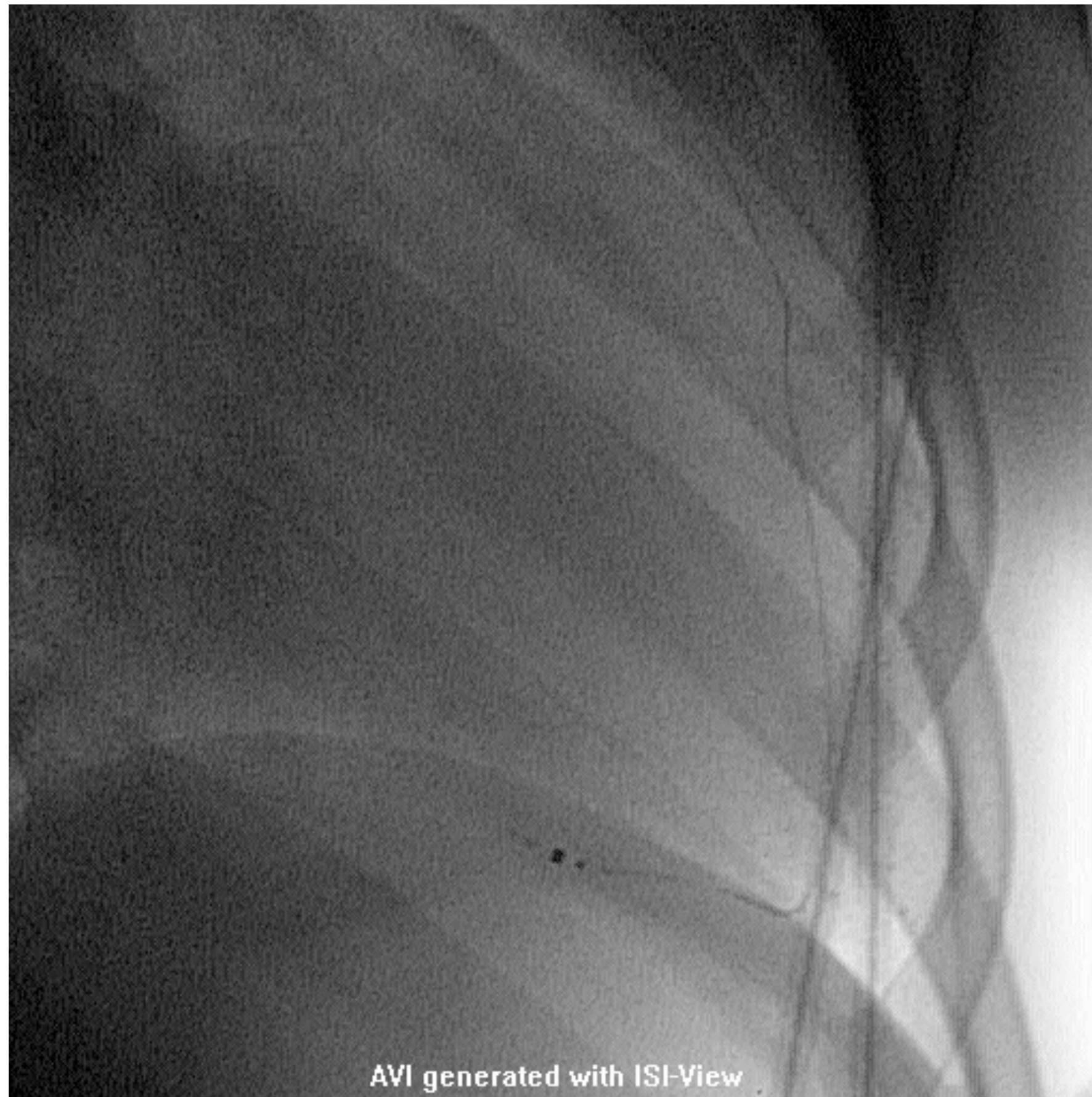
Fistule distale



AVI generated with ISI-View



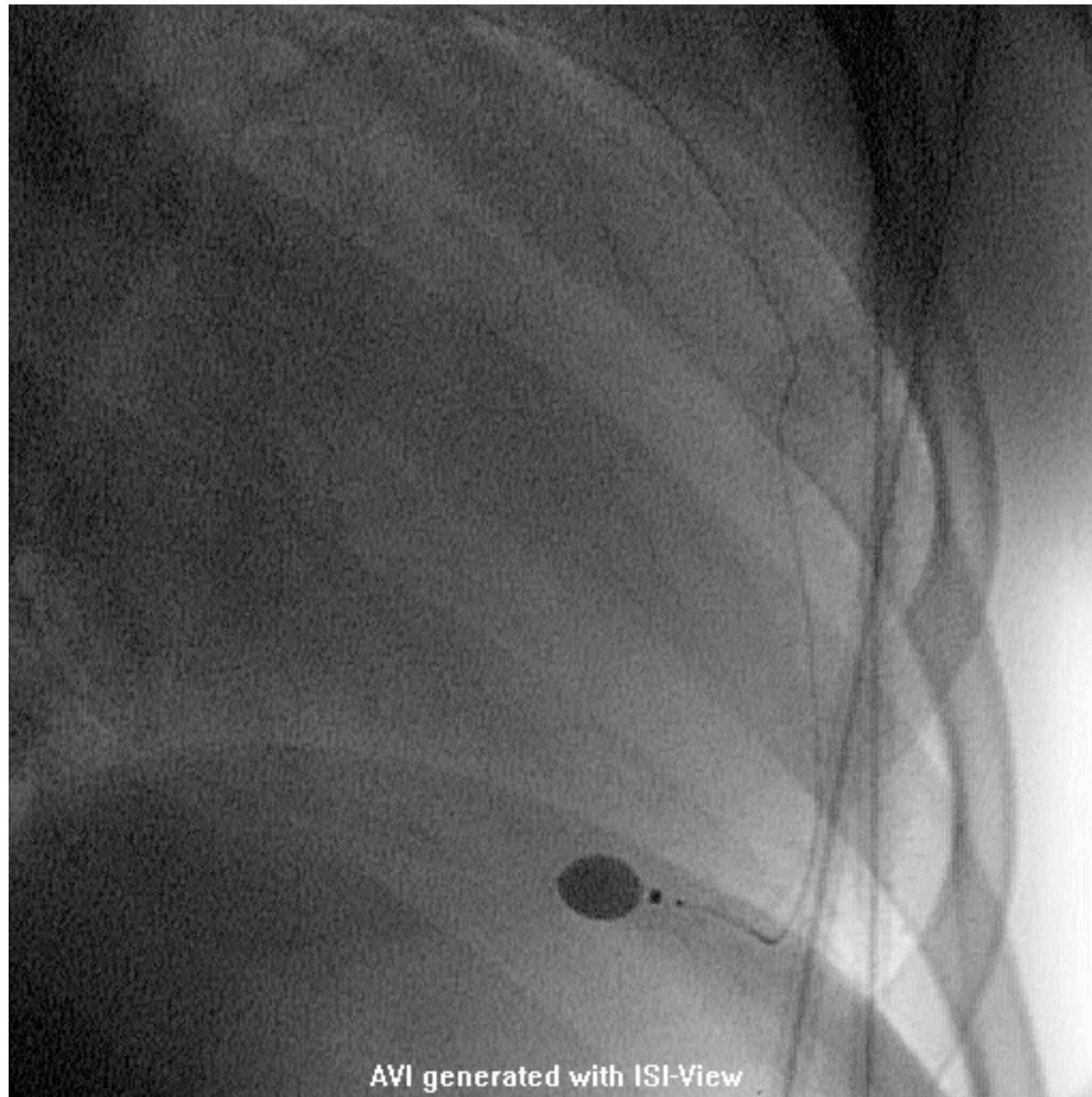
Fistule distale



AVI generated with ISI-View

iserm

Fistule distale



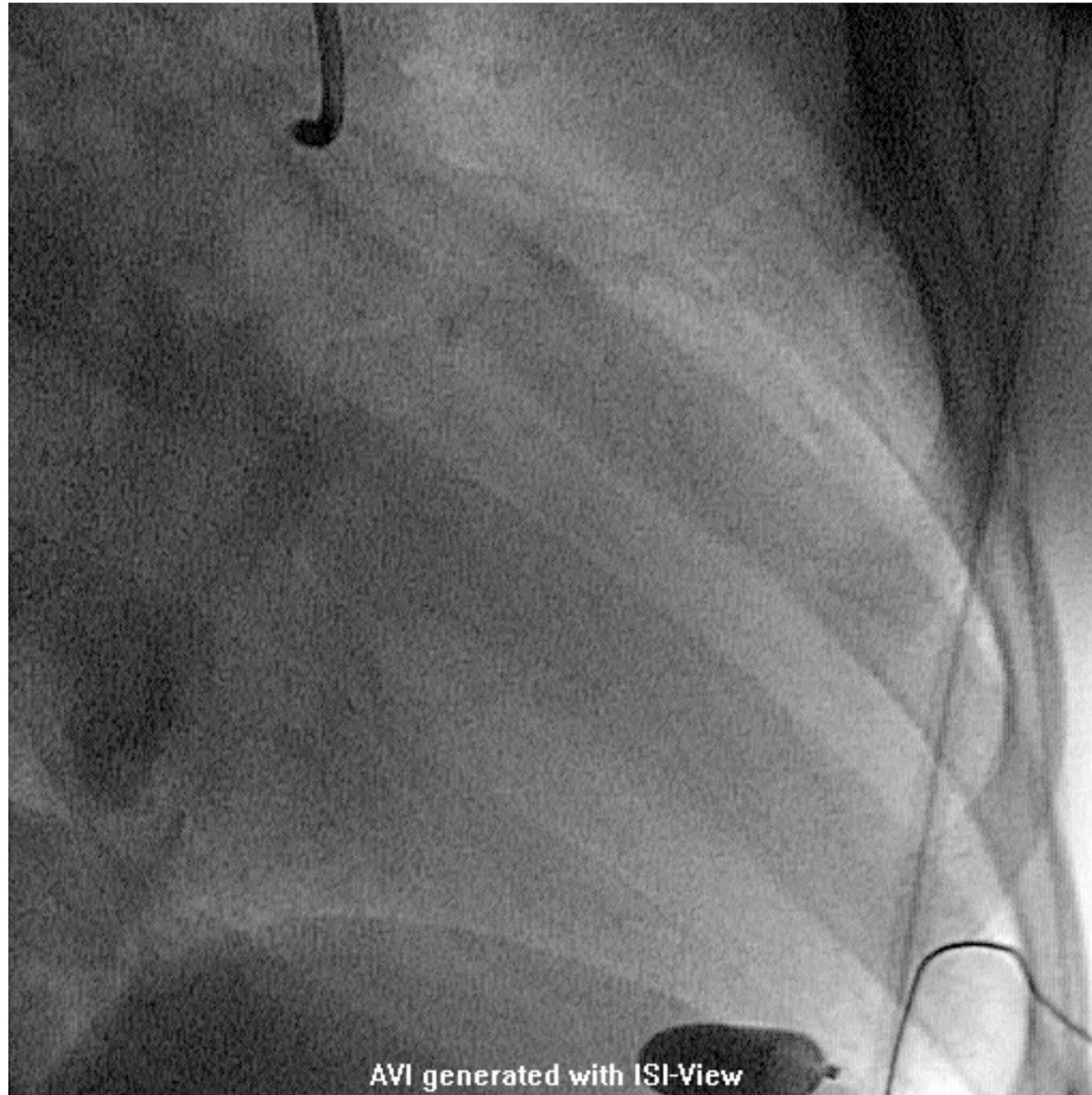
iserm

Fistule distale

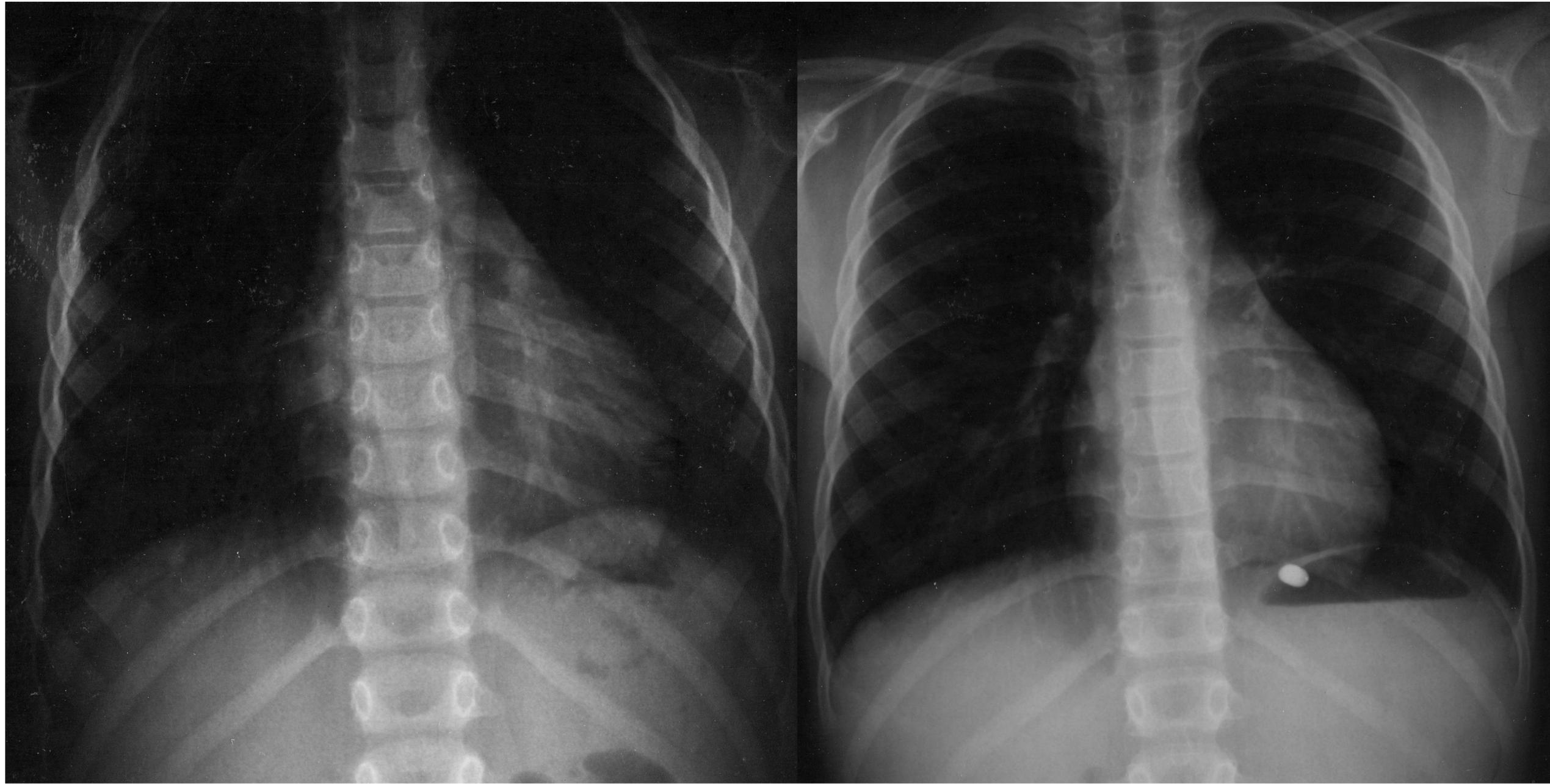


AVI generated with ISI-View

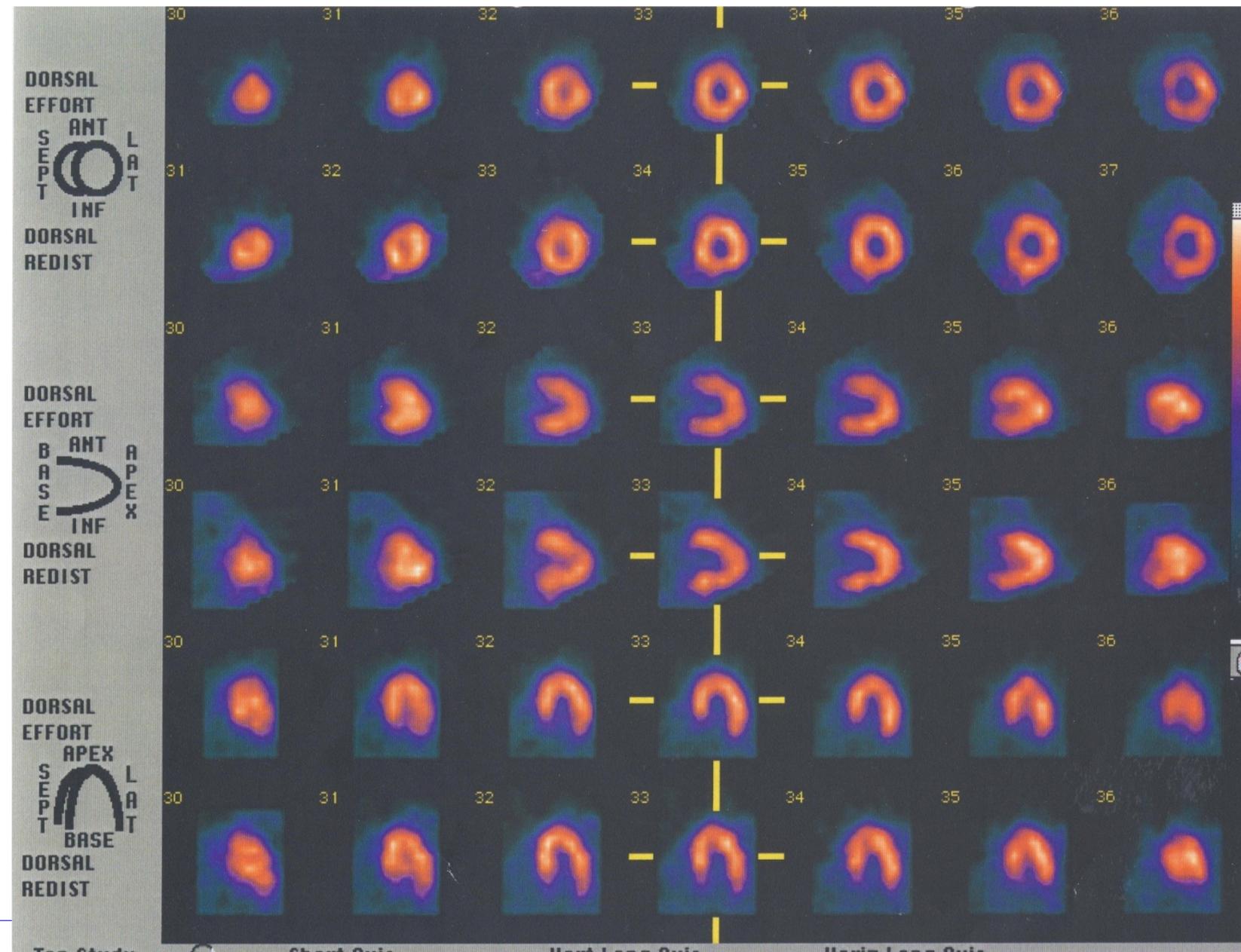
nsERM



Pas d'élévation enzymatique
12 ans de recul
Diminution du calibre écho



1 an plus tard ...quelques douleurs thoraciques...

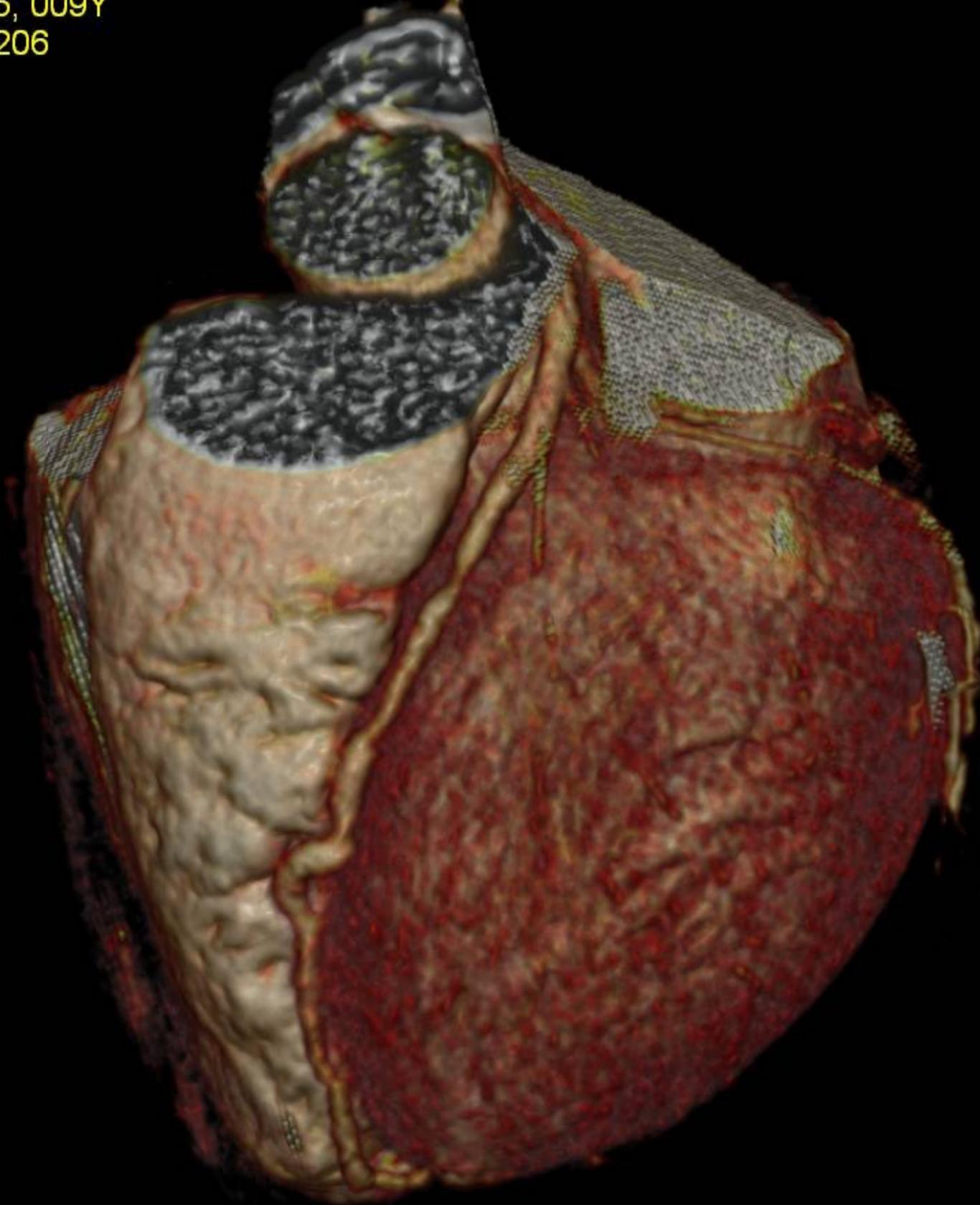


28/12/1995, 009Y
Ex. 00858206
Se. 17
Im. 1

ID: 008843580
13/04/2005
17:59:43

A
R
H

A



P

P
L
F



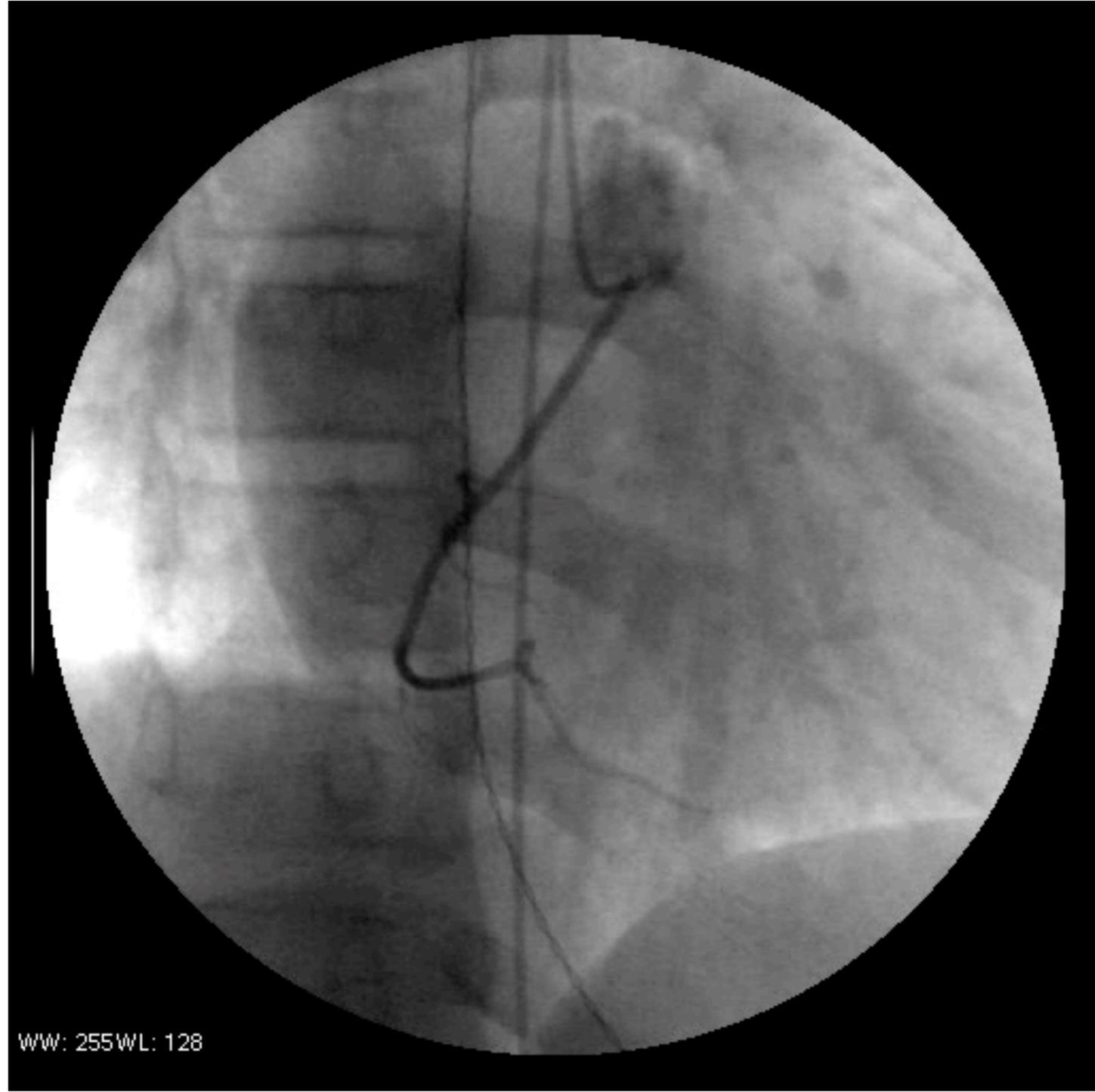
1024 x 1024
L = 128 W = 256

FLA

F

erm

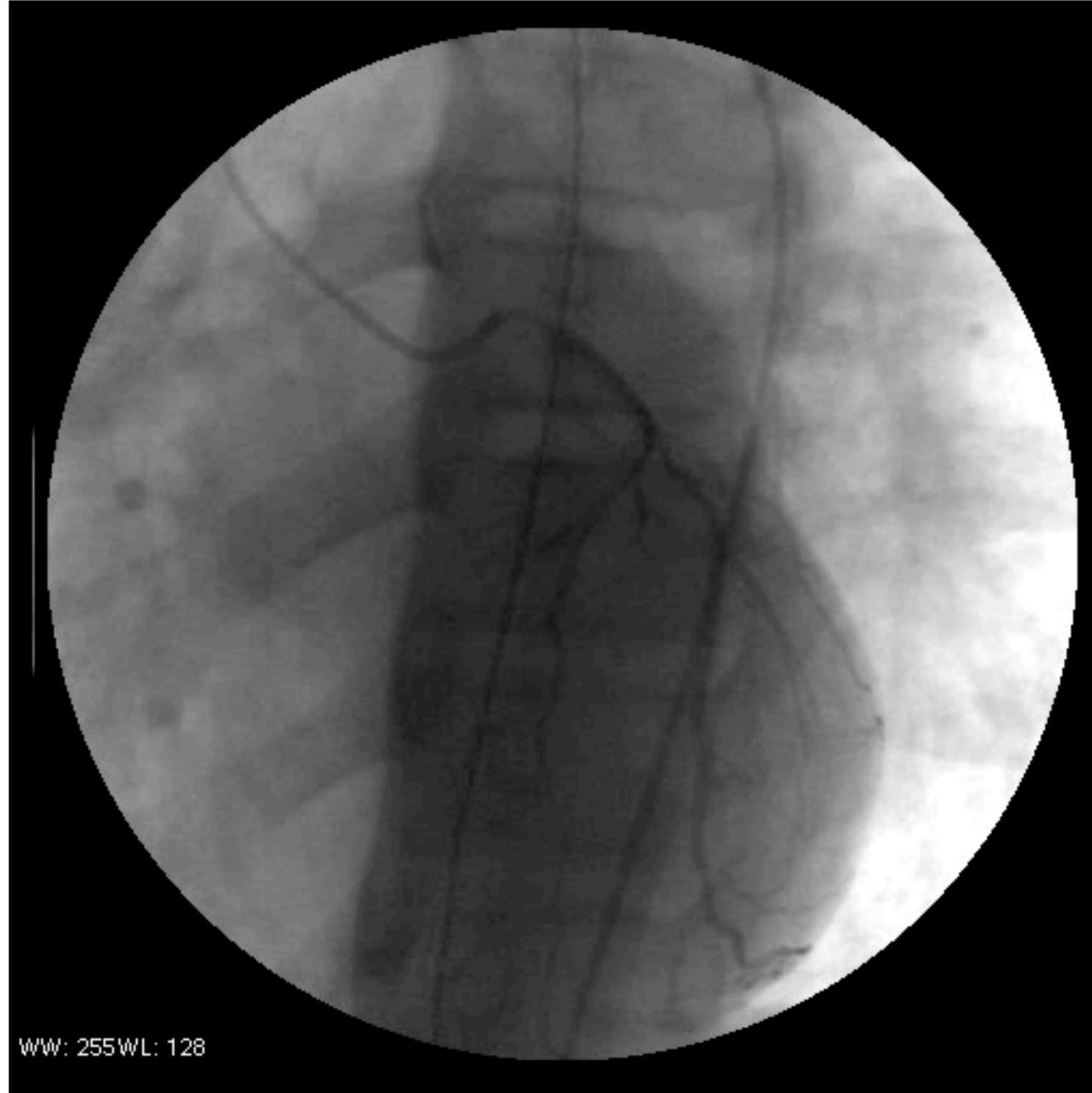
Fistule proximale



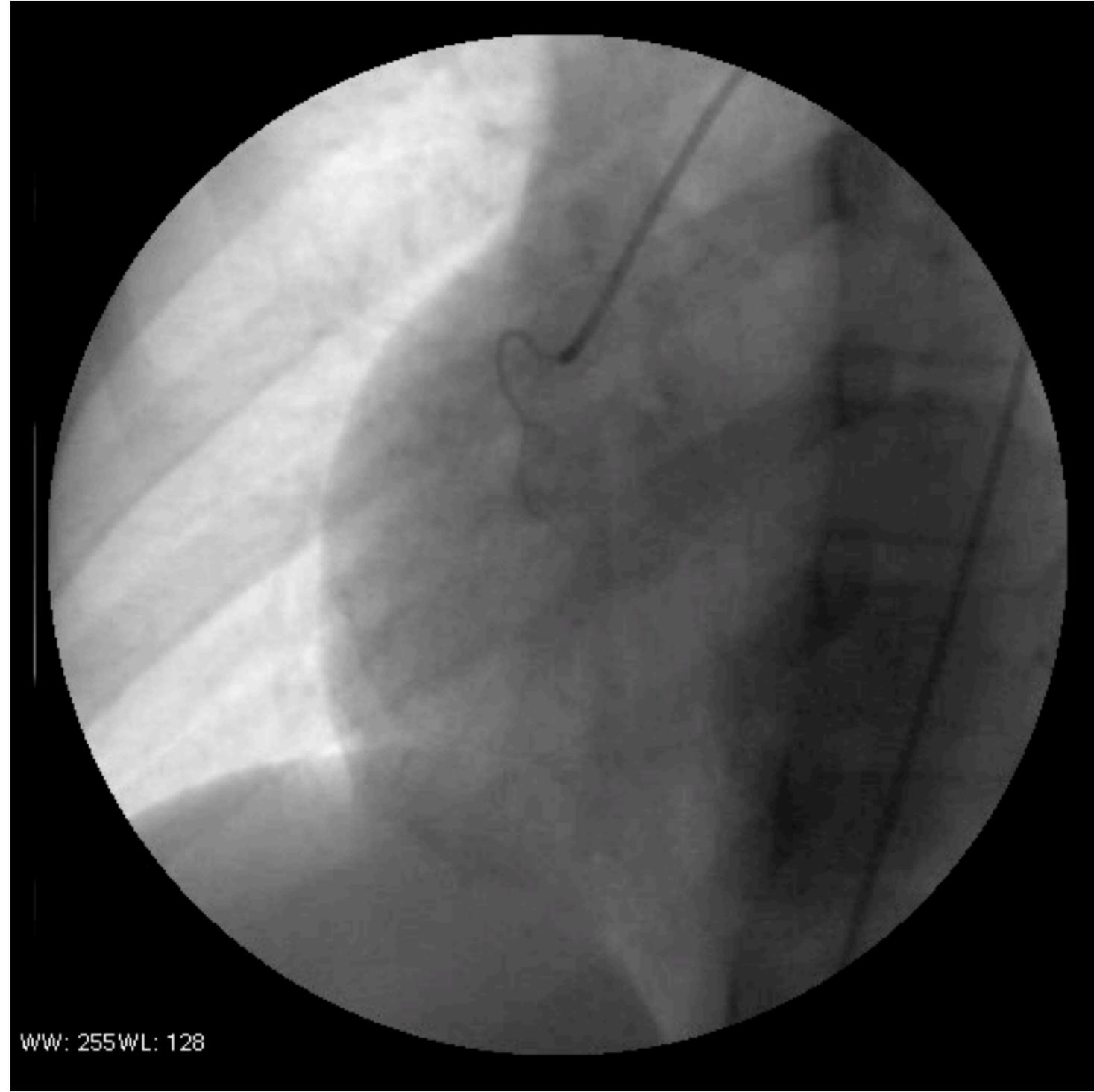
W/W: 255 WL: 128



Fistule proximale



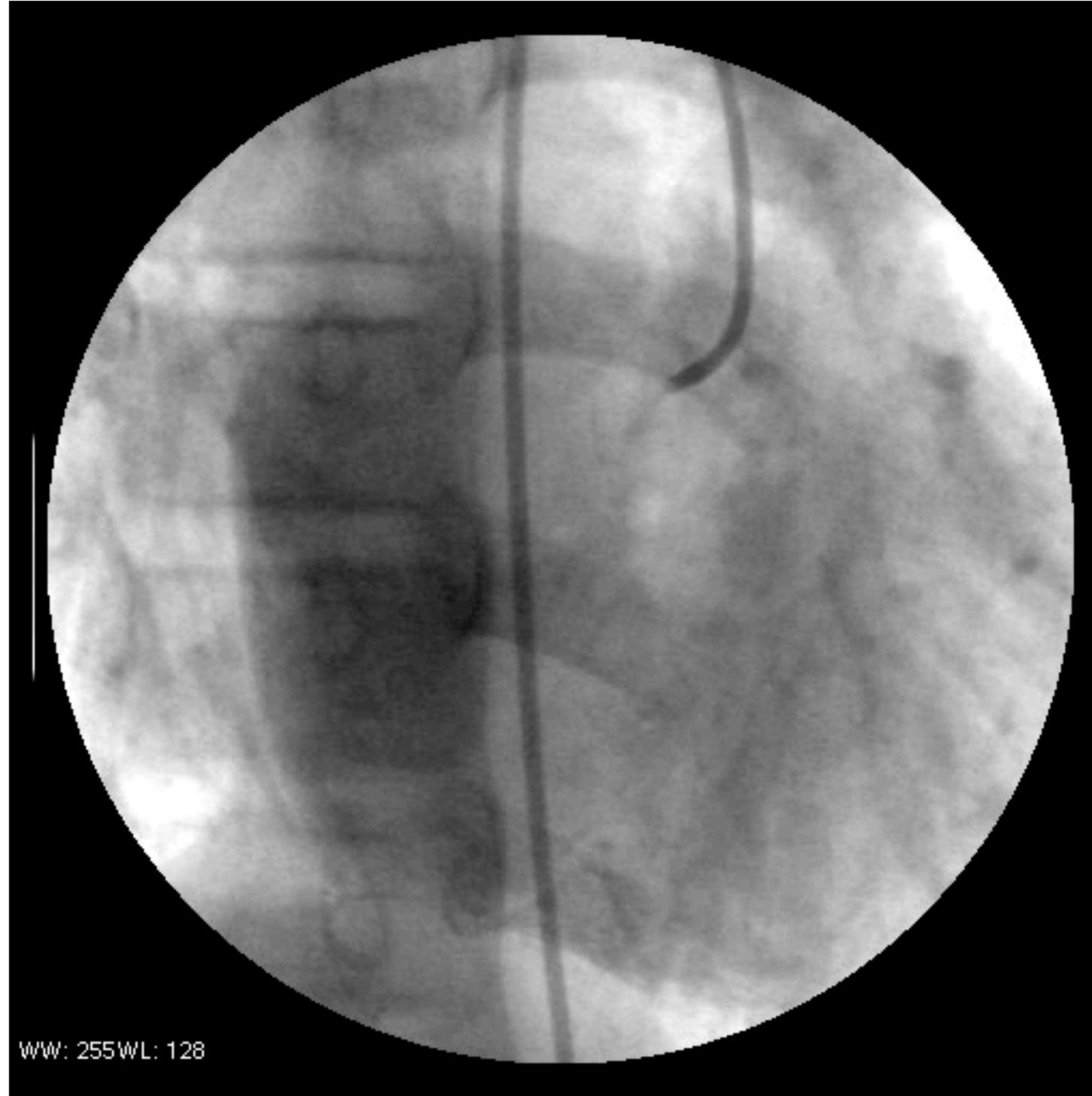
Fistule proximale



WW: 255WL: 128



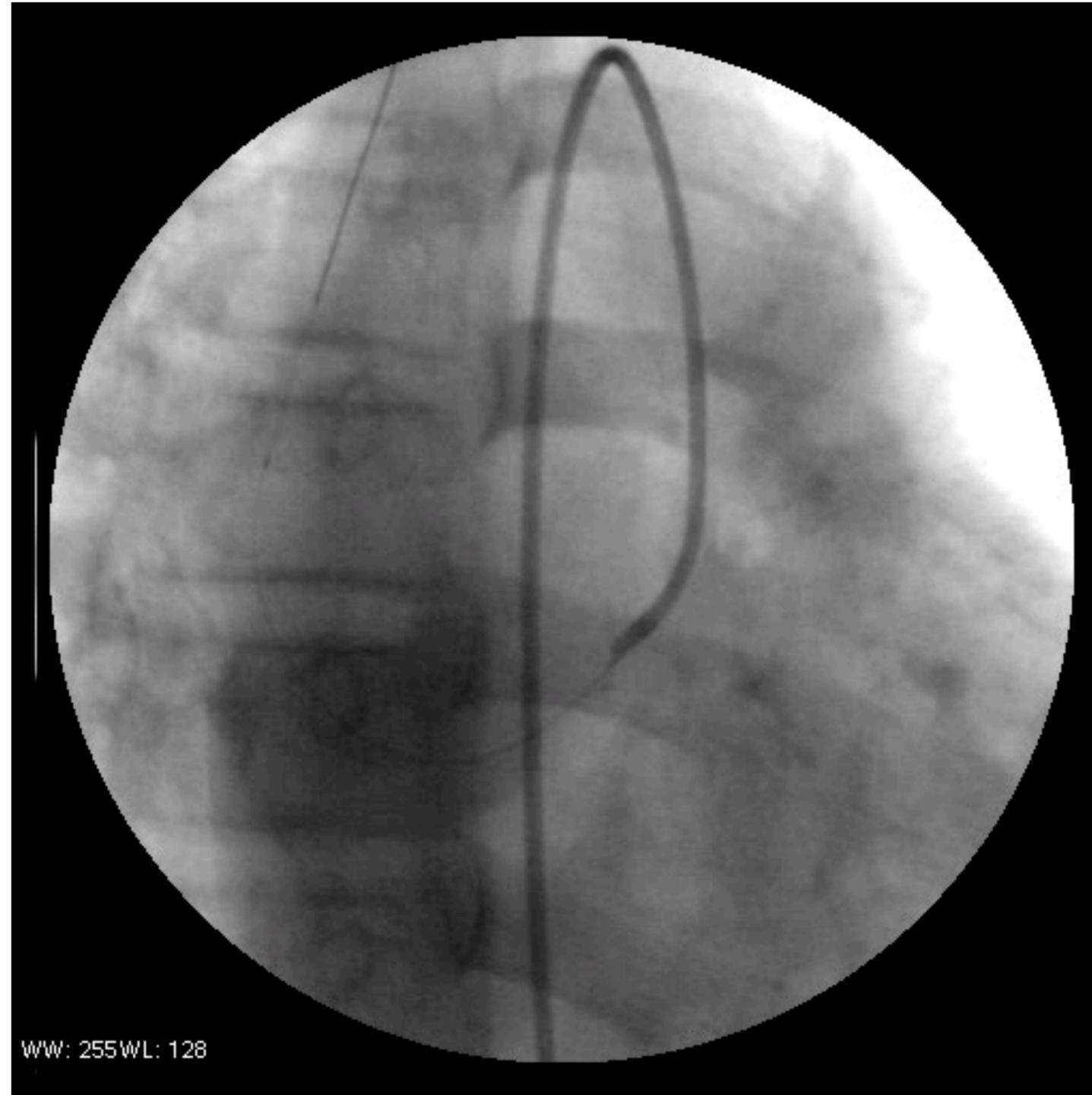
Fistule proximale



WW: 255 WL: 128



Fistule proximale



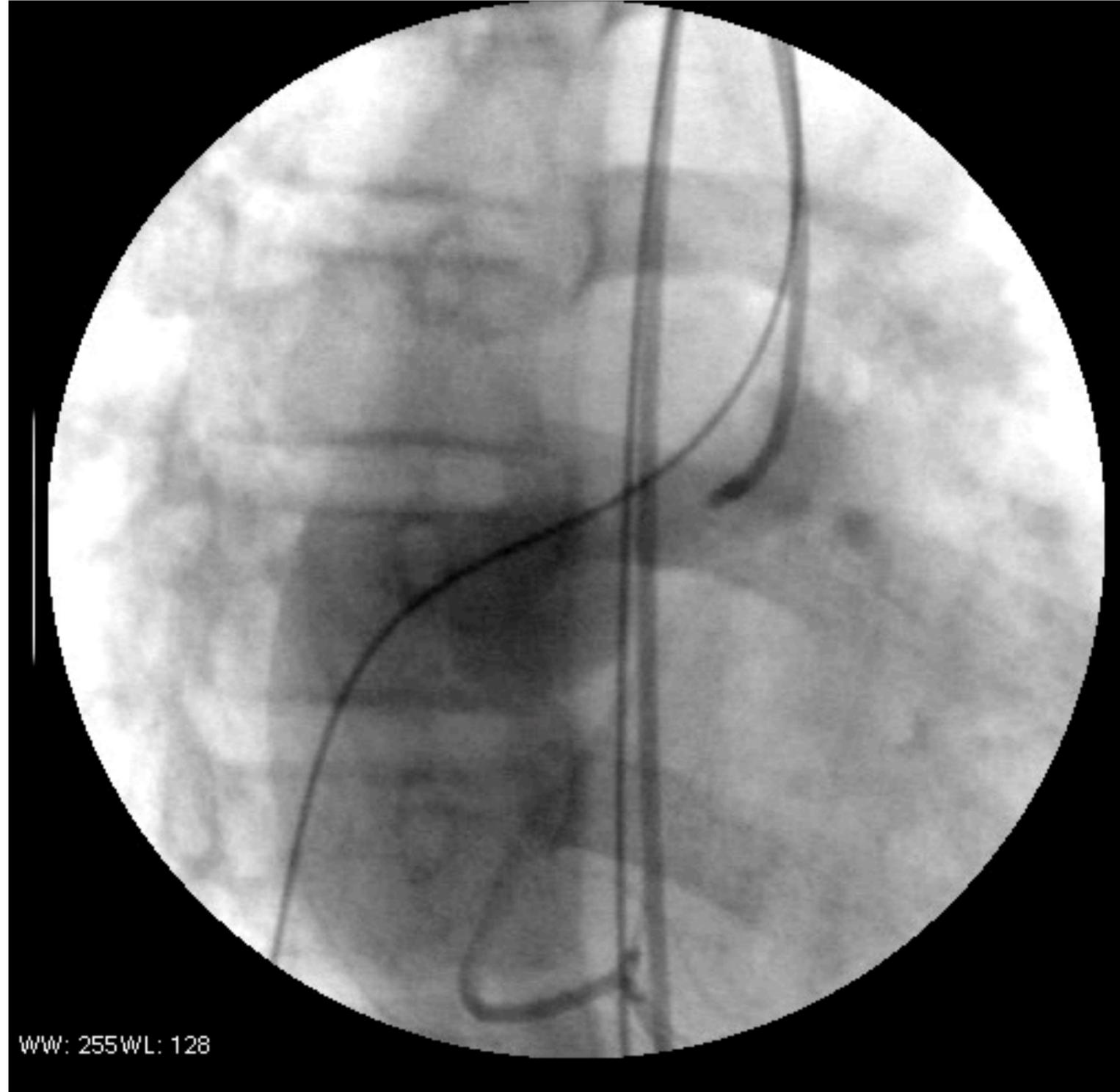
Fistule proximale



WWW: 255WL: 128



Fistule proximale



www: 255WL: 128



Fistule proximale



WW: 255 WL: 128



Fistule proximale

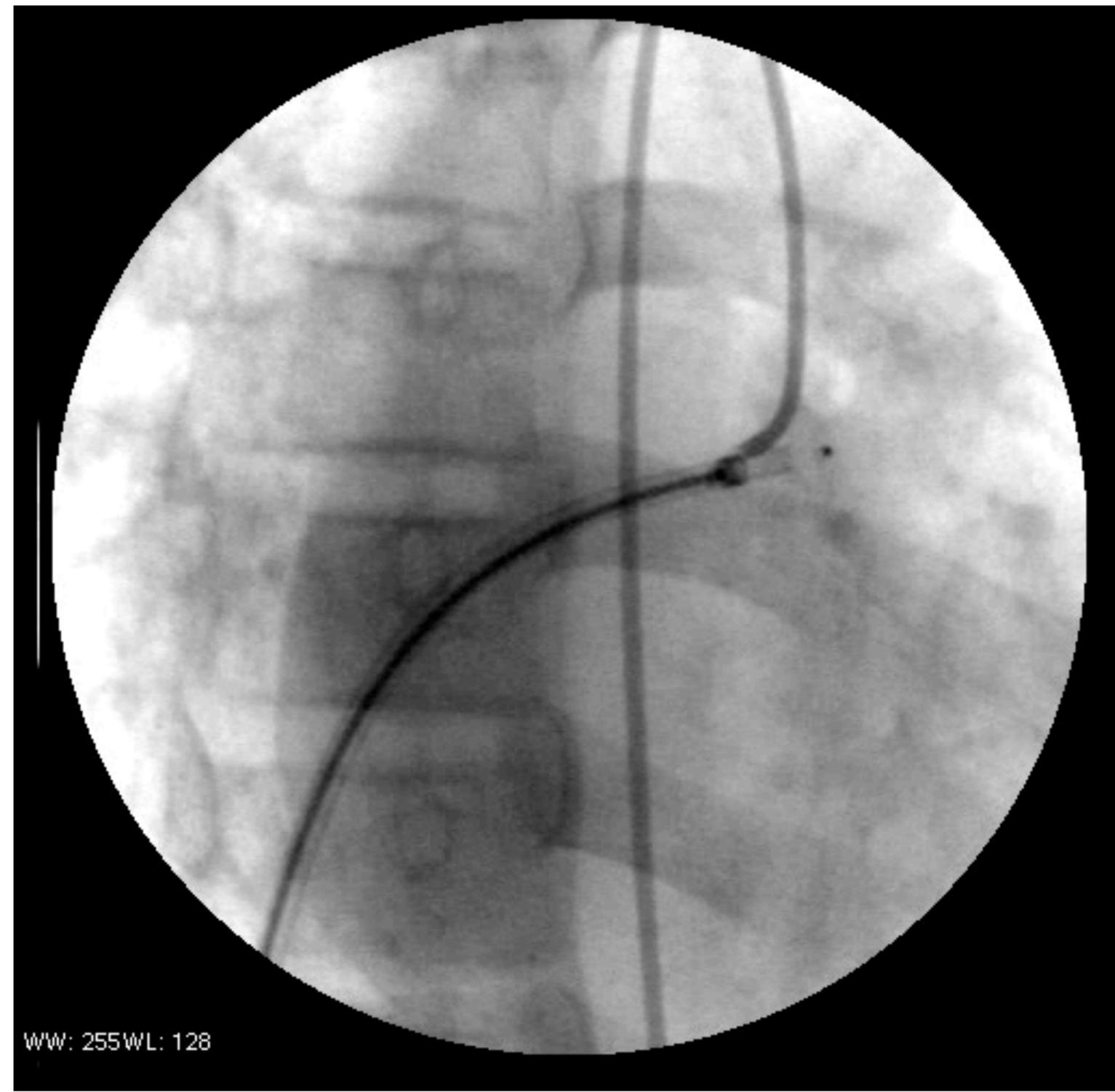


www: 255WL: 128





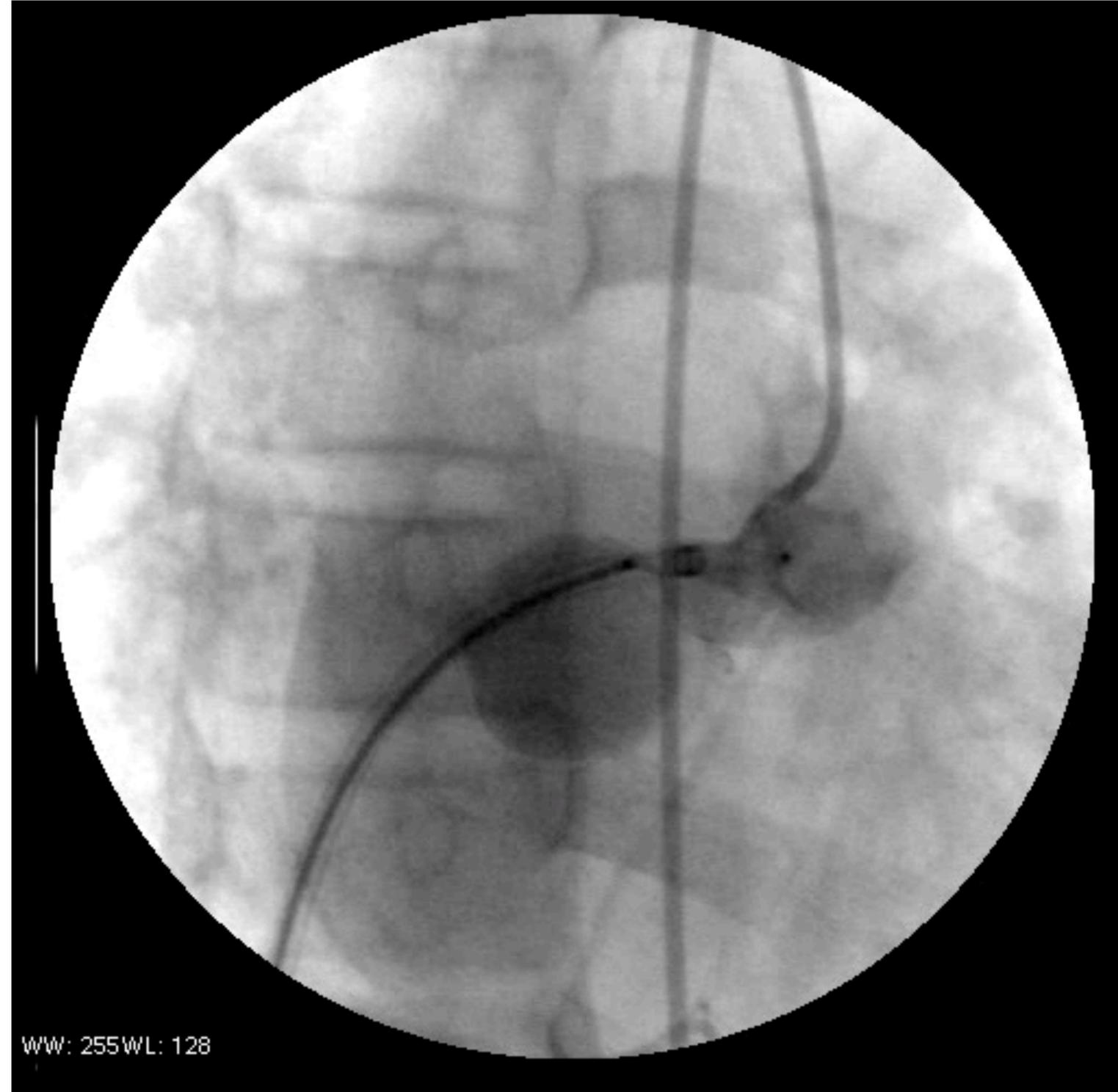
Fistule proximale



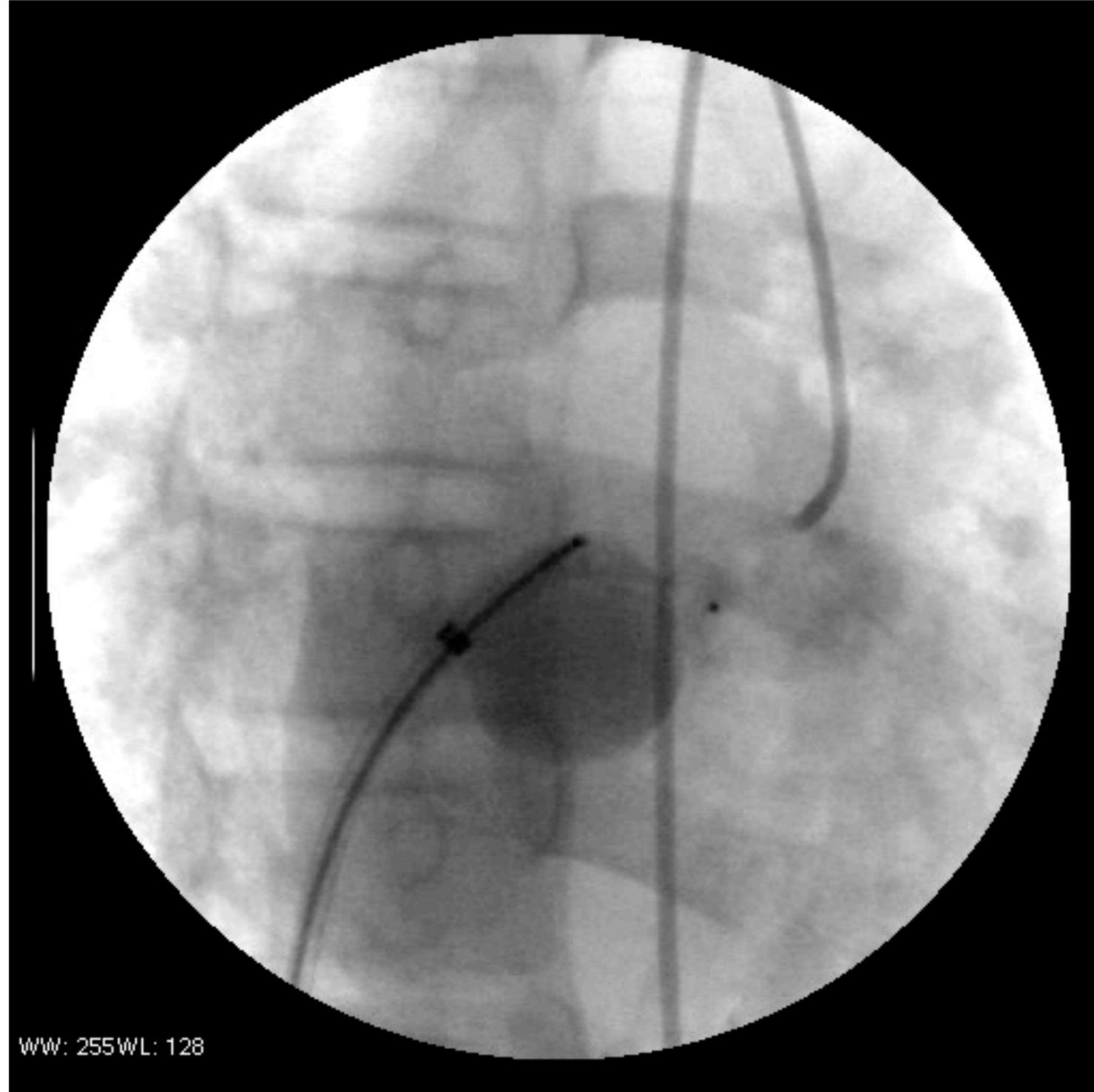
WWW: 255WL: 128



Fistule proximale

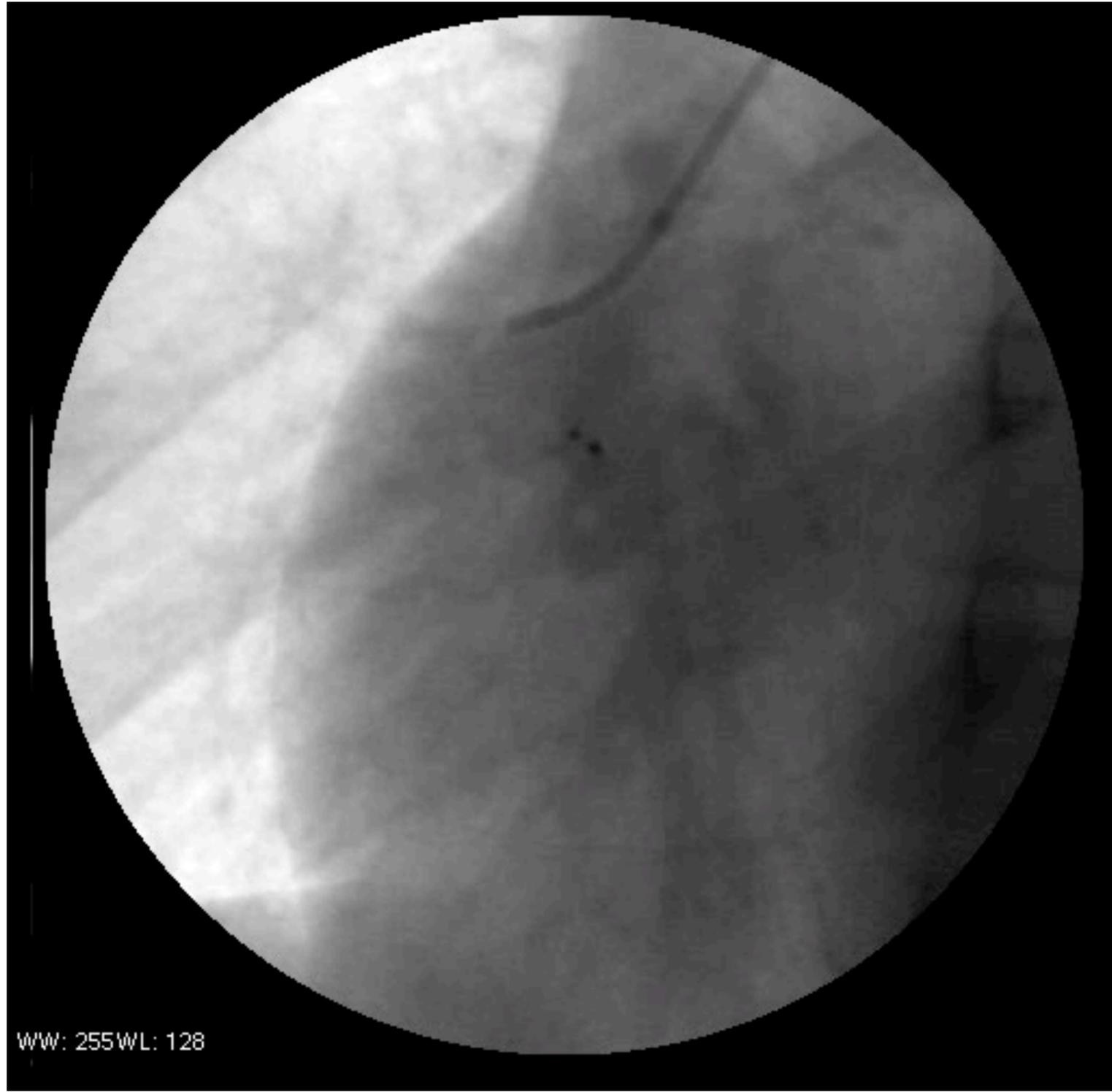


Fistule proximale



WW: 255 WL: 128





WWW: 255WL: 128



Occlusion des CAF

Catheterization and Cardiovascular Interventions 87:411–418 (2016)

Transcatheter Closure of Coronary Artery Fistulas in Infants and Children: A French Multicenter Study

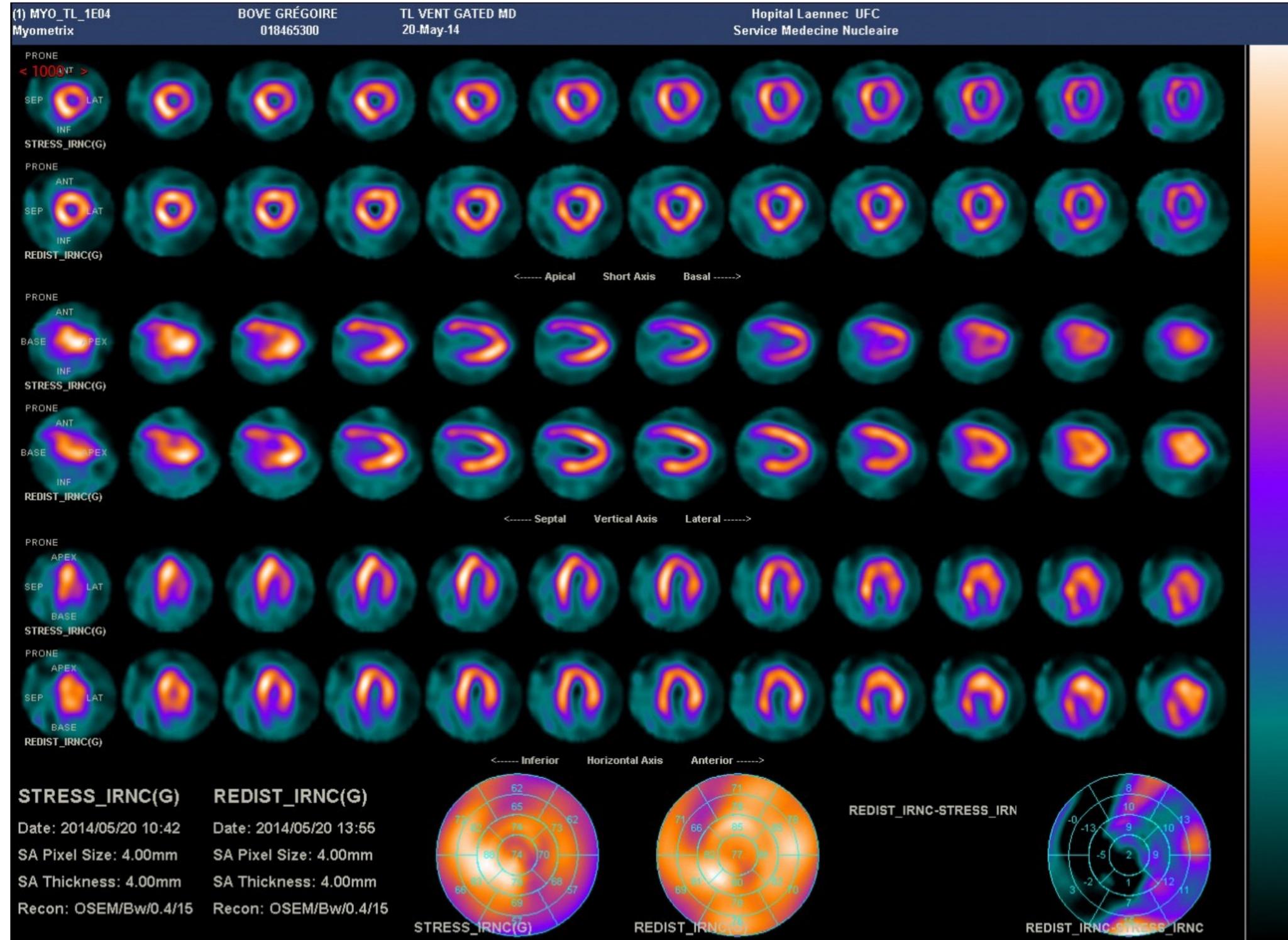
Benoît Mottin,^{1*} MD, Alban Baruteau,² MD, Younes Boudjemline,³ MD, PhD, François J. Piechaud,⁴ MD, François Godart,⁵ MD, PhD, Jean-Rene Lusson,⁶ MD, PhD, Sebastien Hascoet,^{2,7} MD, Laurianne Le Gloan,¹ MD, Karine Warin Fresse,¹ MD, Beatrice Guyomarch,¹ MSc, Ivan Bouzguenda,⁴ MD, Sophie Malekzadeh-Milani,³ MD, Jerome Petit,² MD, and Patrice Guerin,¹ MD, PhD

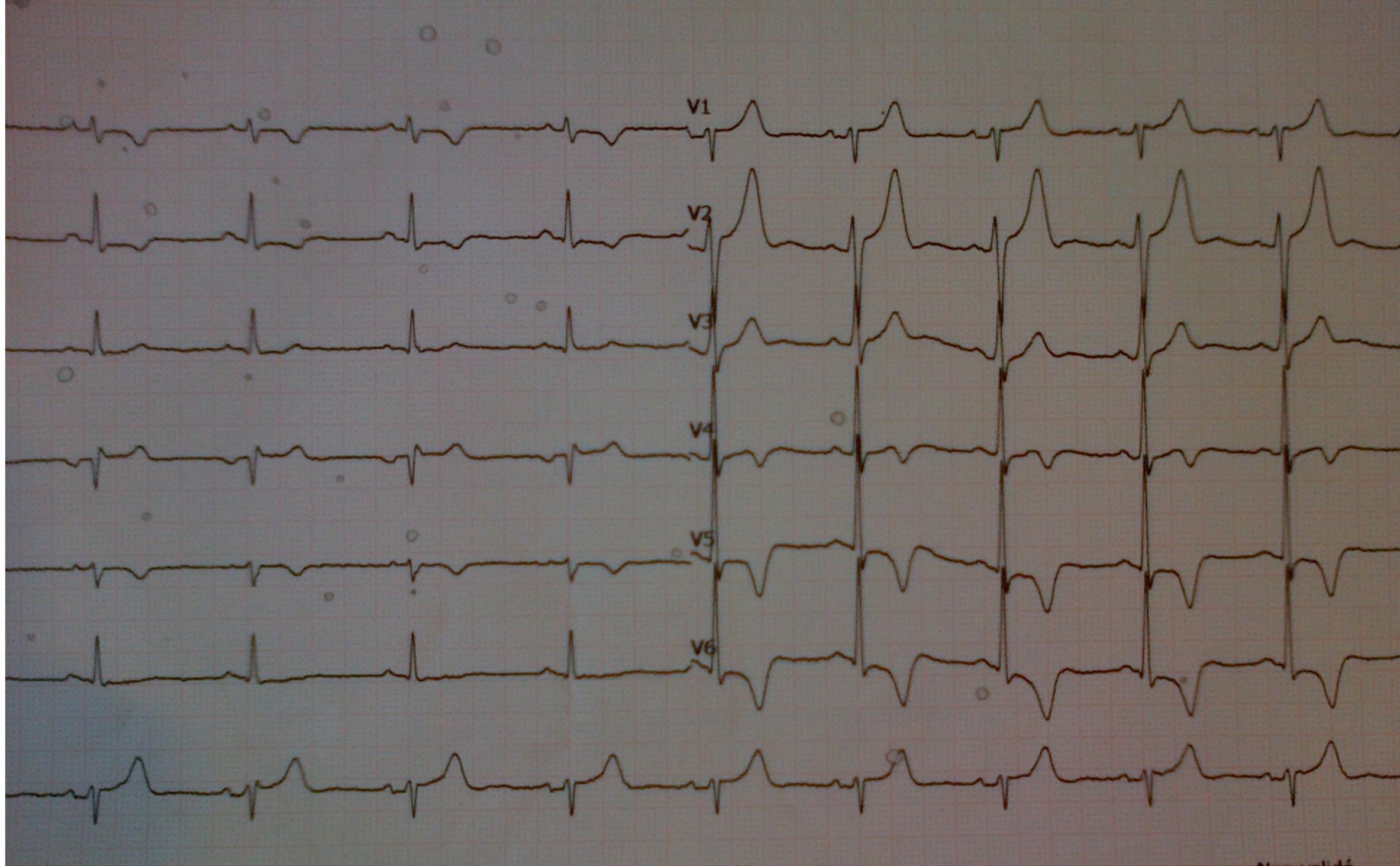
Objectives: The short-term efficacy and safety of transcatheter closure (TCC) for the management of coronary artery fistulas (CAFs) was investigated in pediatric patients. **Background:** CAFs are rare with potentially severe complications and their management is still a matter of debate. Percutaneous closure appears to be the treatment of choice in anatomically suitable vessels but limited data are available in the pediatric population. **Methods:** This retrospective, observational, multicenter, national study included patients under 16 years of age who underwent TCC of a congenital CAF.



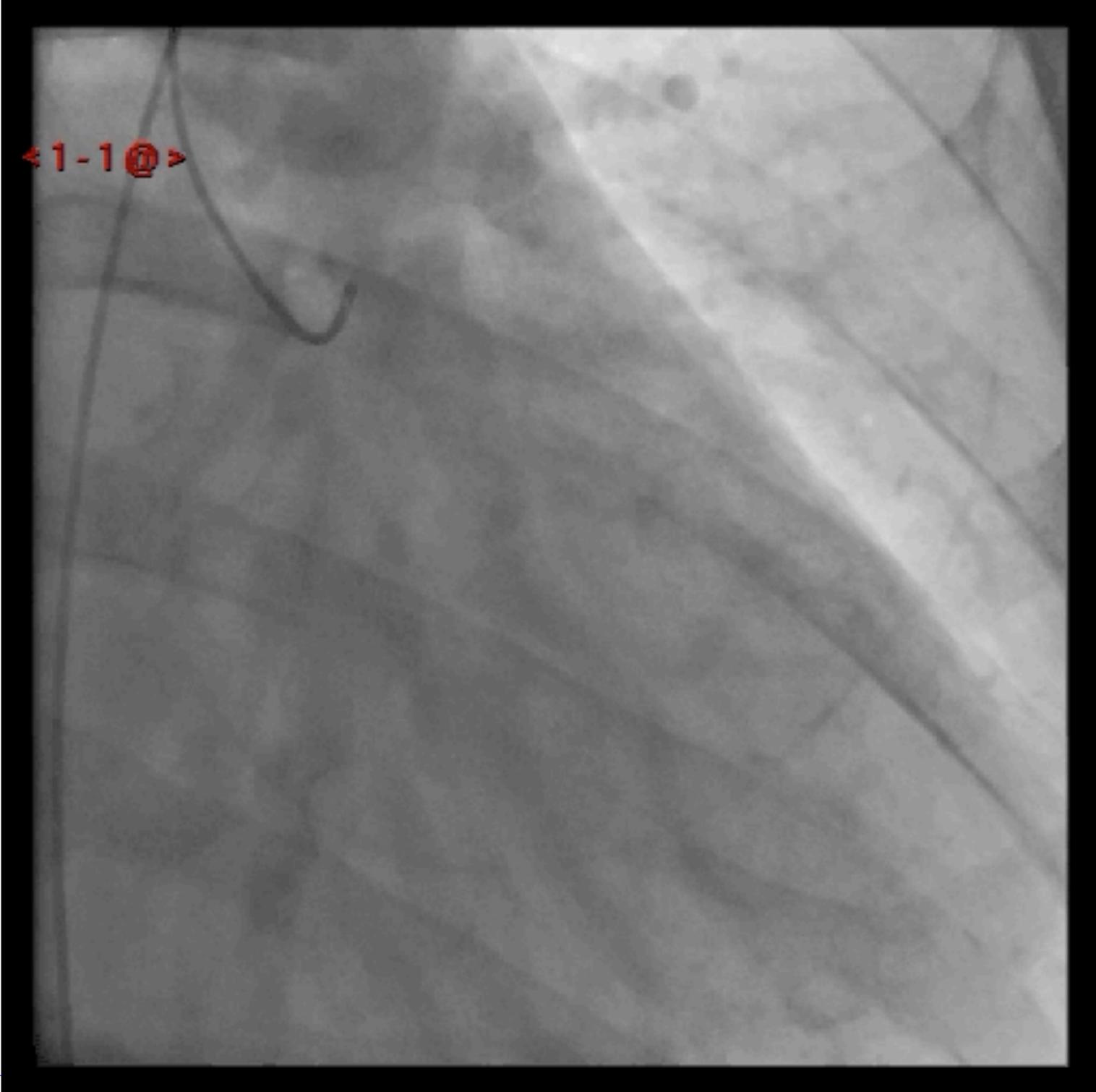
Perdus ? Cas clinique 3

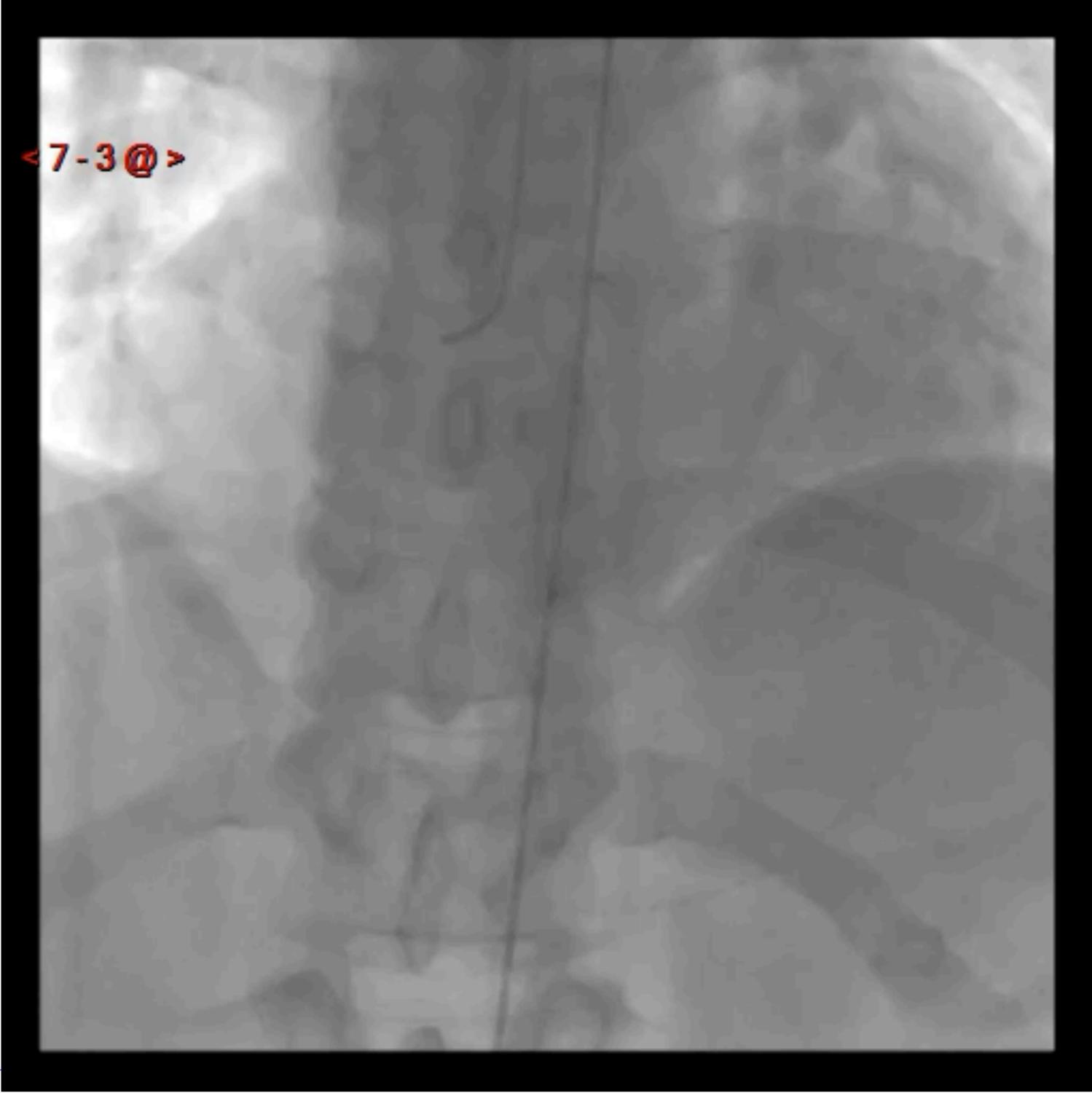
- Mr B. Grégoire
- 40 ans
- Sportif (course à pied deux à trois fois par semaine)
- Gène thoracique à l'effort
- Pas d'antécédents
- Pas de FDR
- En forme....





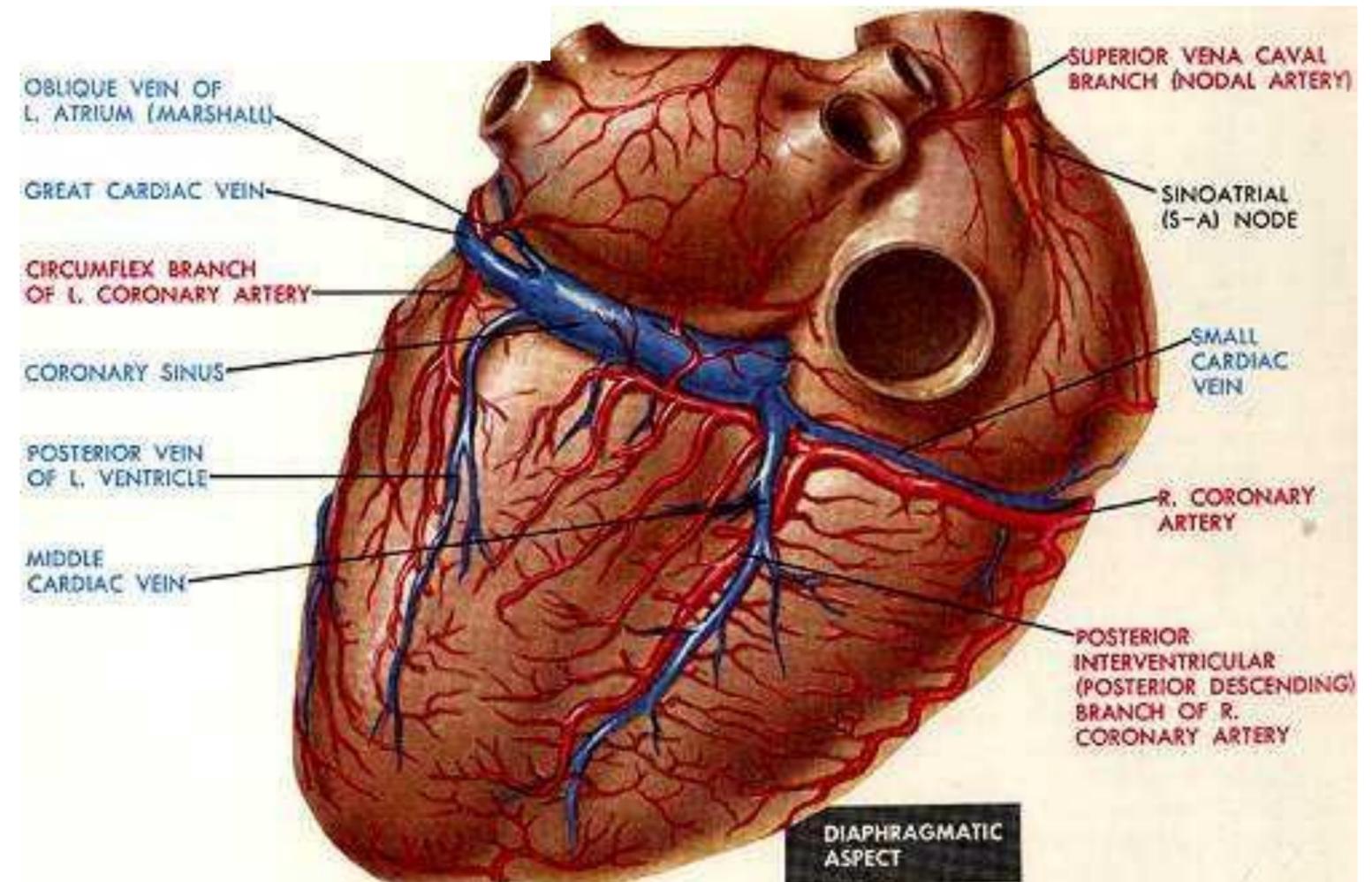
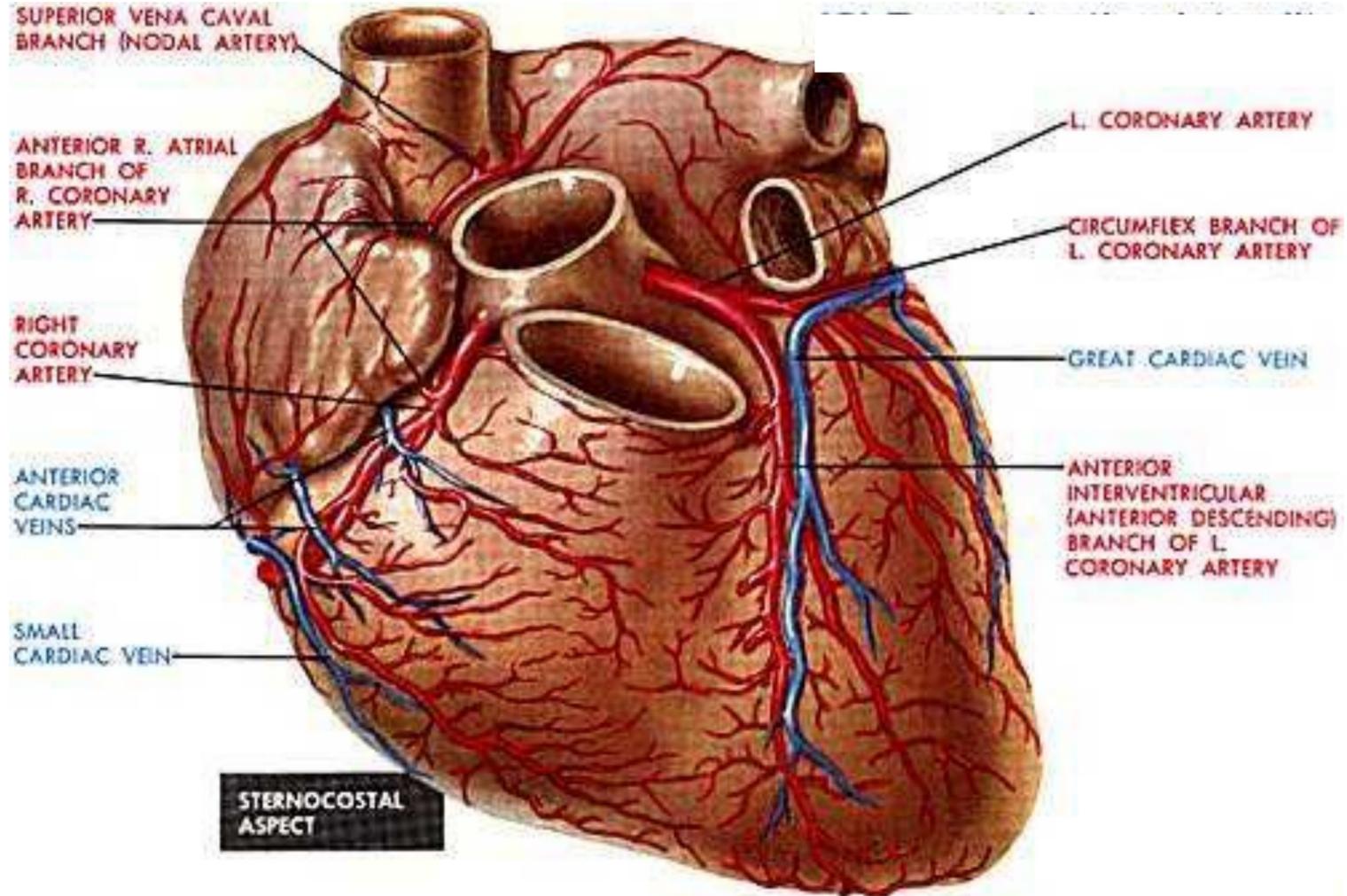
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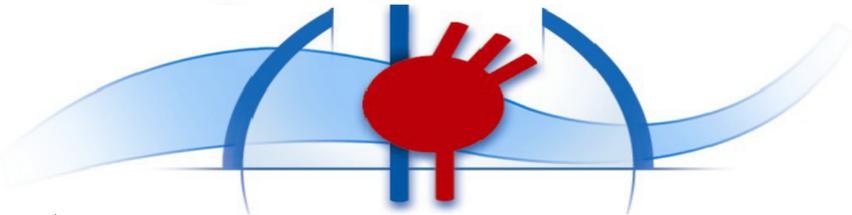












Caractéristiques générales

Réserve coronaire :

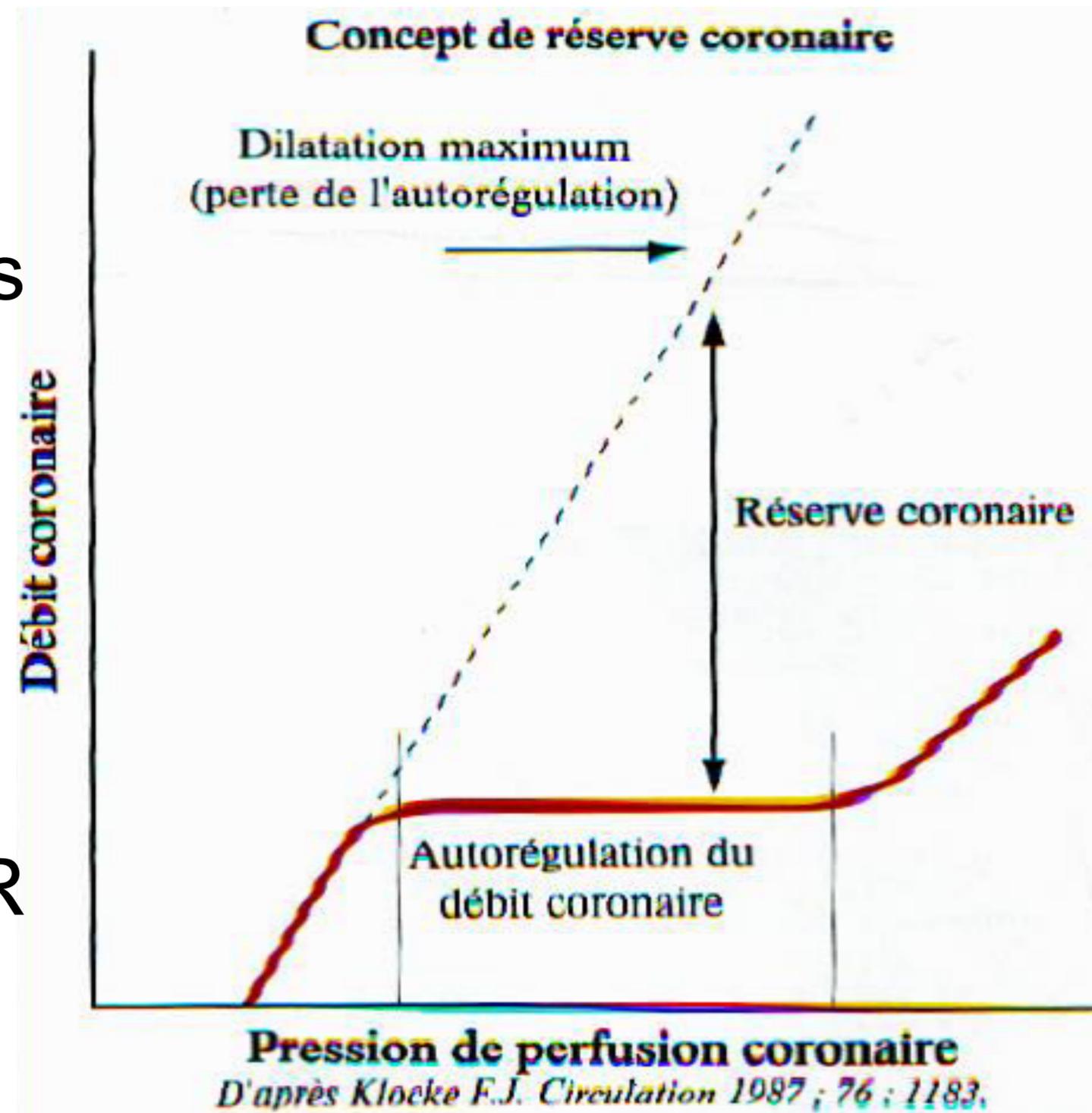
$(Q_{\text{max}} - Q_{\text{repos}}) : Q_{\text{repos}}$

$$P = Q \times R$$

$$Q = P / R$$

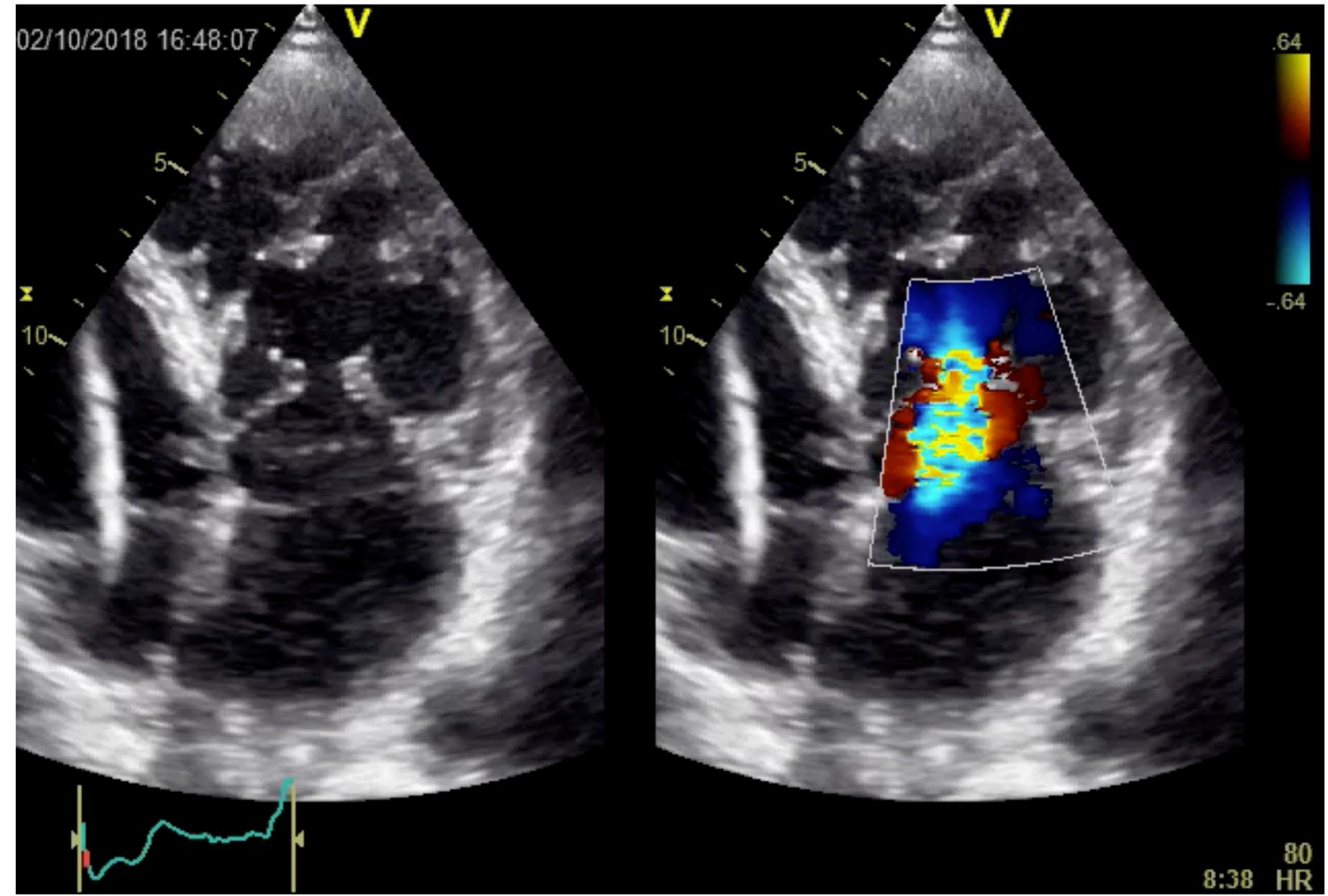
$Q = P/R$ soit $Q = P_a - P_v / R$

Et p_v proche de 0

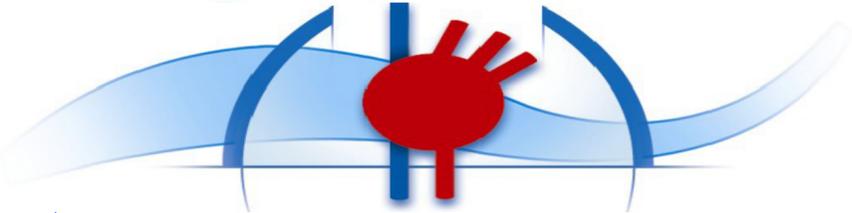


Perdus ? Cas clinique 4

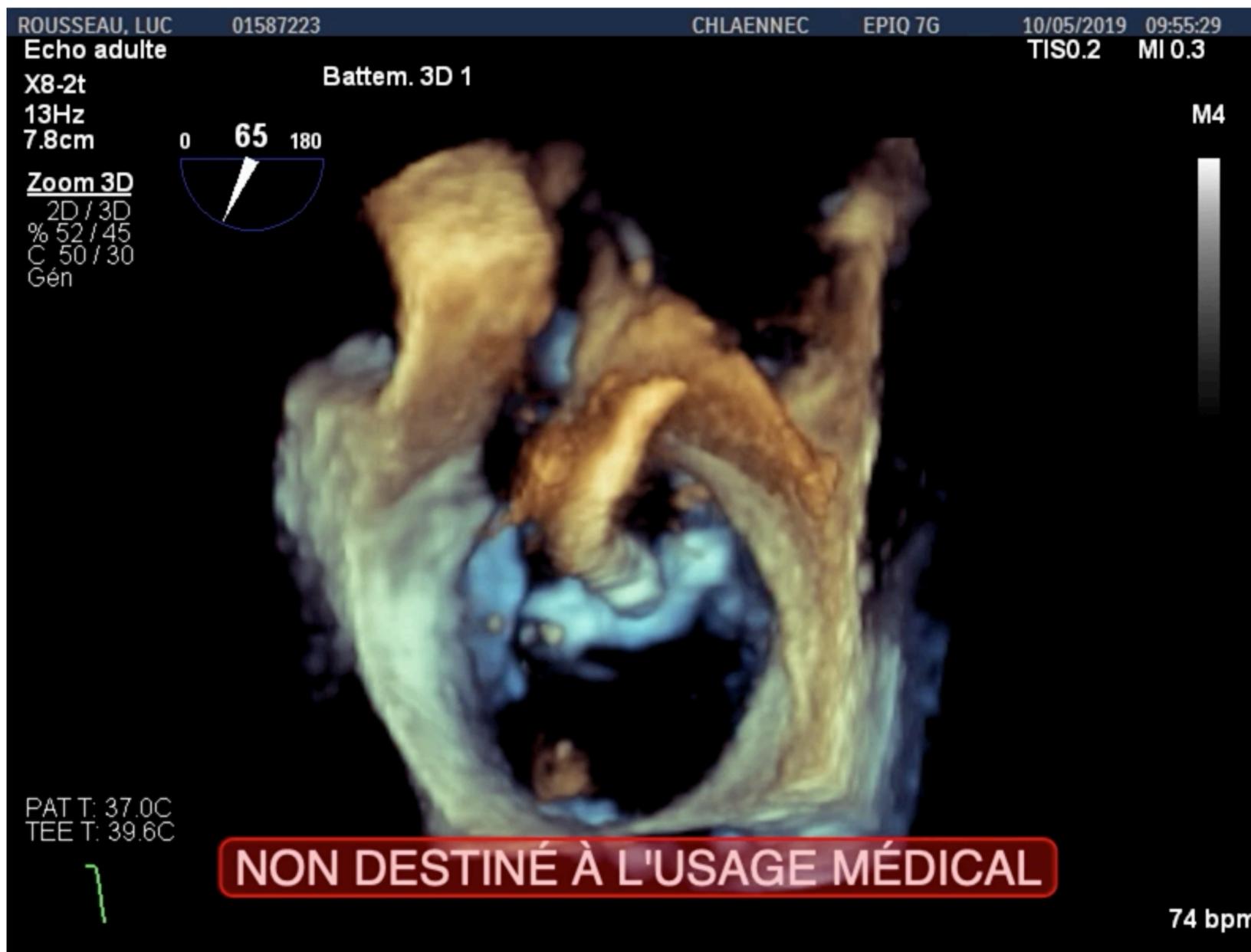
- Mr R. Luc. 60 ans
- BAV
- PM DDD
- 2017 : IVG
- FEV systémique 28%
- Fuite de la valve AV systémique grade 4/4
- Dyspnée grade 2/4 NYHA

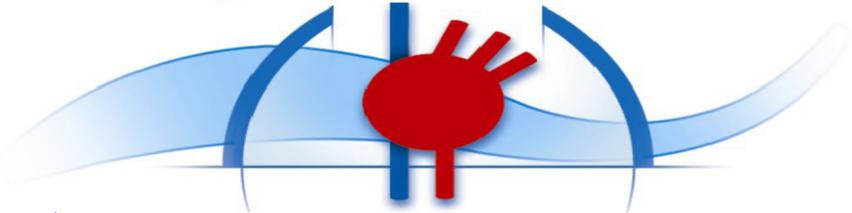




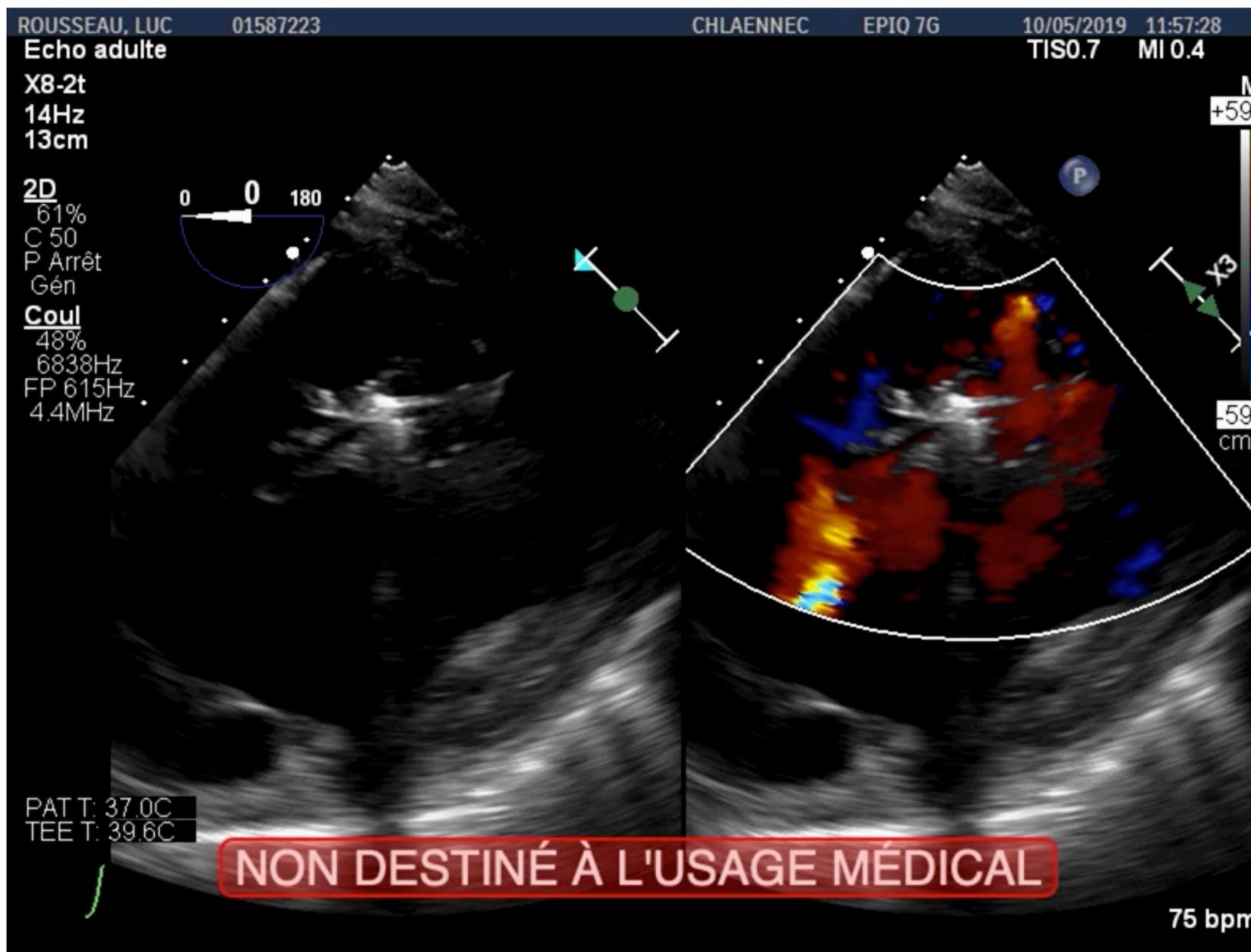


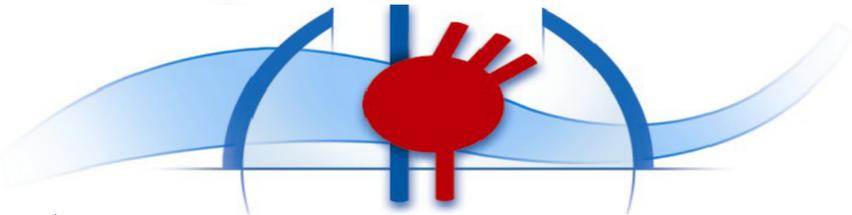
Quand la mitrale...est une tricuspide



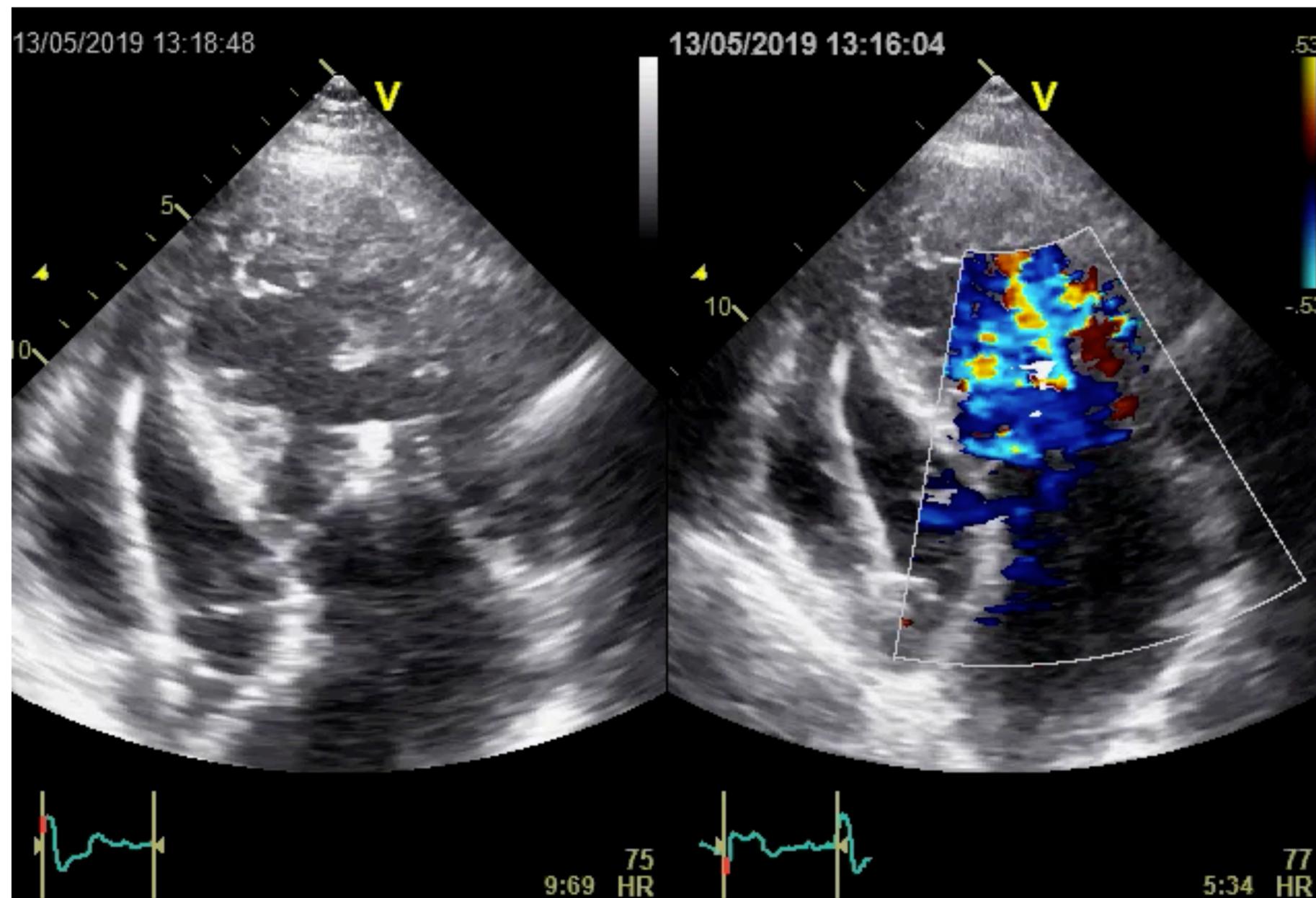


Quand la mitrale...est une tricuspide





Quand la mitrale...est une tricuspide



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L'interventionnel dans le congénital

Merci

