

Angor post-accouchement: Vive le BVS !

M Godin, R Koning, J Berland

Rouen, FRANCE

Clinical case

Nov 2014:

- **25 Years old female**
- Medical history: hypertension, systemic lupus erythematosus, vaginal delivery of a preterm baby 2 months ago
- Cardiovascular risk factor: smoking
- chest pain since 03 weeks intermittently
- EKG: sous epicardial ischemia V1-V4 , D1 AVL
- Echocardiography: Left ventricular apical hypokinesia, normal pericardium
- Biology: troponine+

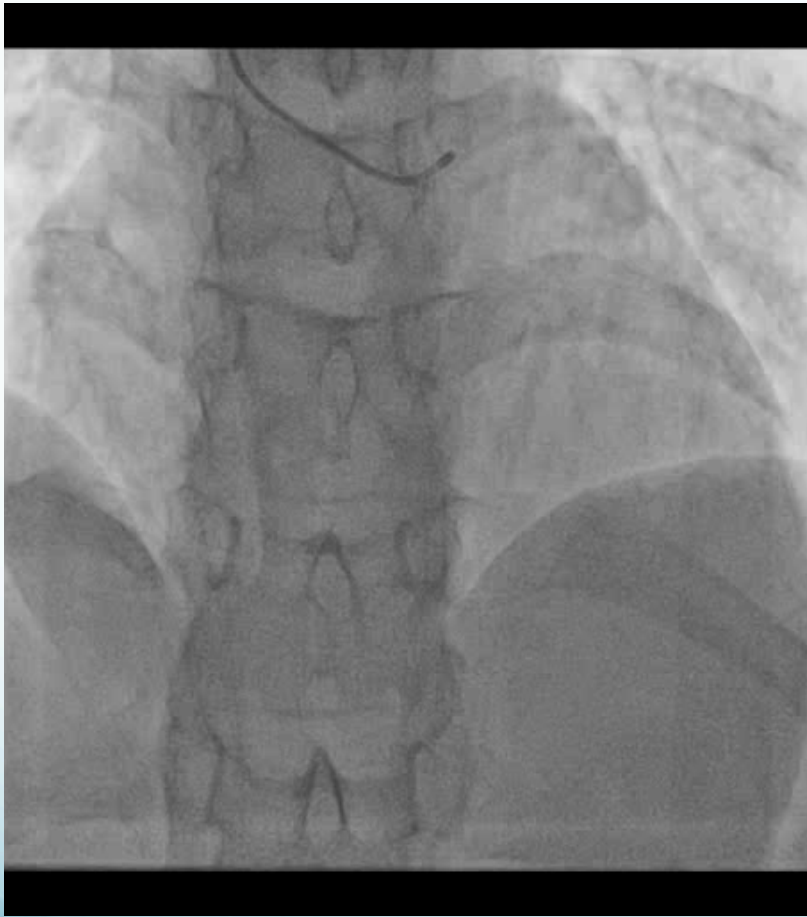


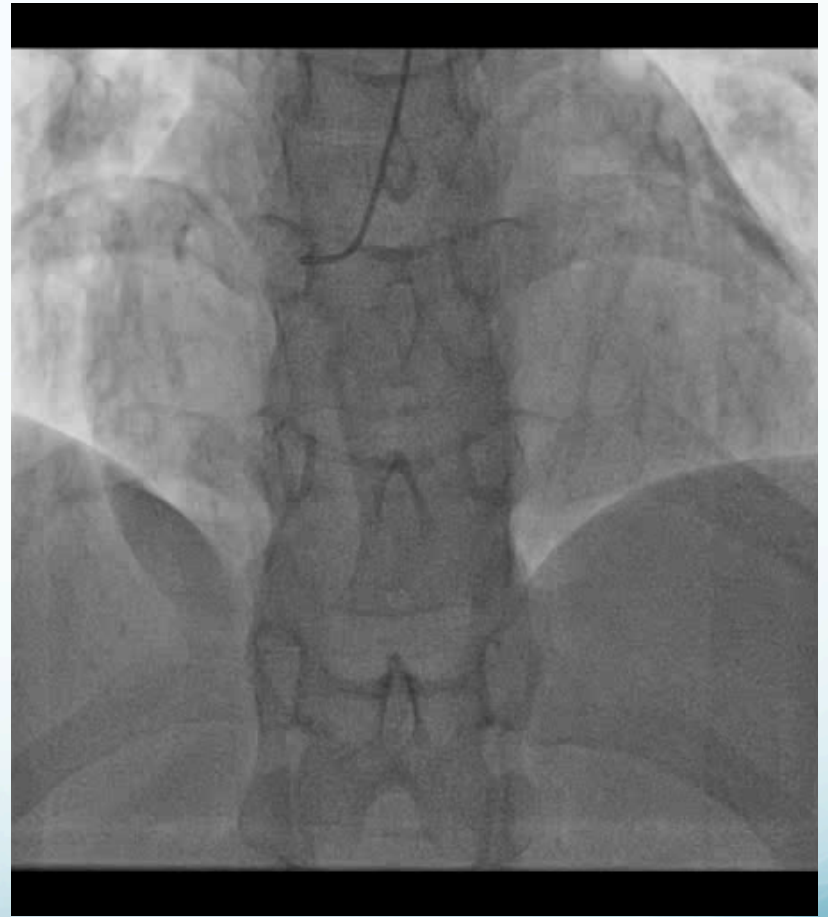
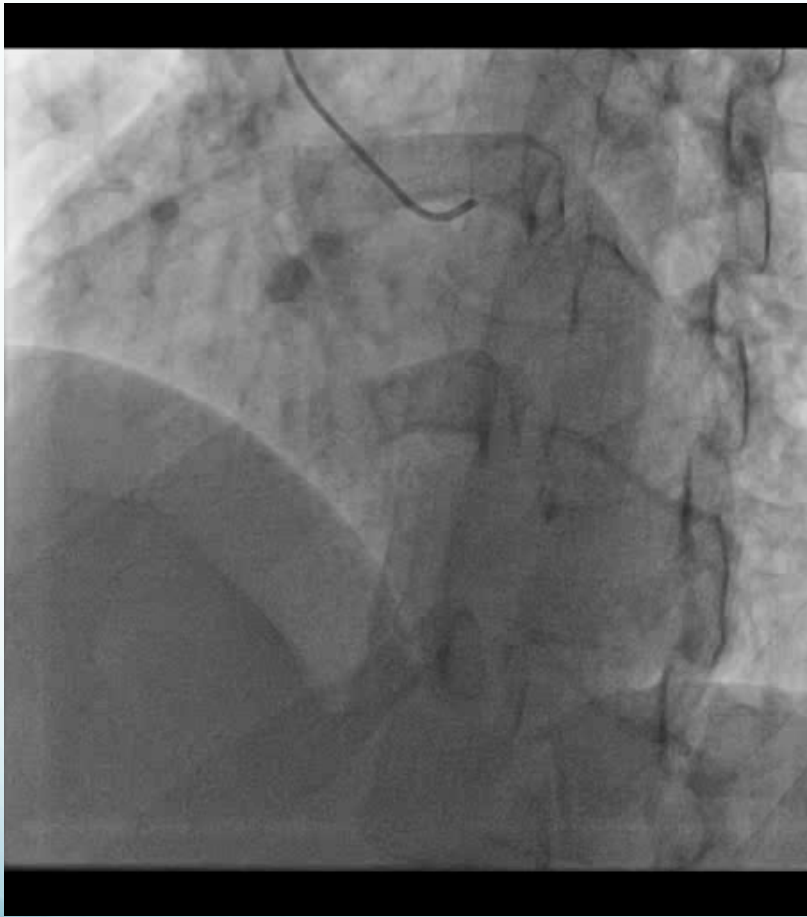
DISCO

**P. MOTREFF
(Clermont)**

Fondation Cœur & Recherche

Etude de la prévalence de la dysplasie fibromusculaire chez des patients pris en charge pour hématome ou **DIS**section **CO**ronaire spontanée





Strategy proposed:

- OCT examination pre dilatation was advised to characterize the lesion: in a young post pregnant patient dissection or vessel haematoma were suspected .
- Balloon inflation pre-stenting if necessary then BVS implantation followed by non compliant balloon post dilatation according to OCT results.

Consensual and appropriate indications

Ideal patient for BVS

- Diffuse disease of LAD requiring long stents
- Diffuse disease of any vessel 2.5 mm or larger requiring long stents
- Any lesion in a young patient
- Any lesion suitable for BVS

A.Latib,... A.Colombo
Minerva Cardiologia 2014

1. Young patients (aged <50 years)
2. Diabetic patients
3. Lesions in segments that may undergo CABG, particularly the LAD
4. Vessels with long lesions (>30 mm) and/or diffuse disease with a high probability of requiring secondary revascularization

R.C. Teles , Rev Port Cardiol.
2013;32(12):1013---1018

Appropriate use of bioresorbable vascular scaffolds in percutaneous coronary interventions: a recommendation from experienced users

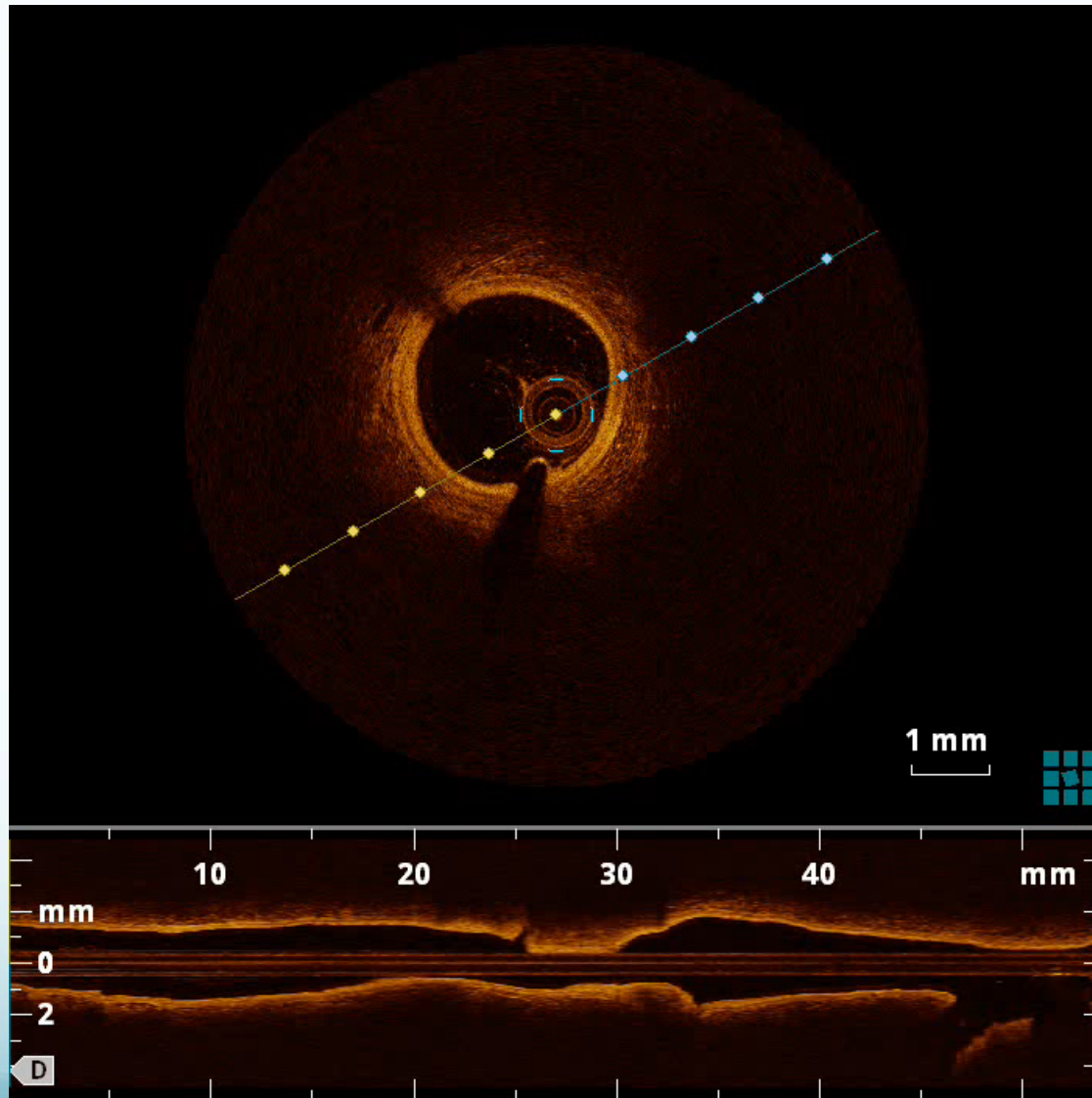
Table 3 Patient specific criteria

Optimal	Young patients or with good life expectancy (i.e. >5 years)	Age < 70 years or Age 70–80 with maximum 1 of PAD, COPD, CVA, renal failure, DM, BMI >40 or LVEF <40%
No potential benefit to be expected	Limited life expectancy (i.e. <1 or 2 years)	Cardiogenic shock, severe heart failure (EF <30%), dialysis

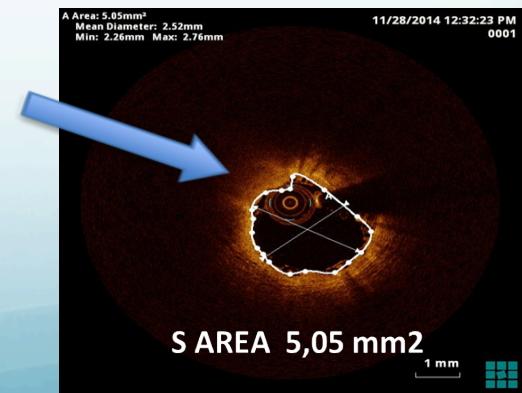
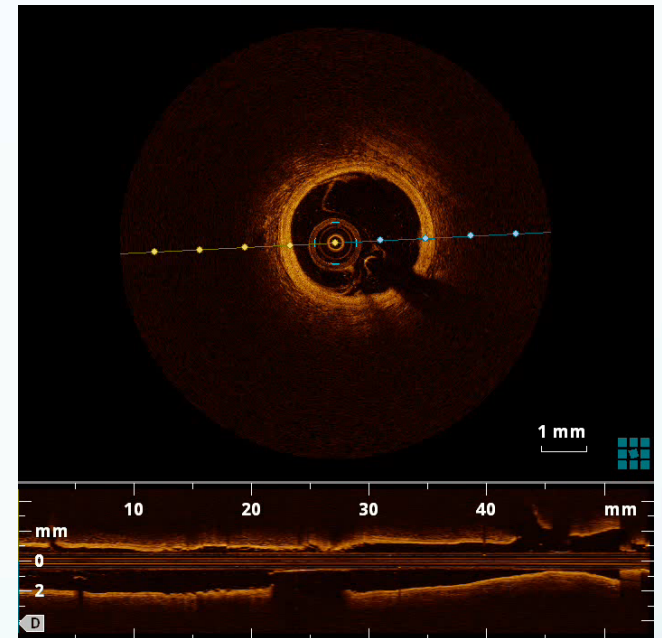
BMI body mass index, *COPD* chronic obstructive pulmonary disease, *CVA* cerebrovascular accident, *DM* diabetes mellitus, *LVEF* left ventricular ejection fraction, *PAD* peripheral artery disease

Position Statement on the use of BVS in The Netherlands

OCT



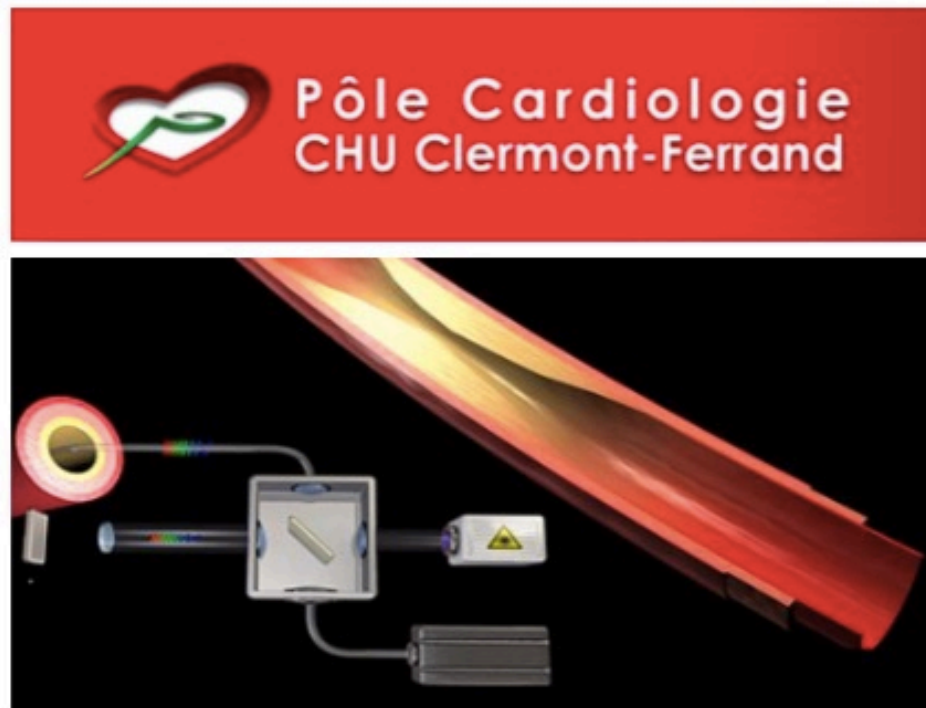
Prédilatation au ballon (3 mm, 16 atm) et implantation d'un BVS (3x18 mm à 18 atm)



OCT, PRESENTATIONS

LE FROG SPECIAL – ATLAS D'IMAGERIE OCT

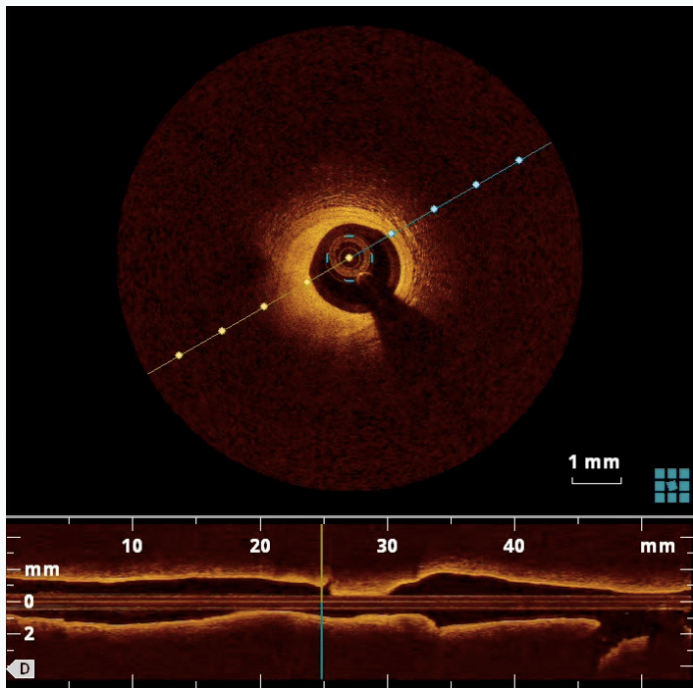
8TH DECEMBER 2015



Pr Pascal MOTREFF

Dr Géraud SOUTEYRAND

Dr Nicolas COMBARET

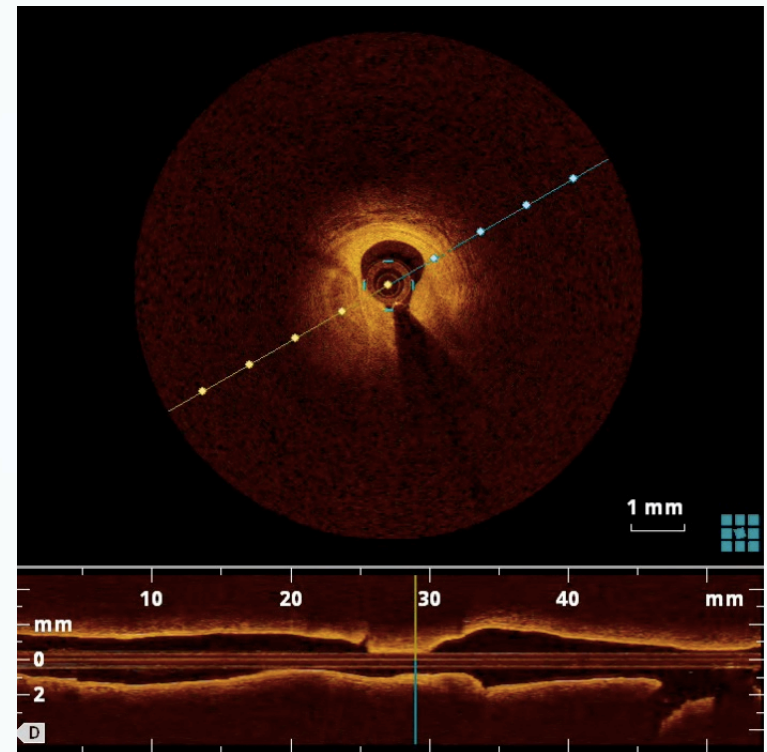
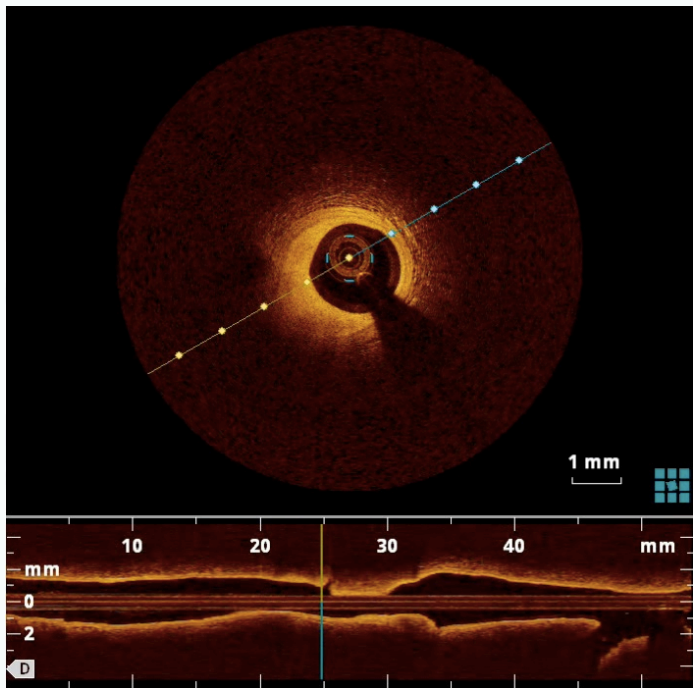


Imagerie OCT

Plaque athéromateuse : Plaque « fibreuse »

La caractérisation tissulaire est difficile en OCT et reste souvent hypothétique. Ici une plaque fibreuse, isosignal homogène

This block contains an OCT image of a vessel lumen with a fibrous plaque. The plaque is characterized by a homogeneous, isosignal appearance. The text above the image reads 'Imagerie OCT' and 'Plaque athéromateuse : Plaque « fibreuse »'. Below the image, a caption states: 'La caractérisation tissulaire est difficile en OCT et reste souvent hypothétique. Ici une plaque fibreuse, isosignal homogène'.

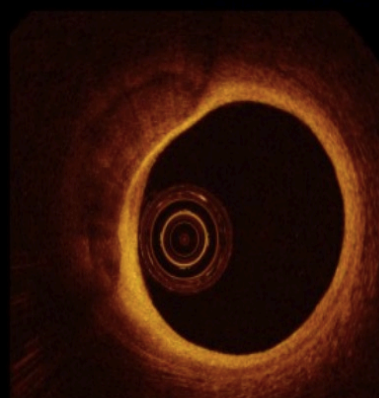


Imagerie OCT

Plaque athéromateuse : Plaque « fibreuse »

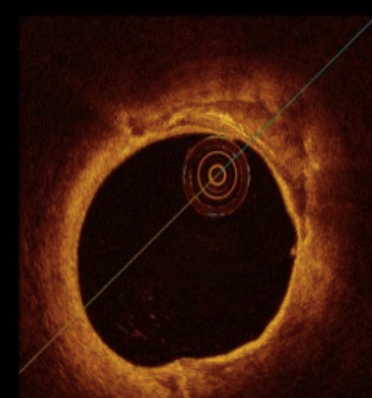
La caractérisation tissulaire est difficile en OCT et reste souvent hypothétique. Ici une plaque fibreuse, isosignal homogène

Plaque athéromateuse : Plaque « lipidique »



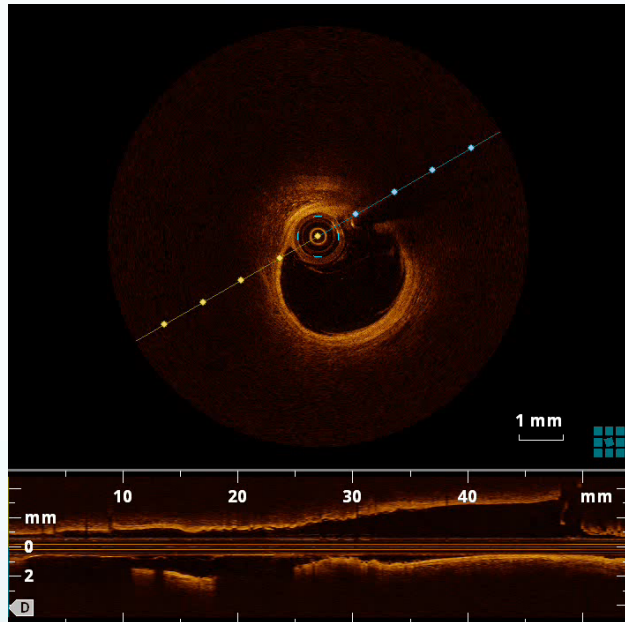
Une plaque plutôt lipidique, hyposignal a bord moussé et contenu homogène. Atténuation forte du signal empêchant de délimiter le contour postérieur.

Plaque athéromateuse : Plaque « calcique »

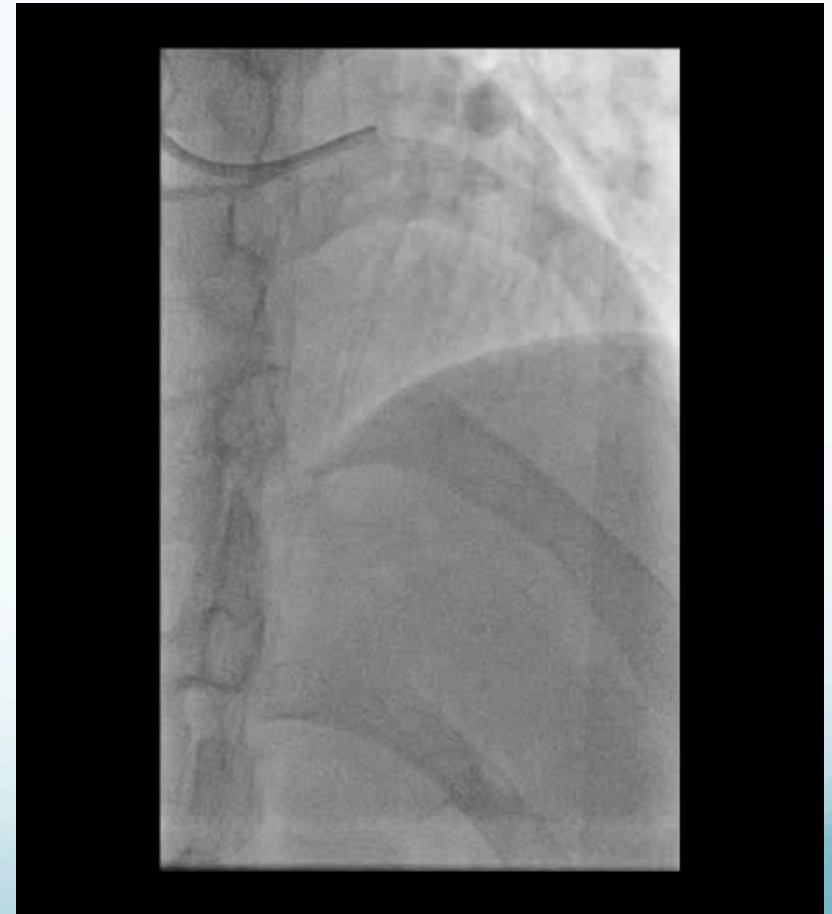
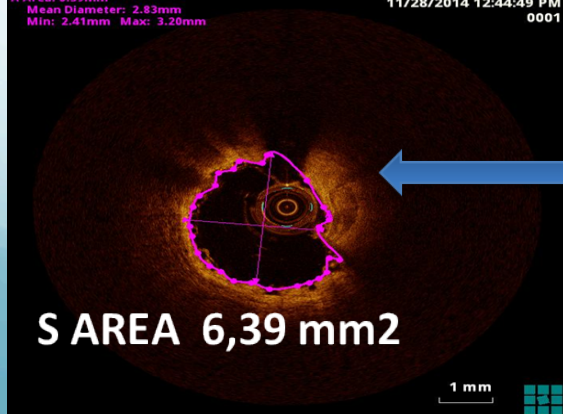


Bords tranchants, contenu hétérogène d'hypo et hypersignaux

Postdilatation avec un ballon NC (3,5 mm; 20 atm)
impaction toujours asymétrique du stent

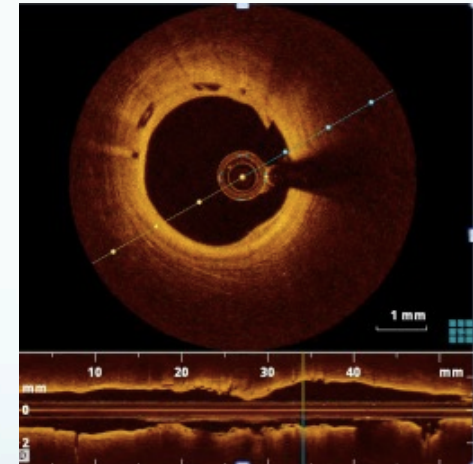
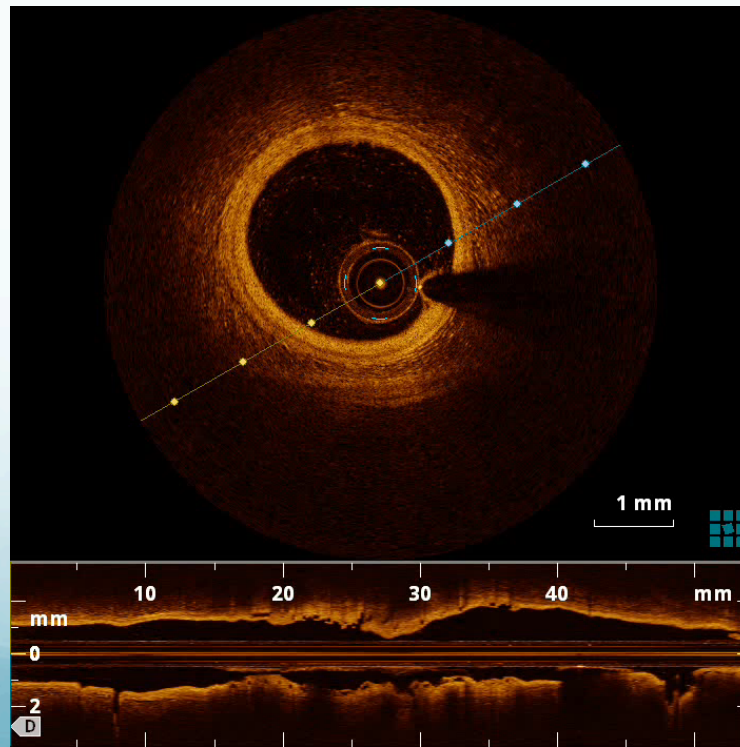
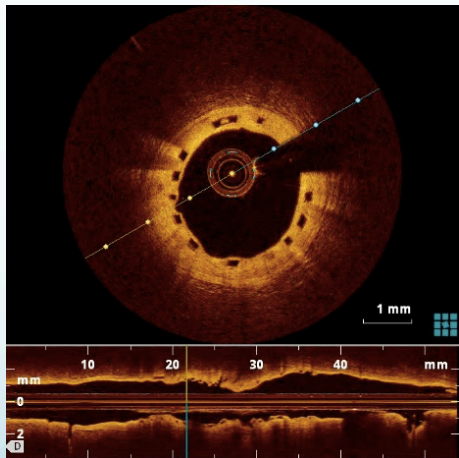
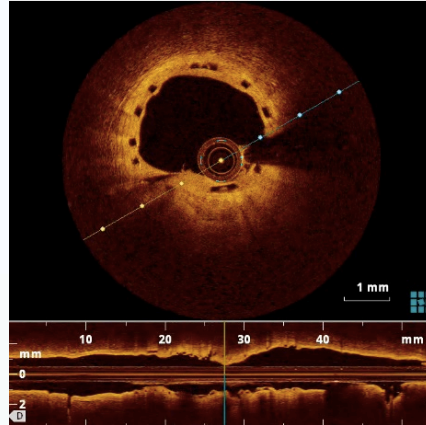


A Area: 6.39mm²
Mean Diameter: 2.83mm
Min: 2.41mm Max: 3.20mm
11/28/2014 12:44:49 PM
0001



Décembre 2015

Réhospitalisation pour DT sans modif ECG. Tropo sub-normale

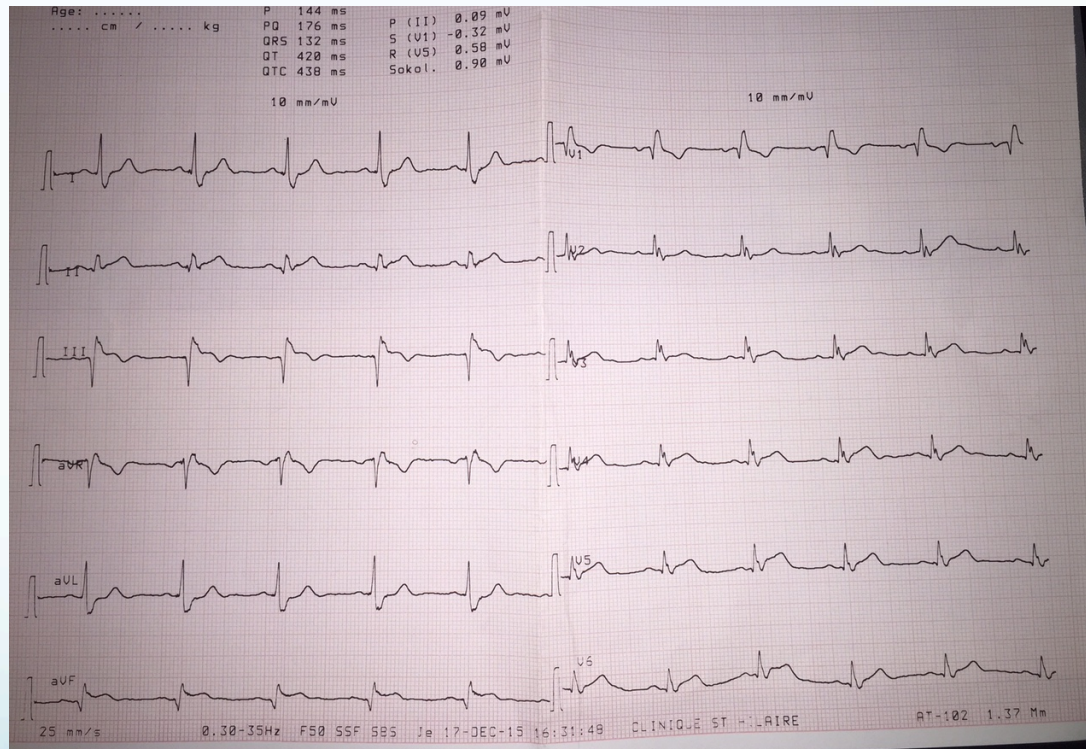


BVS et IDM

M Godin
Rouen

Mr D 58 ans

- H6



Taille de l'image : 512 x 512
NF : 127 LF : 255

154321 (59a , 58a)
Card Faible Dose
Coro 7 5 FD



Zoom : 137%
Im : 1/51 Series: 1
JPEGLossless:Non-hierarchical-1stOrderPrediction
Position : HFS

17/12/2015 17:03:18
Made In OsiriX

Taille de l'image : 512 x 512
NF : 127 LF : 255

154321 (59a , 58a)
Card Faible Dose
Coro 7 5 fort



Zoom : 137%
Im : 1/27 Series: 6
JPEGLossless:Non-hierarchical-1stOrderPrediction
Position : HFS

17/12/2015 17:06:56
Made In OsiriX

Thrombo-aspiration

Taille de l'image : 512 x 512
NF : 127 LF : 255

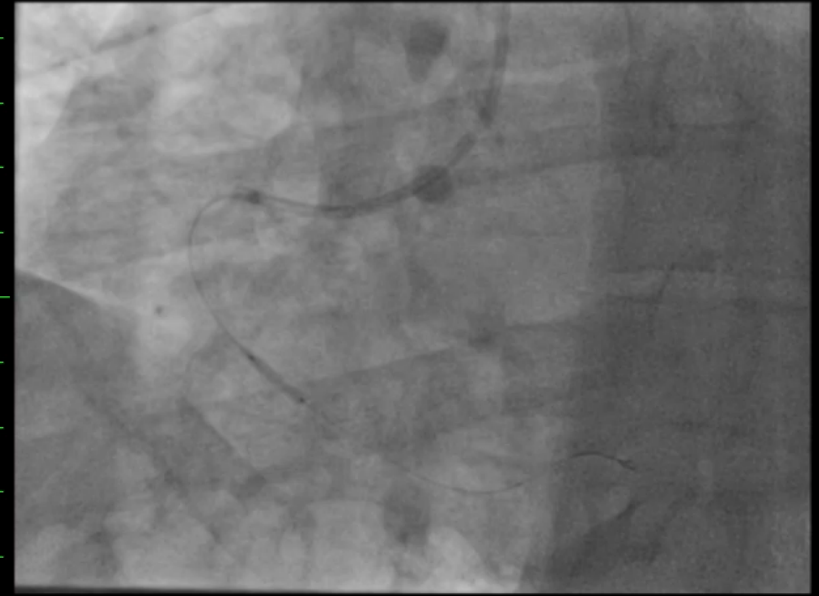
154321 (59a , 58a)
Card Faible Dose
Coro 7.5 fort



Zoom : 135%
Im : 1/42 Series: 7
JPEG Lossless Non-hierarchical-1stOrderPrediction | 17/12/2015 17:12:07
Position : HFS Made In OsiriX

Taille de l'image : 512 x 512
NF : 127 LF : 255

154321 (59a , 58a)
Card Faible Dose
Coro 7.5 fort

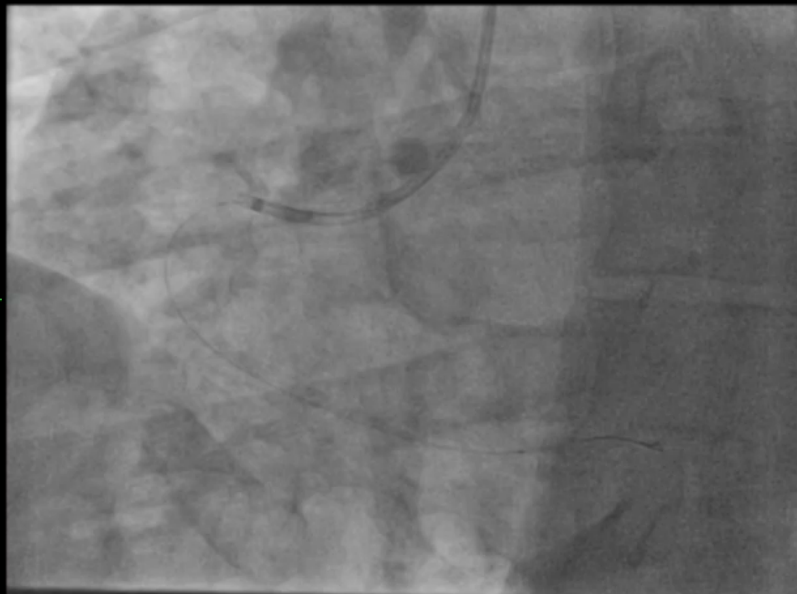


Zoom : 136%
Im : 1/1 Series: 8
JPEG Lossless Non-hierarchical-1stOrderPrediction | 17/12/2015 17:13:46
Position : HFS Made In OsiriX

Ballon 2mm x 12 mm

Taille de l'image : 512 x 512
NF : 127 LF : 255

154321 (59a , 58a)
Card Faible Dose
Coro 7.5 fort



Zoom : 136%
Im : 1/32 Series: 11
JPEGLossless:Non-hierarchical-1stOrderPrediction
Position : HFS
17/12/2015 17:14:14
Made In OsiriX

Taille de l'image : 512 x 512
NF : 127 LF : 255

154321 (59a , 58a)
Card Faible Dose
Coro 7.5 fort



Zoom : 136%
Im : 1/3 Series: 13
JPEGLossless:Non-hierarchical-1stOrderPrediction
Position : HFS
17/12/2015 17:17:18
Made In OsiriX

Ballon 3mm x 15 mm

Taille de l'image : 512 x 512
NF : 127 LF : 255

154321 (59a , 58a)
Card Faible Dose
Coro 7.5 fort



Zoom : 136%
Im : 1/34 Series: 16
JPEGLossless-Non-hierarchical-1stOrderPrediction
Position : HFS

17/12/2015 17:18:27
Made In OsiriX

Taille de l'image : 512 x 512
NF : 127 LF : 255

154321 (59a , 58a)
Card Faible Dose
Coro 7.5 fort

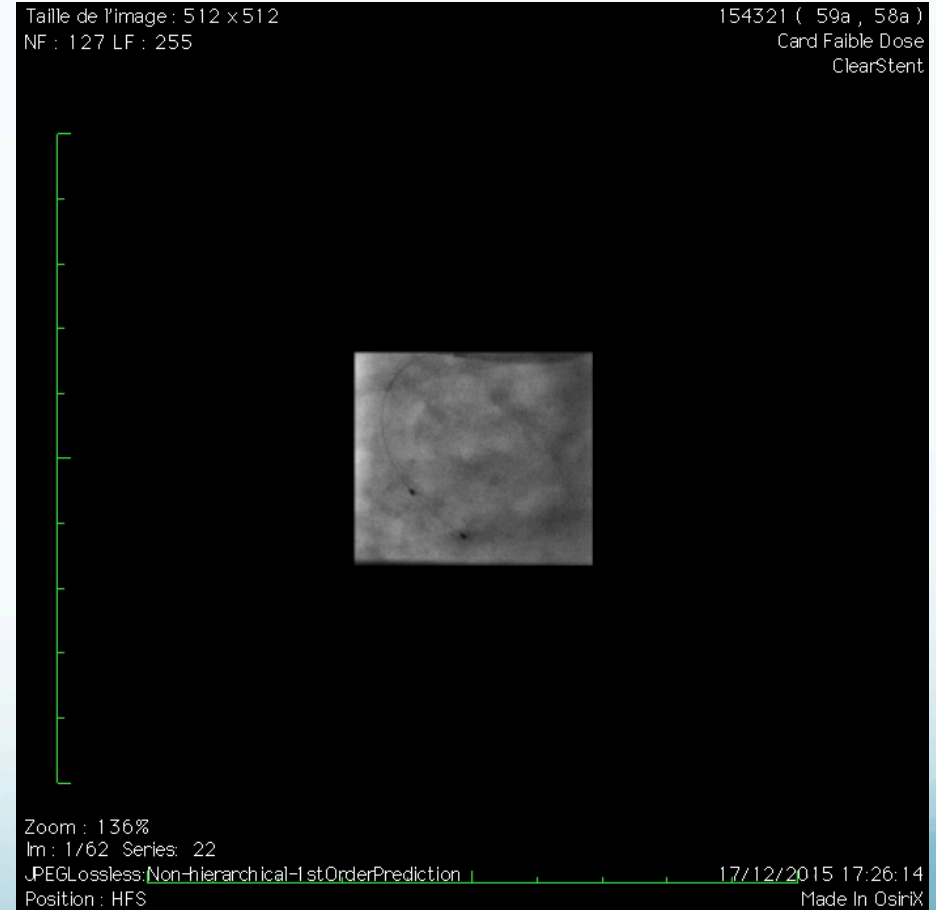


Zoom : 136%
Im : 1/5 Series: 19
JPEGLossless-Non-hierarchical-1stOrderPrediction
Position : HFS

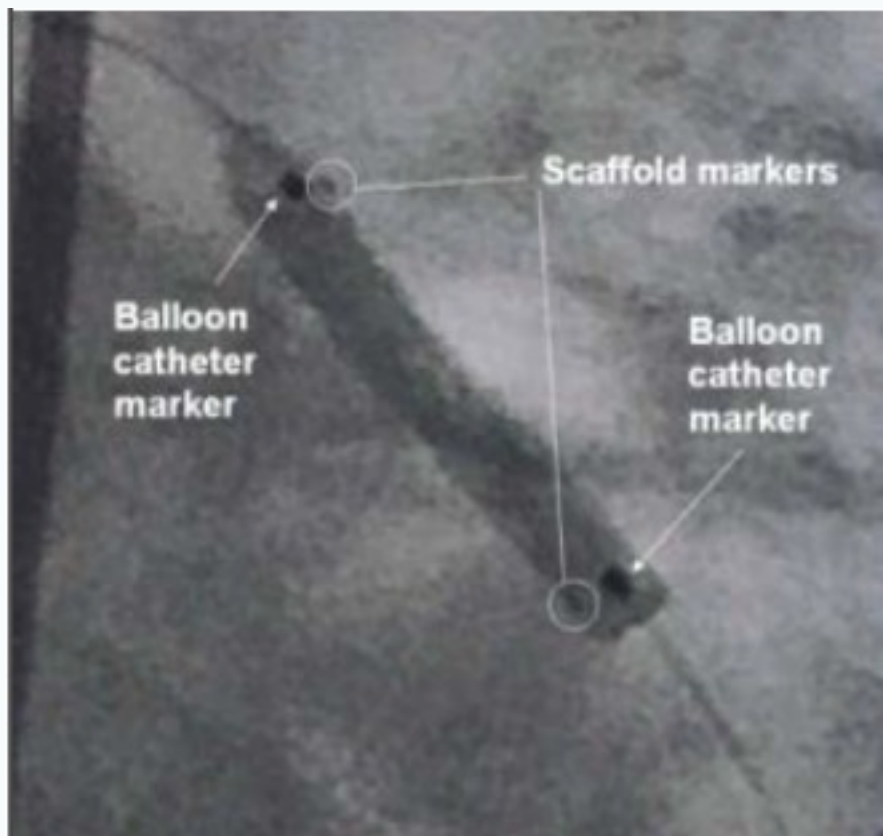
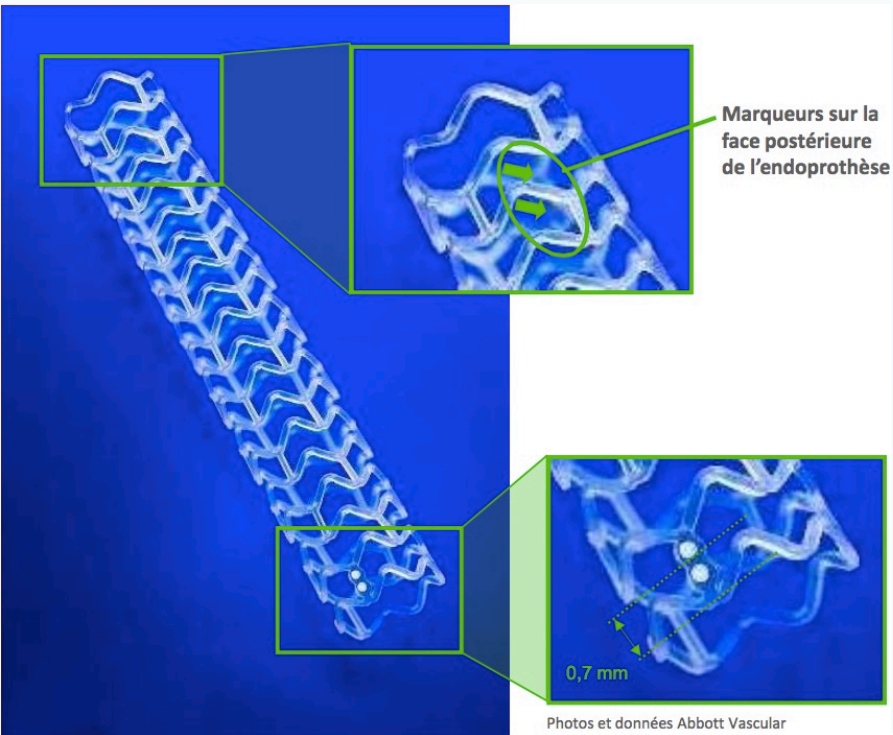
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Made In OsiriX

Stent ABSORB 3 x 28mm

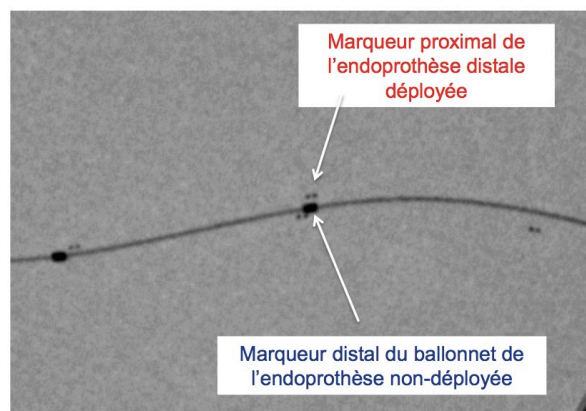
Réhaussement Stent



Stent ABSORB 3mm x 12 mm

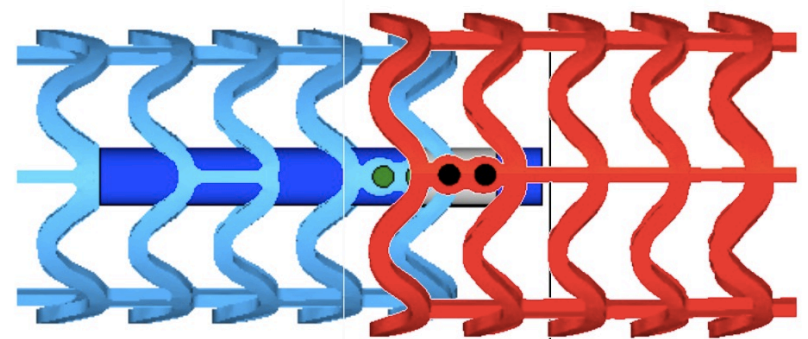


- Aligner le marqueur du ballonnet avec le marqueur de l'endoprothèse déployée = 1 mm d'overlap



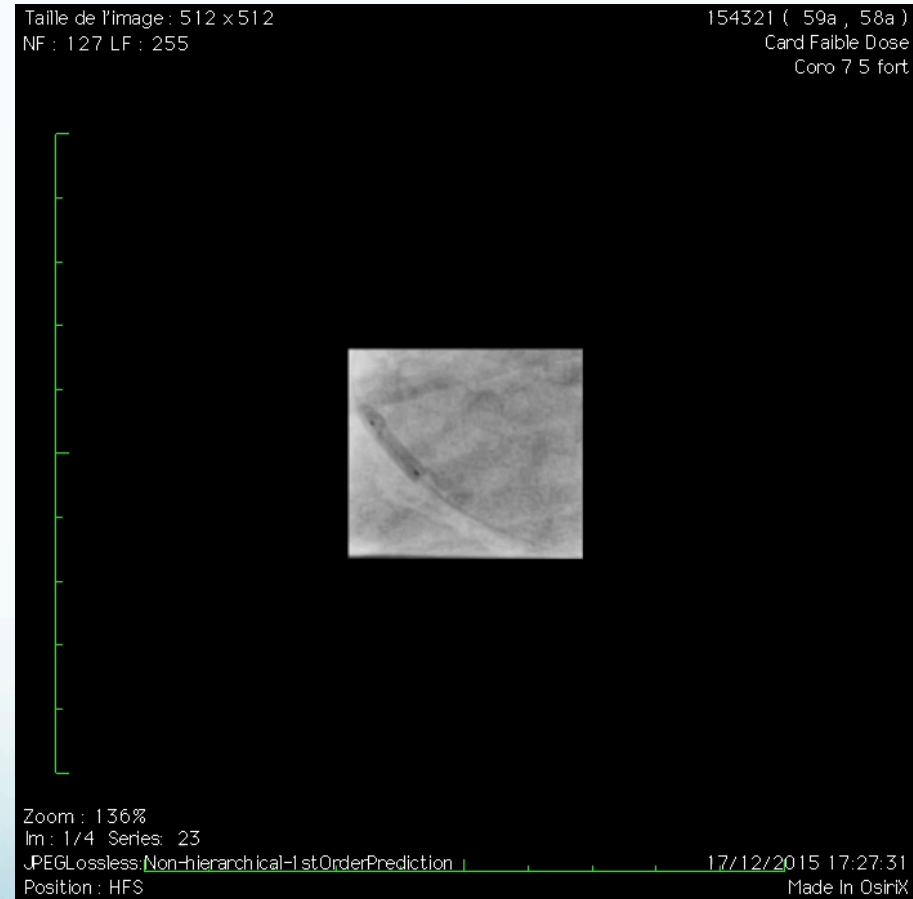
Les marqueurs du ballonnet sous les marqueurs de l'endoprothèse déployée

Résultat : ~1 mm d'overlap

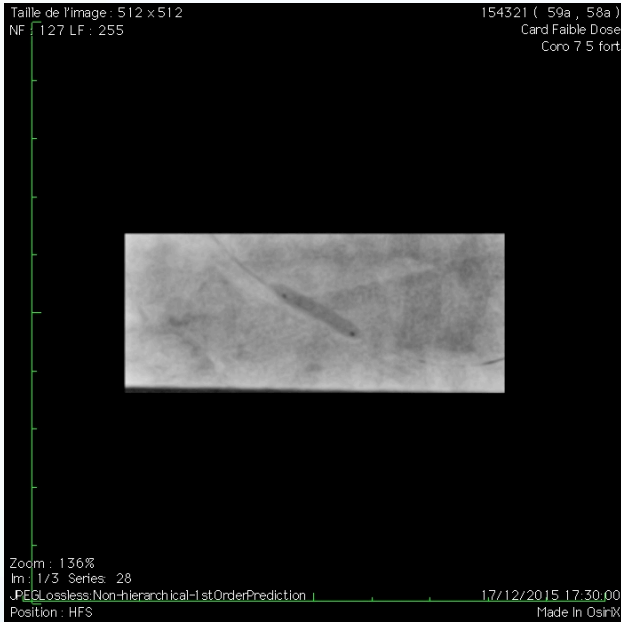


- Overlap proximal : Le marqueur distal du ballonnet (**BLEU**) aligné avec le marqueur proximal de l'endoprothèse implantée (**ROUGE**)
- Overlap distal : Le marqueur proximal du ballonnet est aligné avec le marqueur distal de l'endoprothèse implantée

Réhaussement Stent



Post-dilatation



Ballon NC 3,25mm x 15 mm

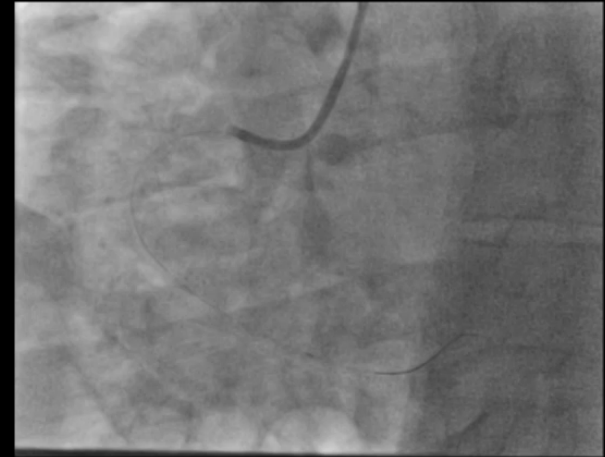
Taille de l'image : 512 x 512

NF : 127 LF : 255

154321 (59a , 58a)

Card Faible Dose

Coro 7.5 fort



Zoom : 136%

Taille de l'image : 512 x 512

NF : 127 LF : 255

154321 (59a , 58a)

Card Faible Dose

Coro 7.5 fort



Zoom : 136%

Im : 1/40 Series : 37

.JPEG.Lossless.Non-hierarchical-1stOrderPrediction

Position : HFS

17/12/2015 17:33:34

Made In OsiriX

Age : 58 ans Date : 17/12/15
N° d'exploration : 154324-22

DESCRIPTION CHRONOLOGIQUE DETAILLEE DES MANGEUVRES EFFECTUEES

Debut 17h08

Medtronic SHERPA NX ACTIVE
Lot 0007819767

Abbott Vascular Absorb GT1 Bioresorbable Vascular Scaffold System
3.0 mm x 12 mm
S171317
(01) 0 8717648 21278 9 17H27
(17) 161009 (10) 5041461 (91) 1790
REF 1234300-12 LOT 5041461
2015-04-14 2016-10-09
YYYY-MM-DD YYYY-MM-DD RX

Guide BMW Elite 17H09

Medtronic Export Aspiration Catheter
Ref. EXPORTACE Lot 0007724652

16 AT 58 secondes
16 AT 10 //

Boston Scientific Emergent™ 17H10
2.00mm x 12mm
GTIN 0871473799894
REF H7493919312200
LOT 18466441
24 AT 10 secondes

NC TREK 17H20
3.25 mm x 15 mm,
143 cm
REF 1012450-15
LOT 5050491 RX
12 AT 15 secondes
10 AT 20 //
12 AT 13 //
14 AT 28 //

Risordan 1 mg

Boston Scientific Emergent™ 17H18
3.00mm x 15mm
GTIN 08714729800040
REF H7493919315300
LOT 18603889
17H18 12 AT 15 secondes
10 AT 12 //
10 AT 13 //

Risordan 1 mg 17H35
Retrait Guide 17H36
Fin 17H37

LAO 32° / CAUD 7°

Abbott Vascular Absorb GT1 Bioresorbable Vascular Scaffold System
3.0 mm x 28 mm
S172098
(01) 0 8717648 21282 6 17H23
(17) 161030 (10) 5050561 (91) 1244
REF 1234300-28 LOT 5050561
2015-05-05 2016-10-30
YYYY-MM-DD YYYY-MM-DD RX

17 AT 79 secondes

Avoir le temps et l'envie de bien travailler !!!

Quand penser BVS?

- Age jeune (<70 ans?)
- Lésions longues (Résultats de France Absorb)
- Taille de Vaisseaux $2,5\text{mm} < \text{ABSORB} < 4\text{mm}$
- SCA (thromboaspiration, MIMI, pré-dilatation prudente..)
- Zones de pontage éventuel
- Durée DAPT prolongée possible
-
-
-
-

Quand penser BVS?

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- Lésions longues (Résultats de France Absorb)
- Taille de Vaisseaux $2,5\text{mm} < \text{ABSORB} < 4\text{mm}$
- SCA
- Zones de pontage éventuel
- Durée DAPT prolongée possible
- « Bifurcations »
- « Lésions fibreuses »



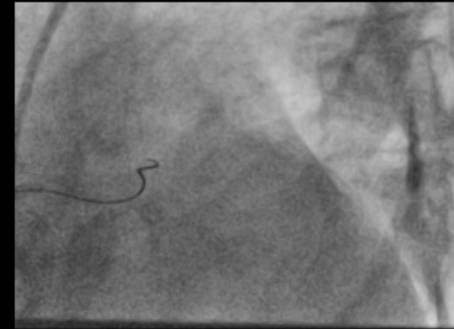
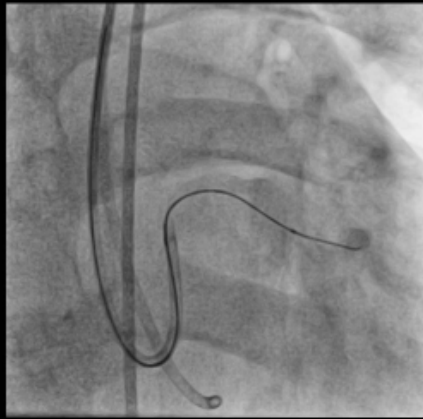
Quand penser BVS?

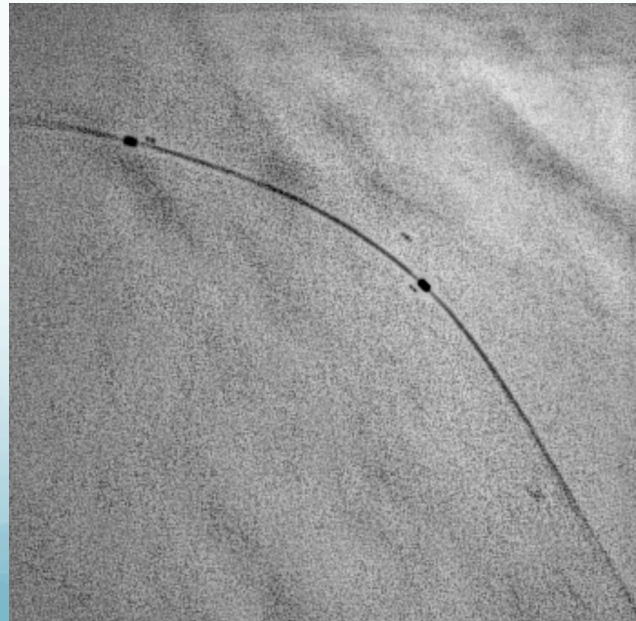
- Age jeune (<70 ans?)
- Lésions longues (Résultats de France Absorb)
- Taille de Vaisseaux $2,5\text{mm} < \text{ABSORB} < 4\text{mm}$
- SCA
- Zones de pontage éventuel
- Durée DAPT prolongée possible
- Bifurcations
- Lésions fibreuses
- ~~Calcifications~~
- ~~Tronc commun~~

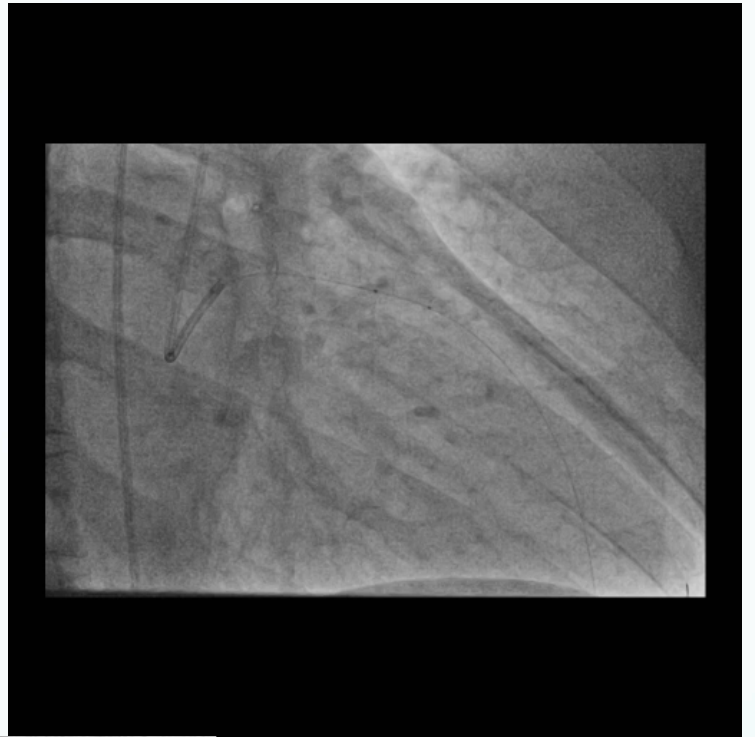
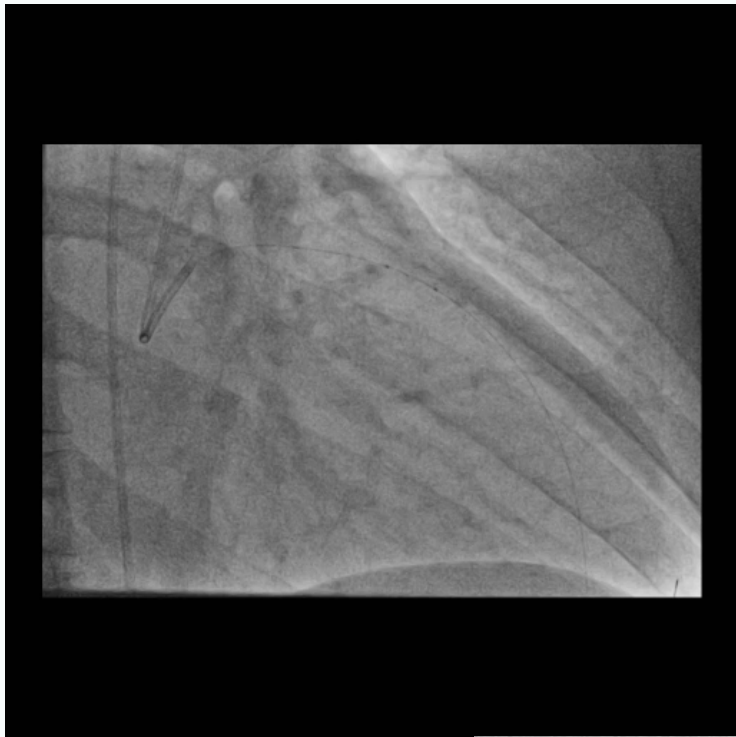


CTO Absorb 45 ans











Patient jeune
Zone de pontage IVA
Lésion >70mm