

# Dissections coronaires spontanées: Particularités de la prise en charge

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# DÉCLARATION DE LIENS D'INTÉRÊT AVEC LA PRÉSENTATION

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Je n'ai pas de lien d'intérêt à déclarer

# Introduction

- La dissection coronaire spontanée → entité **sous diagnostiquée**, souvent **oubliée**, en particulier chez **les femmes** présentant un SCA.
- L'apparition de nouvelles modalités d'imagerie endocoronaire a permis d'améliorer sa reconnaissance.
- Elle est responsable d'une morbi-mortalité non négligeable (ischémie myocardique, arythmies ventriculaires, mort subite...)

### Angiographic Prevalence of SCAD in ACS Cohorts

Reference	Year	Patients With SCAD, n	SCAD Prevalence as a Proportion of All ACS Cases, %	Women Among SCAD Cases, %	PA-SCAD, %	SCAD Prevalence in Subgroups With ACS	Methods, Population, Inclusion Criteria
Varzetto et al <sup>11</sup>	2009	23	0.2 (0.6 women, 0.07 men)	74	0	8.7% SCAD among ACS in women <50 y	Systematic retrospective review of 11 605 angiograms Included type 1 SCAD only Atherosclerosis-related coronary dissection not excluded
Mortensen et al <sup>10</sup>	2009	22	2.0	77	12	NR	Retrospective search for coded diagnoses in database of 32 969 angiograms; reviewed only those with prior SCAD diagnosis
Alfonso and Bastante <sup>14</sup>	2014	27	0.16	85	3.7	NR	Retrospective search for coded diagnoses among 16 813 first angiograms (2004–2010)
Saw et al <sup>13</sup>	2014	16	NR	100	NR	24.2% SCAD among ACS in women <50 y	Retrospective review of 177 angiograms in women <50 y (reported in 10 of 1605 angiograms (n=1605) performed during the study period (2009–2011))
Razik et al <sup>12</sup>	2016	21	1.7	91	NR	100% SCAD among ACS in women <60 y	Retrospective search for coded diagnoses among 1332 angiograms (2012–2013)
Nakashima et al <sup>11</sup>	2016	63	0.31	94	8.1	35% SCAD among ACS in women <50 y	Retrospective review of 20 195 angiograms (2000–2013) Excluded atherosclerosis-related coronary dissection Included type 2 SCAD Separate analysis for women <50 y with ACS (n=45)
Nishiguchi et al <sup>17</sup>	2016	13	4	53.8	NR	NR	326 Selected ACS patients undergoing OCT (2008–2012) Atherosclerosis-related coronary dissection not excluded

1 à 4% des SCA.

23% à 36% des SCA de la femme de moins de 60 ans.

43% des SCA associés à la grossesse.

ACS indicates acute coronary syndrome; NR, not reported; OCT, optical coherence tomography; PA-SCAD, pregnancy-associated spontaneous coronary artery dissection; and SCAD, spontaneous coronary artery dissection.

Associated Condition or Factor	Reported Prevalence in Cohort Studies, %
Fibromuscular dysplasia	25–86 <sup>13,20,21,24</sup>
Pregnancy	2–8 <sup>8,13,20</sup>
Multiparity (≥4 births)	8.9–10 <sup>13,22</sup>
Inherited arteriopathy and connective tissue disorder (see below)	1.2–3.0 <sup>8,13</sup>
Marfan vascular antitype disease	
Exogenous hormones	2.6 <sup>8,13</sup>
Oral contraceptive therapy, corticosteroids	
Systemic inflammatory disease	0.9 <sup>8,13</sup>
Systemic disease, including tuberculosis, sarcoidosis, nodosa, sarcoidosis, Churg-Strauss syndrome, Wegener granulomatosis, rheumatoid arthritis, Kawasaki disease, celiac disease	
Migraine headache	NR
Coronary artery spasm	NR
Precipitating factors	>50% Patients recall a precipitating factor <sup>13</sup>
Intense exercise (isometric or aerobic)	
Intense Valsalva	
Retching, vomiting, bowel movement, coughing, lifting heavy objects	
Intense emotional stress	
Labor and delivery	
Recreational drugs (cocaine, methamphetamines)	
Exogenous hormones/hormone modulators	
β-hCG injections, corticosteroid injections,	

- Dysplasie fibro musculaire
- Grossesse
- Multiparité

>50% Patients recall a precipitating factor<sup>13</sup>

# Cas clinique 01

- Jeune femme de **35** ans,
- **Sans FDR cvx,**
- **Multipare (05 EVBP),**
- **Contraception orale**
- Reçue à notre niveau pour la PEC d'un **STEMI** en antérieur, H02 de la douleur.

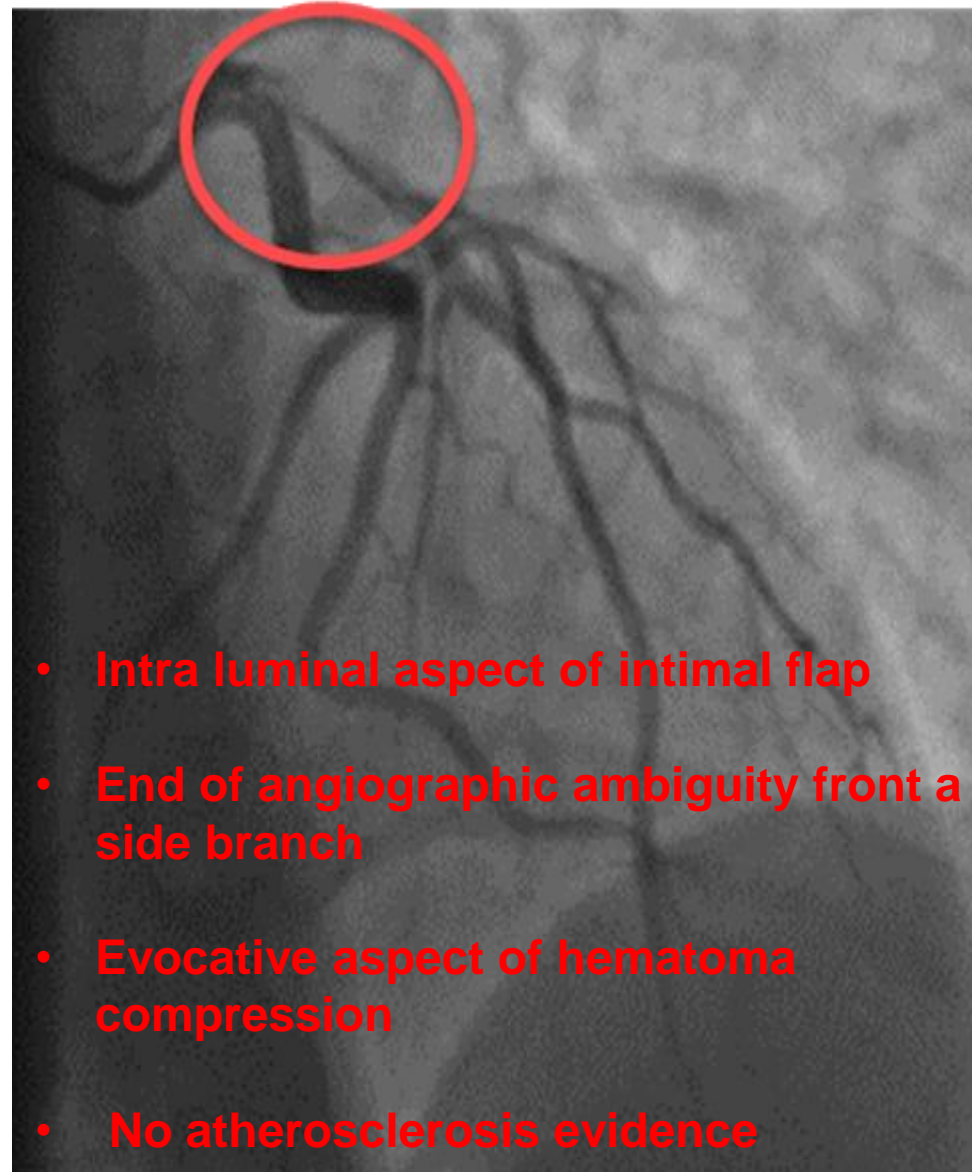




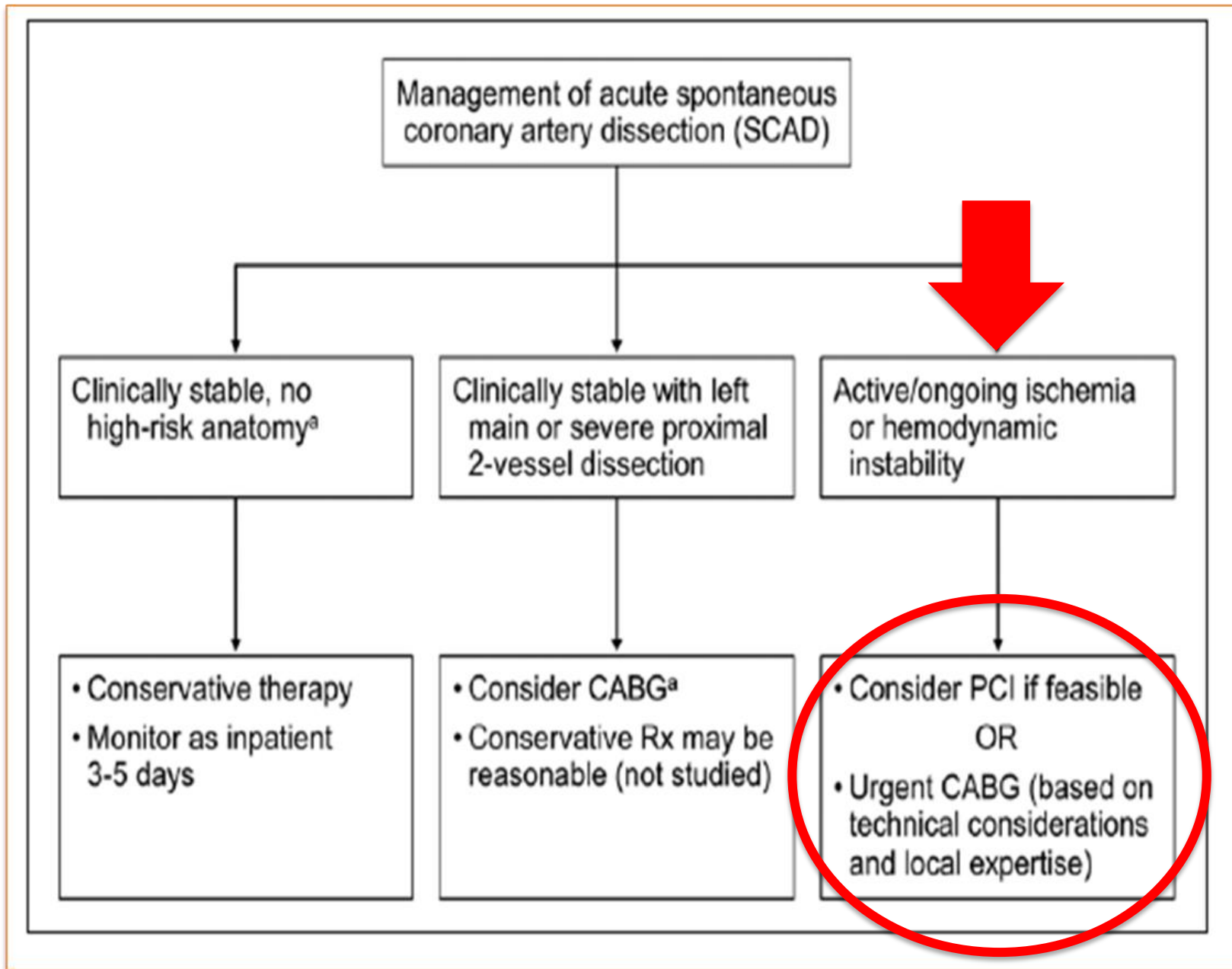
## Diagnostic ?

- Plaque d'athérome
- Thrombus
- Spasme coronaire
- Dissection spontanée





- Intra luminal aspect of intimal flap
- End of angiographic ambiguity front a side branch
- Evocative aspect of hematoma compression
- No atherosclerosis evidence

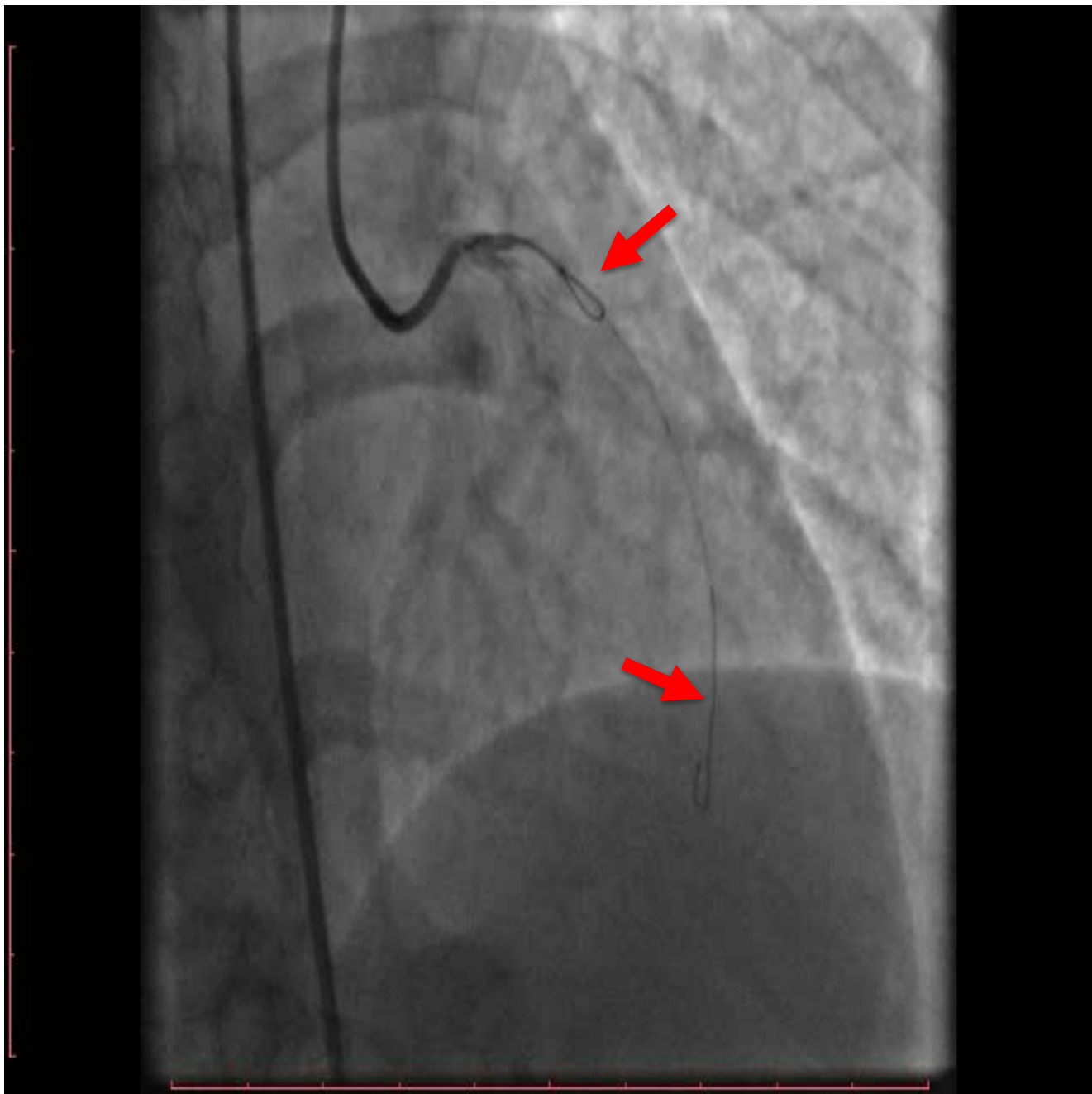




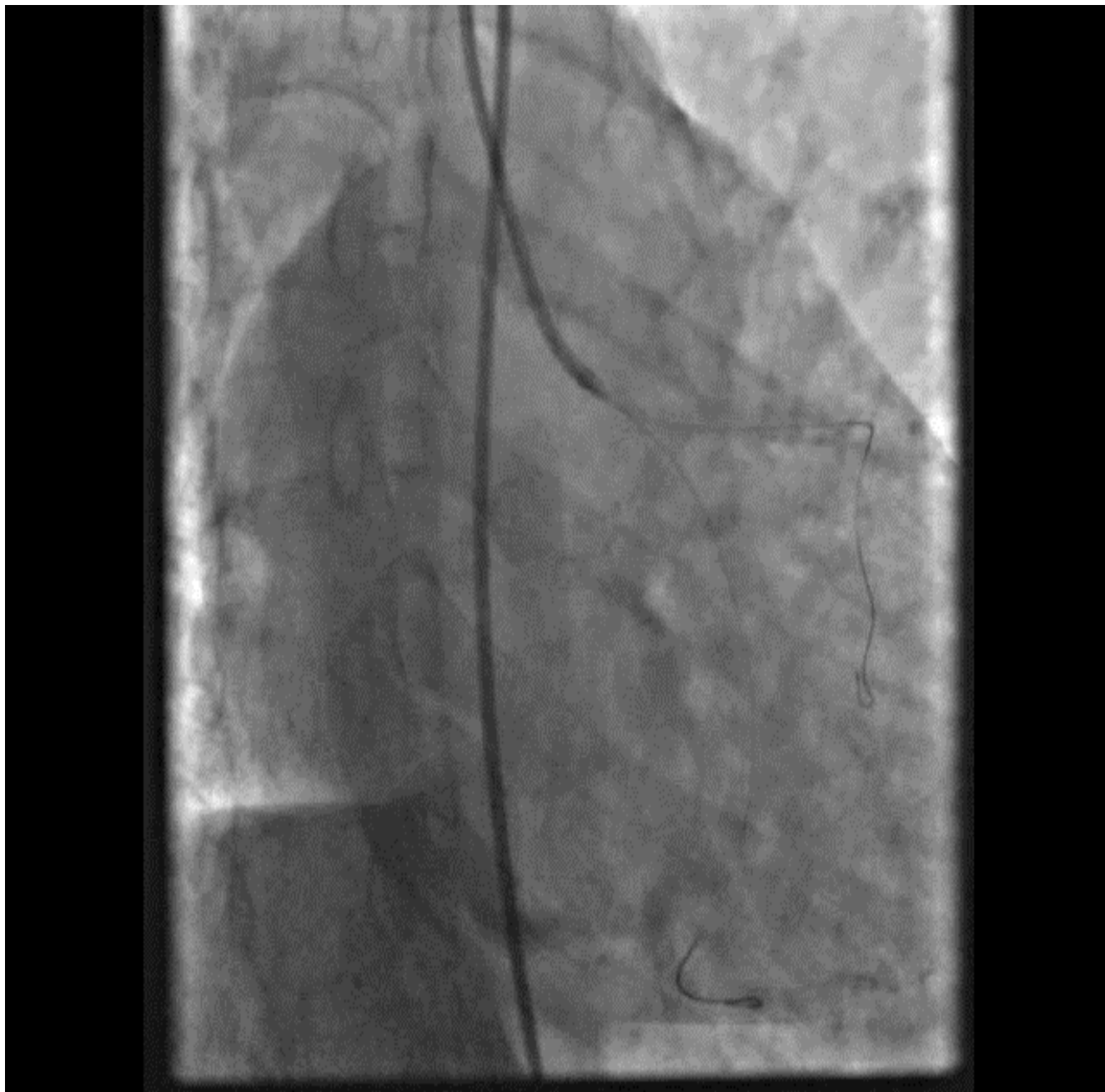


# Quoi faire ?















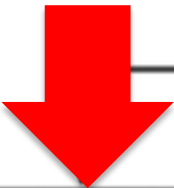
# Cas clinique 02

- Jeune femme de **36 ans**,
- **Sans FDR cvx**,
- **ATCD d'avortements**,
- Reçue pour la PEC d'un **NSTEMI**, H 09 de la douleur.





Management of acute spontaneous coronary artery dissection (SCAD)



Clinically stable, no high-risk anatomy<sup>a</sup>

- Conservative therapy
- Monitor as inpatient 3-5 days

Clinically stable with left main or severe proximal 2-vessel dissection

- Consider CABG<sup>a</sup>
- Conservative Rx may be reasonable (not studied)

Active/ongoing ischemia or hemodynamic instability

- Consider PCI if feasible
- OR
- Urgent CABG (based on technical considerations and local expertise)

# Spontaneous Coronary Artery Dissection

## Clinical Outcomes and Risk of Recurrence



Jacqueline Saw, MD,<sup>a</sup> Karin Humphries, DSc,<sup>b</sup> Eve Aymong, MD,<sup>c</sup> Tara Sedlak, MD,<sup>a</sup> Roshan Prakash, MBBS,<sup>a</sup>  
Andrew Starovoytov, MD,<sup>a</sup> G.B. John Mancini, MD<sup>a</sup>

# Spontaneous Coronary Artery Dissection

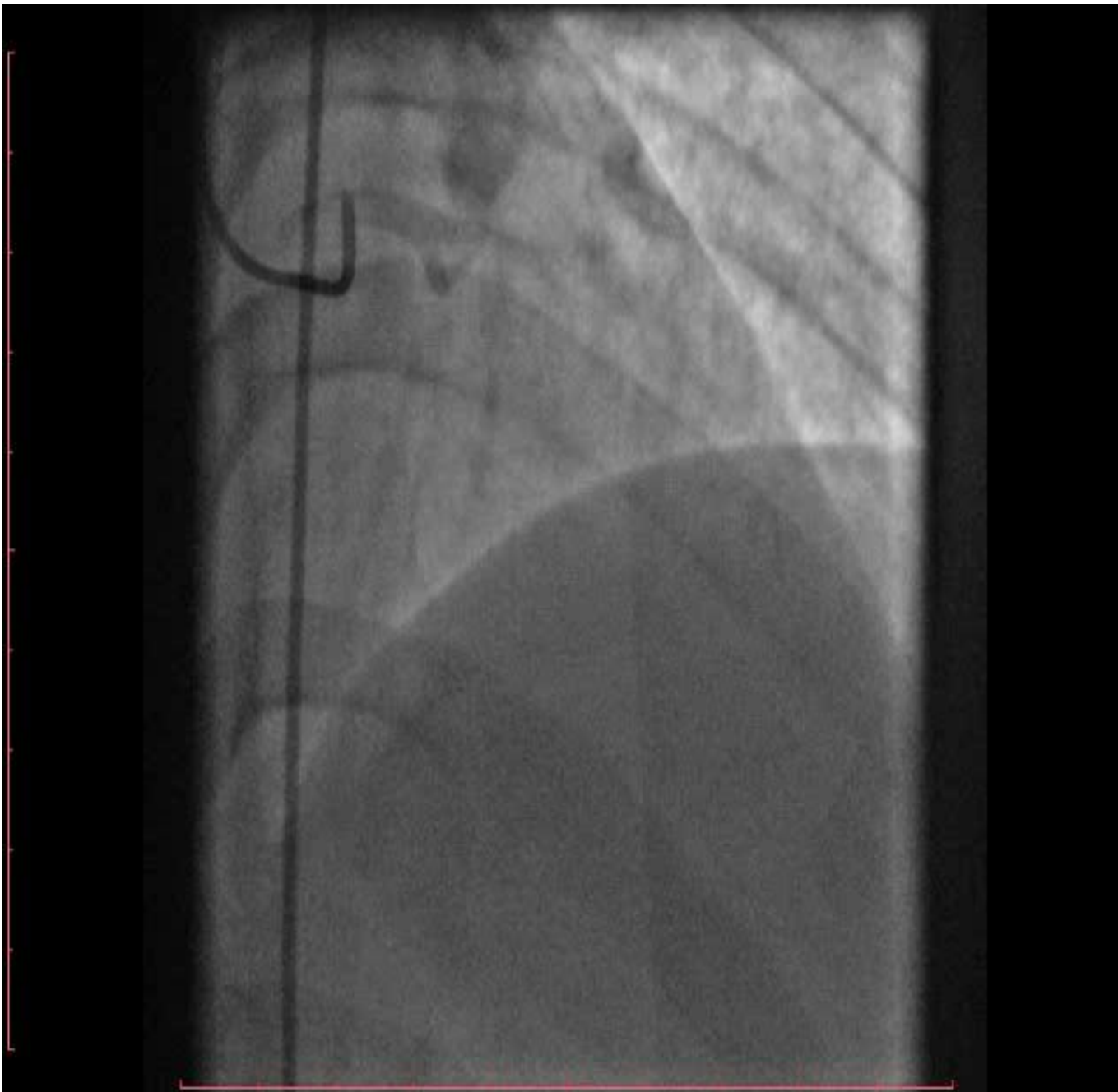
## Clinical Outcomes and Risk of Recurrence



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Pas d'association entre la prise de statines  
et la récurrence de la DSC

subsequent risk of SCAD recurrence (Table II in the online-only Data Supplement), although sample size remains a limitation for analysis. An exception appeared to be statin use, which was higher in the SCAD recurrence group. However, because the median index event year was 2007 for those prescribed statins versus 2002 for those not prescribed statins, the date of event is a potential confounding factor. More so, it is certainly possible that those not prescribed statins initially were prescribed them at a later date. Lack of information on statin use is a limitation





# Take Home Messages

- Dissection spontanée coronaire → cause fréquente de SCA, surtout chez la **femme jeune**.
- Le diagnostic purement angiographique est possible, grand apport de **l'imagerie endocoronaire**.
- Pas de guidelines.
- **Une stratégie conservatrice** est souvent préconisée, sauf ischémie persistante, instabilité hémodynamique.
- L'angioplastie est un **challenge**,
  - **risque de progression du guide dans le faux chenal,**
  - **extension de l'hématome,**
  - **mal apposition du stent.**
- Registre **DISCO**.





