Syncope: Cas Clinique

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- Hôpital Jacques Cartier, Massy

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DÉCLARATION DE RELATIONS PROFESSIONNELLES

- Consultant chez Cardiologs

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- Mme V. 45 ans consulte aux urgences suite à une syncope sur son lieu de travail alors qu'elle était assise au bureau
- Quelques ecchymoses, pas de TC
- Pas d'ATCD
- Ne prend aucun traitement
- 5-6 épisodes lipothymiques et 1 syncope dans des circonstances identiques dans les 2 dernières années
- Bilan il y a 1an: ECG, ETT et Holter ECG normaux

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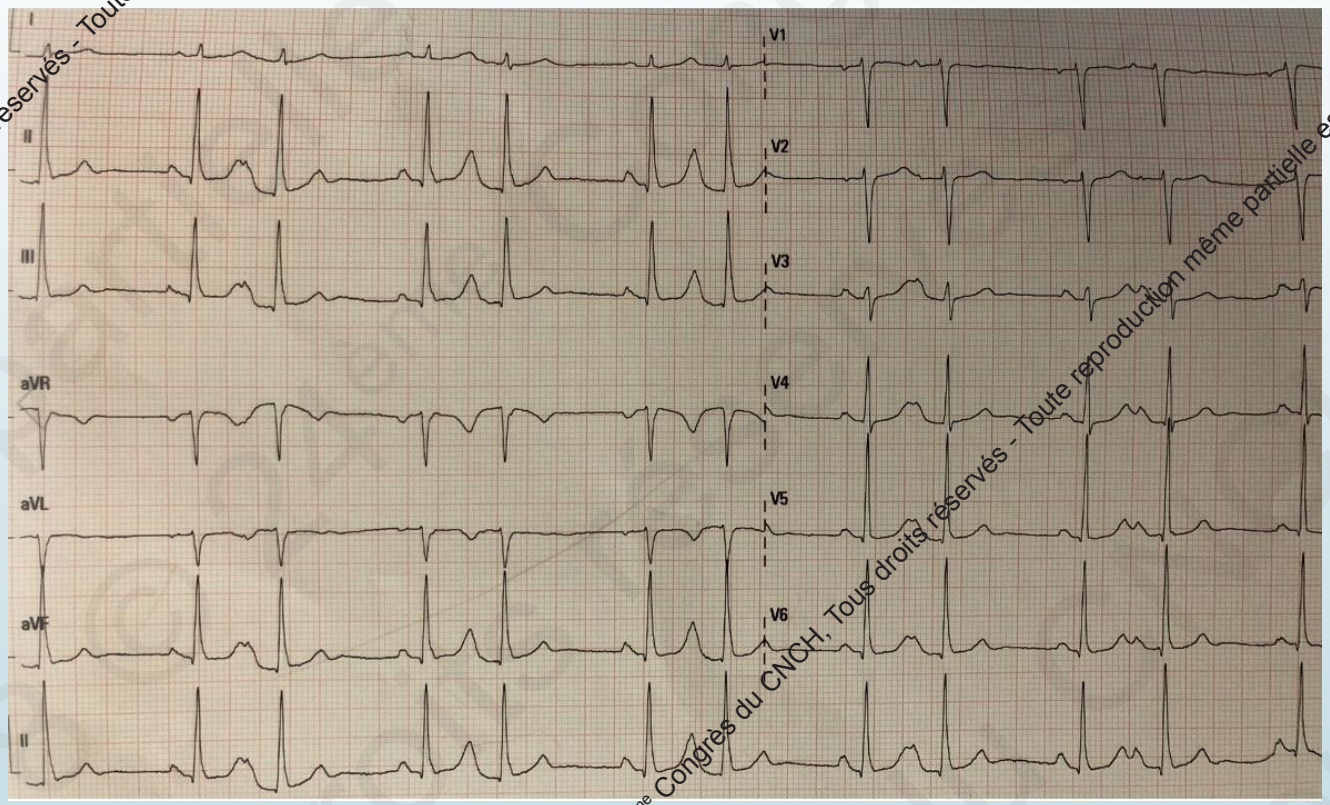
Questions à poser

- Palpitations?
- Douleur?
- Dyspnée, avion..?
- À l'effort?
- En se levant?
- En urinant?
- En toussant?
- En se rasant?
- En sciant??
- En se couchant sur le côté???

ECG aux urgences



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- Décision de l'hospitaliser pour surveillance
- Bilan biologique normal
- ETT normale

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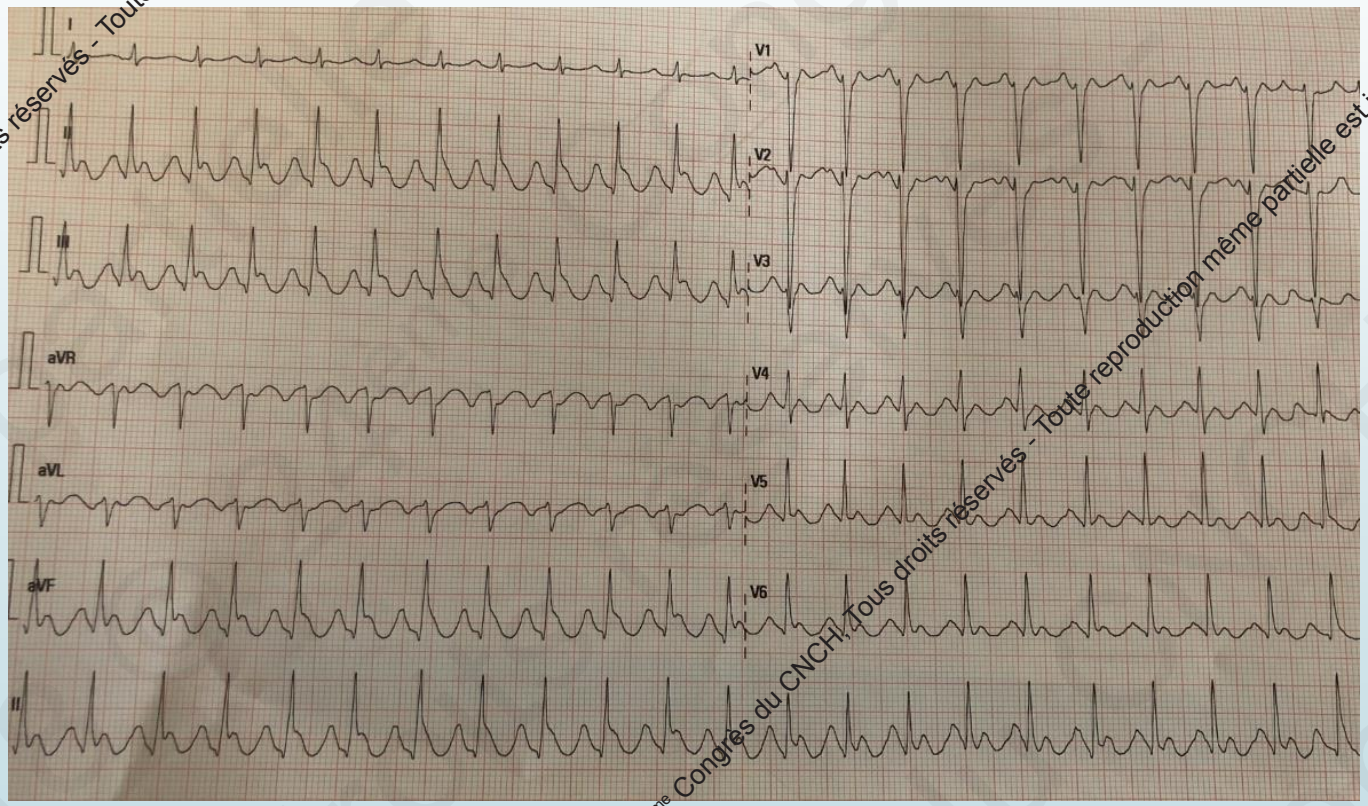

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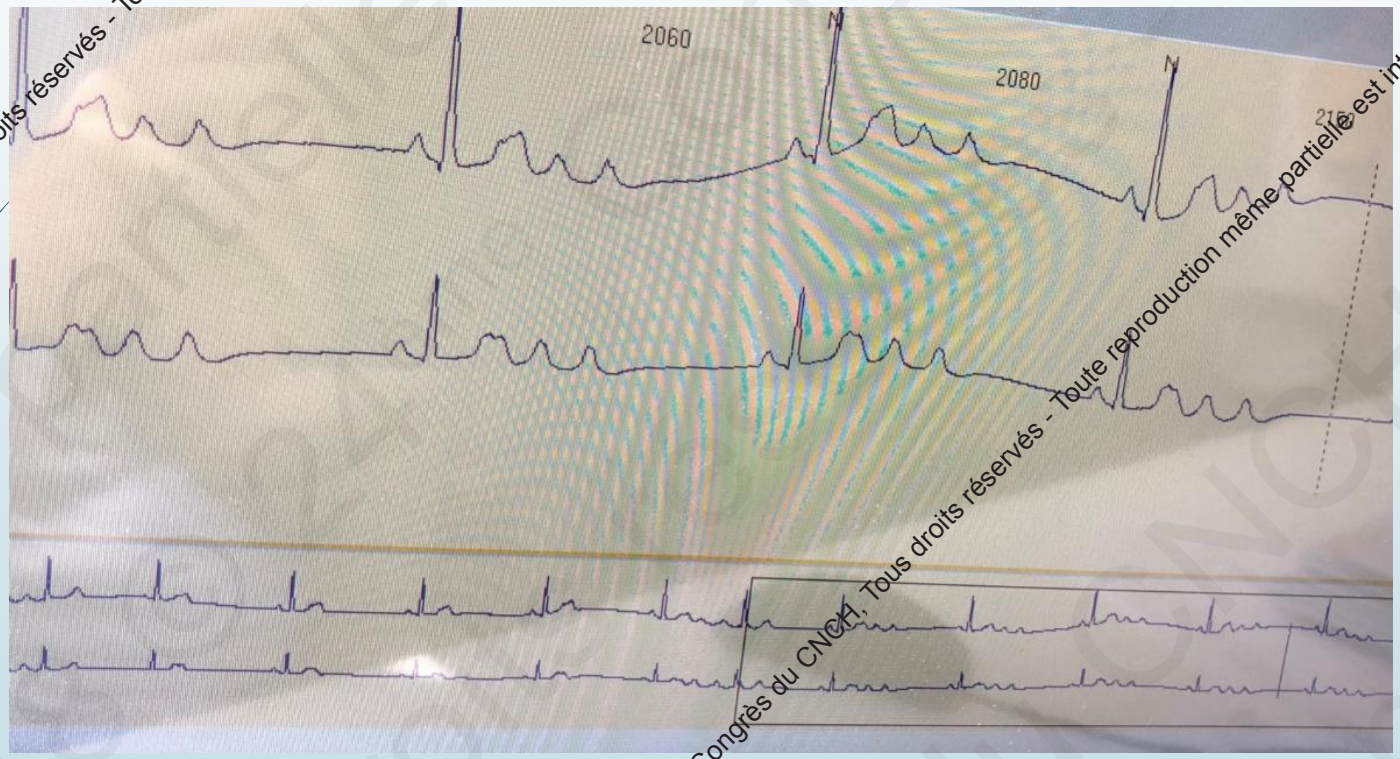
Holter ECG/24h



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Options thérapeutiques

- Anti-arythmiques
- Pace-maker
- Ablation par radiofréquence

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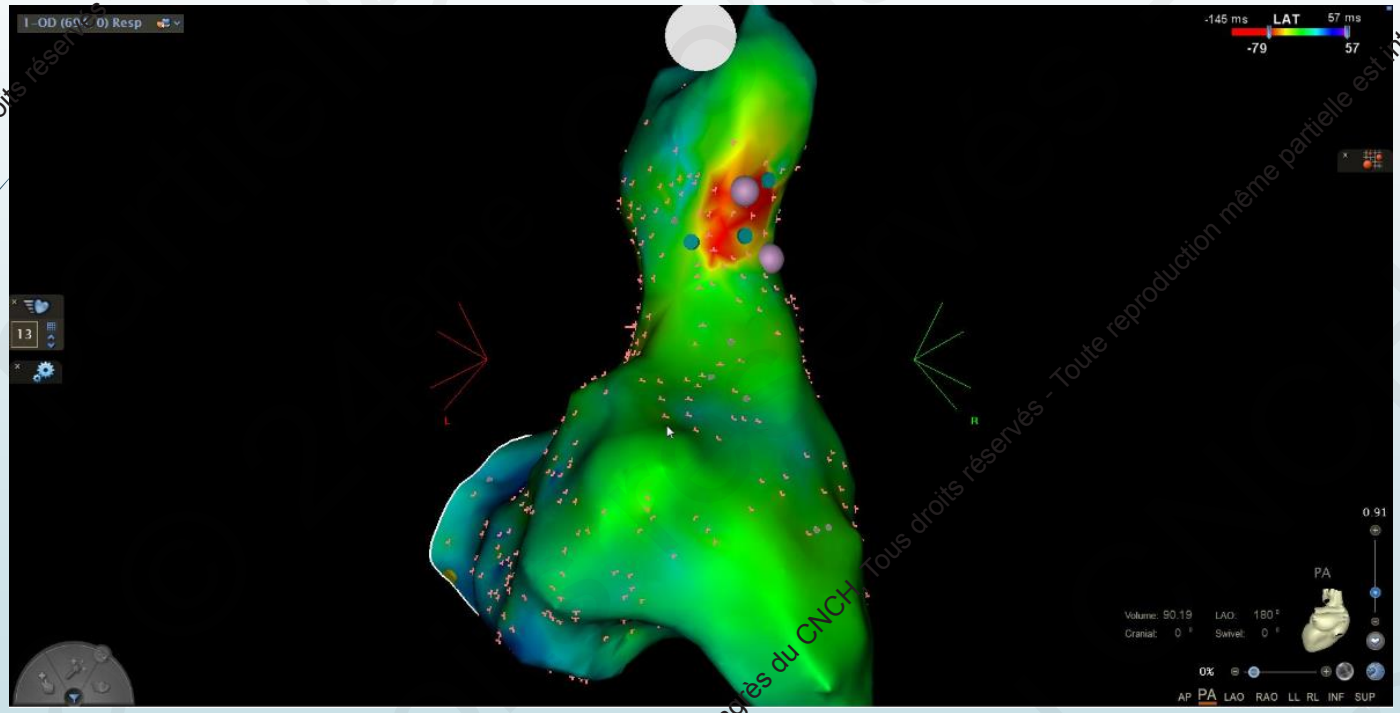
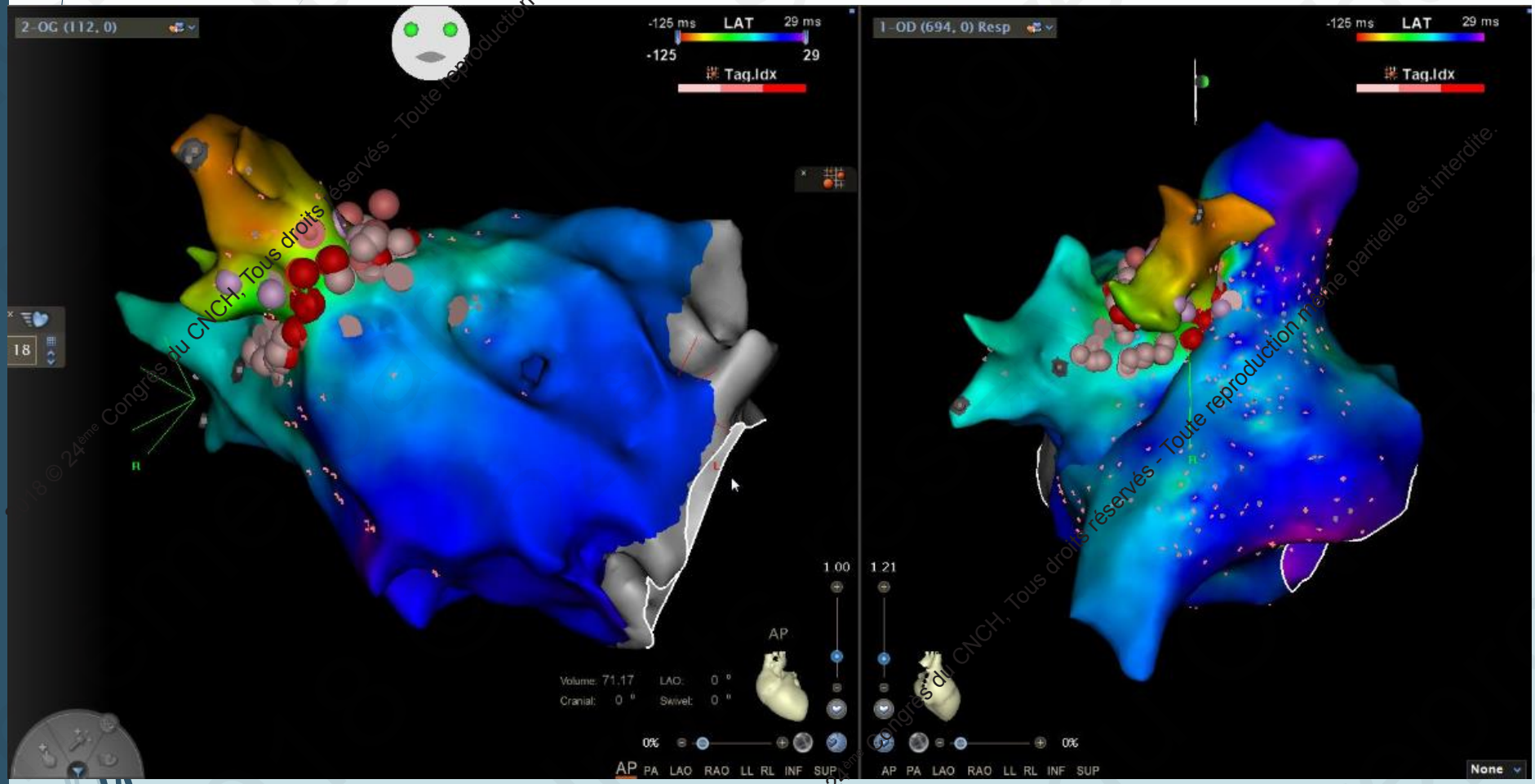
Cartographie 3D





Rétrospectivement

- Holter longue durée
- Holter implantable

Take home message

- Penser au holter longue durée
- Penser au holter implantable
- Penser à l'ablation par radiofréquence pour les FA syncopales

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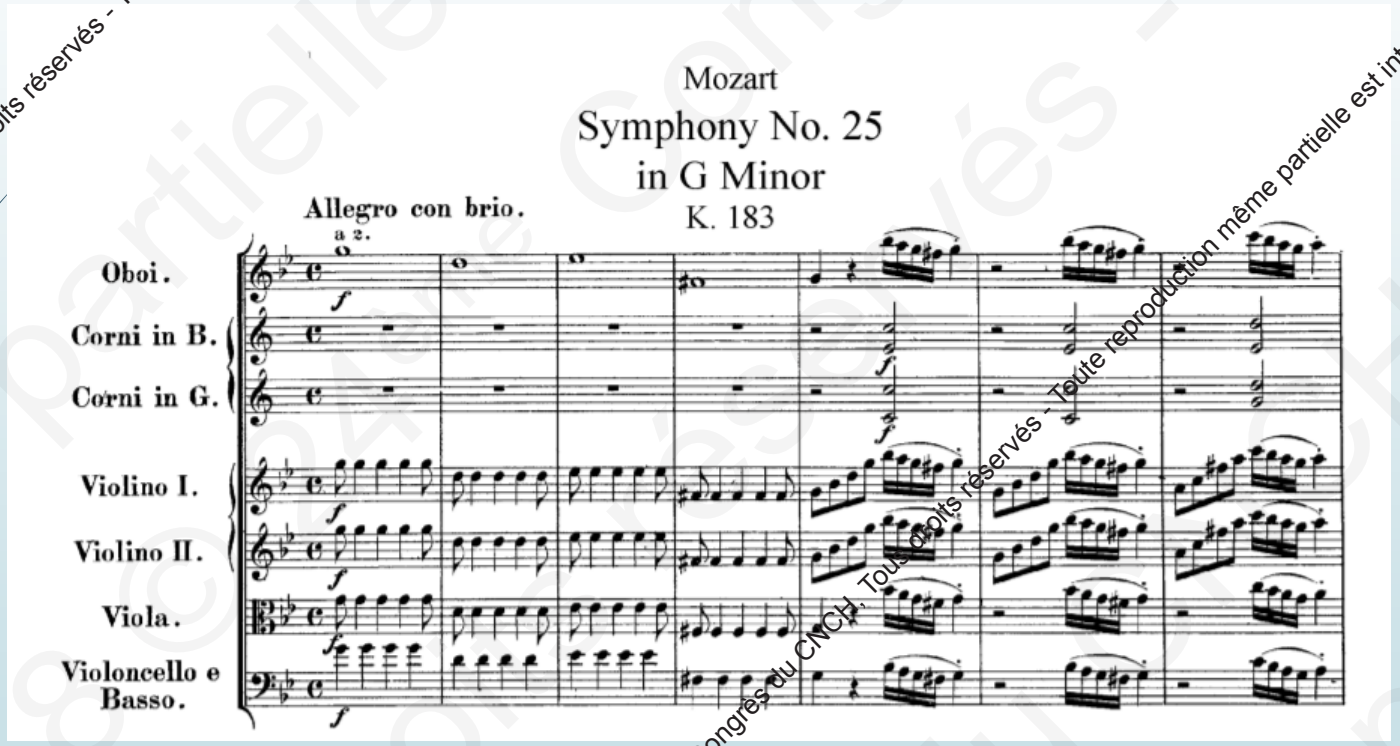
MERCI



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CHANGE IN RECOMMENDATIONS 2009 2018

Contraindications to CSM	
Tilt testing: indication for syncope[23, 24, 105-109, 111-117]	
Tilt testing for educational purposes[119-121]	
Tilt testing: diagnostic criteria[23, 24, 105-109, 111-117]	
Tilt testing for assessing therapy	
Holter for unexplained syncope[161]	
ECG monitoring: presyncope & asymptomatic arrhythmias	
Adenosine trisphosphate test	
EPS-guided pacemaker: prolonged SNRT[210-212]	
EPS-guided pacemaker: HV >70 ms[188, 214-217, 221]	
Empiric pacing in bifascicular block[217, 255, 344]	
Therapy of reflex syncope: PCM[119-121, 263, 264]	
Therapy of OH: PCM[319]	
Therapy of OH: abdominal binders[23, 320, 321]	
Therapy of OH: head-up tilt sleeping[104, 322, 323]	
Syncope & SVT/VT: AA drugs Expert opinion	

I IIa IIb III Taken out

CHANGE IN RECOMMENDATIONS 2009 2018

Syncope & AF: catheter ablation Expert opinion	
ICD: LVEF >35% and syncope[46]	
Syncope & high risk HCM: ICD[245]	
Syncope & ARVC: ICD[46]	
Psychiatric consultation for PPS Expert opinion	

2018 NEW RECOMMENDATIONS (only major included)

Management of syncope in ED (section 4.1.2)

- *Low-risk*: discharge from ED
- *High-risk*: early intensive evaluation in ED, SU versus admission
- *Neither high or low*: observation in ED or in SU instead of being hospitalized

Video recording (section 4.2.5):

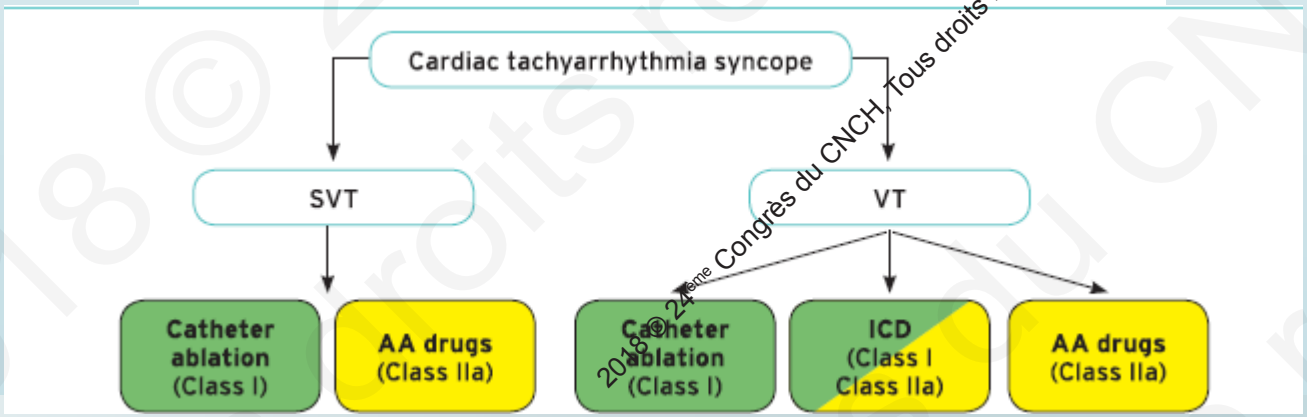
- Video recordings of spontaneous events

ILR indications (section 4.2.4.7):

- In patients with suspected unproven epilepsy
- In patients with unexplained falls

ILR indications (section 5.6):

- In patients with primary cardiomyopathy or inheritable arrhythmogenic disorders who are at low risk of sudden cardiac death, as alternative to ICD



PHYSICAL EXAMINATION	
High-risk	
Major	
• Unexplained systolic BP in the ED <90 mmHg[26,55] • Suggestion of gastrointestinal bleed on rectal examination[44] • Persistent bradycardia (<40 b.p.m.) in awake state and in absence of physical training • Undiagnosed systolic murmur[60]	
ECG[a]	
Low-risk	
• Normal ECG[26,35,36,55]	
High-risk	
Major	**Minor** (high-risk only if history consistent with arrhythmic syncope)
• ECG changes consistent with acute ischaemia • Mobitz II second- and third-degree AV block • Slow AF (<40 b.p.m.) • Persistent sinus bradycardia (<40 b.p.m.), or repetitive sinoatrial block or sinus pauses >3 seconds in awake state and in absence of physical training • Bundle branch block, intraventricular conduction disturbance, ventricular hypertrophy, or Q waves consistent with ischaemic heart disease or cardiomyopathy[44,56] • Sustained and non-sustained VT • Dysfunction of an implantable cardiac device (pacemaker or ICD) • Type 1 Brugada pattern • ST-segment elevation with type 1 morphology in leads V1–V3 (Brugada pattern) • QTc >460 ms in repeated 12-lead ECGs indicating LQTS[46]	• Mobitz I second-degree AV block and 1°degree AV block with markedly prolonged PR interval • Asymptomatic inappropriate mild sinus bradycardia (40–50 b.p.m.), or slow AF (40–50 b.p.m.)[56] • Paroxysmal SVT or atrial fibrillation[50] • Pre-excited QRS complex • Short QTc interval (≤340 ms)[46] • Atypical Brugada patterns[46] • Negative T waves in right precordial leads, epsilon waves suggestive of ARVC[46]

Recommendations	Class[a]	Level[b]
Indications		
Immediate in-hospital monitoring (in bed or by telemetry) is indicated in high-risk patients (defined in *Table 6*).	I	C
Holter monitoring should be considered in patients who have frequent syncope or presyncope (≥1 episode per week).[161]	IIa	B
External loop recorders should be considered, early after the index event, in patients who have an inter-symptom interval ≤4 weeks.[162,166,168,201]	IIa	B
ILR is indicated in an early phase of evaluation in patients with recurrent syncope of uncertain origin, absence of high-risk criteria (listed in *Table 6*), and a high likelihood of recurrence within the battery life of the device.[175,176,181–184,202], *Supplementary Data Table 5*	I	A
ILR is indicated in patients with high-risk criteria (listed in *Table 6*) in whom a comprehensive evaluation did not demonstrate a cause of syncope or lead to a specific treatment, and who do not have conventional indications for primary prevention ICD or pacemaker indication.[174,180,187,188,195], *Supplementary Data Tables 5 and 6*	I	A
ILR should be considered in patients with suspected or certain reflex syncope presenting with frequent or severe syncopal episodes.[184–186]	IIa	B
ILR may be considered in patients in whom epilepsy was suspected but the treatment has proven ineffective.[189–191], *Supplementary Data Table 7*	IIb	B
ILR may be considered in patients with unexplained falls.[191–194], *Supplementary Data Table 8*	IIb	B
Diagnostic criteria		
Arrhythmic syncope is confirmed when a correlation between syncope and an arrhythmia (bradyarrhythmia or tachyarrhythmia) is detected.[172,184–186,188,200]	I	B
In the absence of syncope, arrhythmic syncope should be considered likely when periods of Mobitz II second- or third-degree AV block or a ventricular pause >3 s (with the possible exception of young trained persons, during sleep or rate-controlled atrial fibrillation), or rapid prolonged paroxysmal SVT or VT are detected.[185,188,197–199]	IIa	C
Additional advice and clinical perspectives • Be aware that the pre-test selection of the patients influences the subsequent findings. Include patients with a high likelihood of arrhythmic events. The duration (and technology) of monitoring should be selected according to the risk and the predicted recurrence rate of syncope.[158–160,183] • Exclude patients with a clear indication for ICD, pacemaker, or other treatments independent of a definite diagnosis of the cause of syncope. • Include patients with a high probability of recurrence of syncope in a reasonable time. Owing to the unpredictability of syncope recurrence, be prepared to wait up to 4 years or more before obtaining such a correlation.[203] • In the absence of a documented arrhythmia, presyncope cannot be considered a surrogate for syncope, whereas the documentation of a significant arrhythmia at the time of presyncope can be considered a diagnostic finding.[199] • The absence of arrhythmia during syncope excludes arrhythmic syncope.		