3èmes JOURNÉES de STIMULATION & DÉFIBRILLATION
GROUPE DE RYTHMOLOGIE ET DE STIMULATION CARDIAQUE DE LA SOCIÉTÉ FRANÇAISE DE CARDIOLOGIE
16 et 17 MARS 2023 Paris

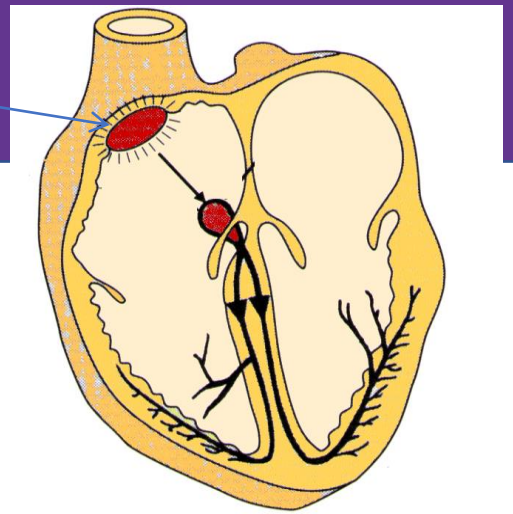
Indications de stimulation

Baptiste MAILLE, MARSEILLE

Liens d’intérêts

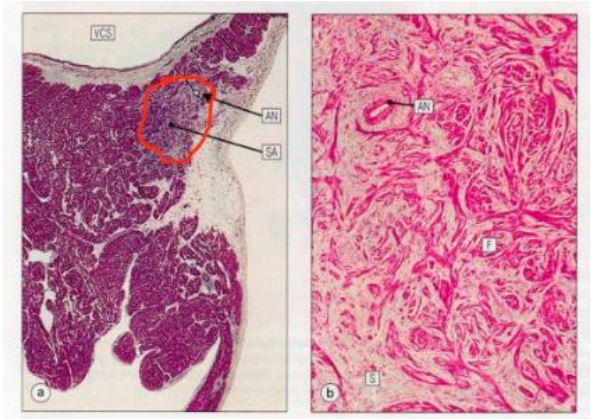
- Medtronic
  - Congrès Journées de stimulation et défibrillation
- Abbott
  - Consultant

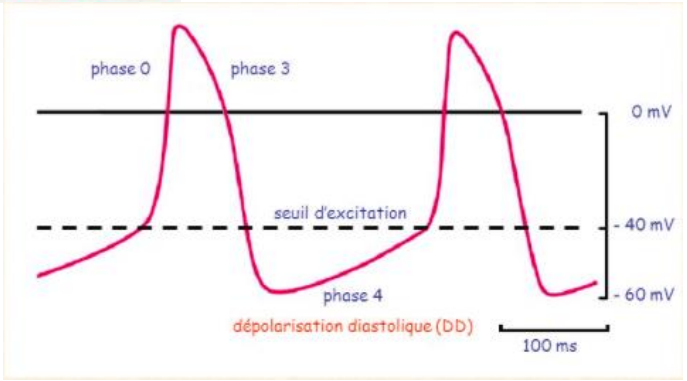
Atteintes du nœud sinusal



- 1/600 après 65 ans

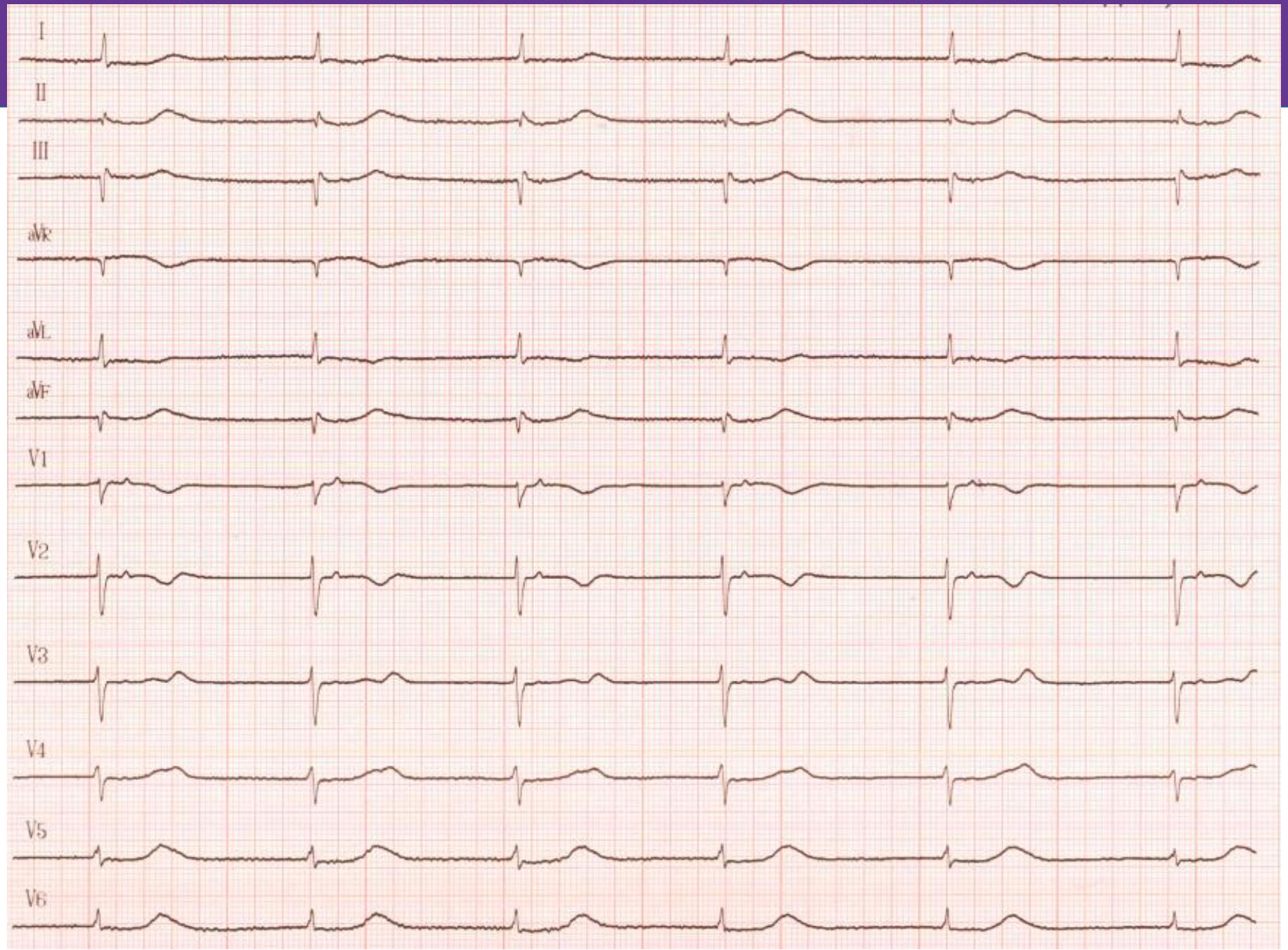
- Etiologies
  - Intrinsèque: fibrose du NS / IDM
  - Extrinsèque:
    - pharmaco +++
    - tb électrolytiques (hyperK)
    - Hypothermie
    - Hypothyroidisme
    - Hypertension intra-cranienne
    - Hypervagotonie





- Risque de mort subite faible et non amélioré par implantation d'un stimulateur cardiaque

- Sur-risque thromboembolique (potentiellement lié au risque de FA associé)


I
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III
aVR
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V1
V2
V3
V4
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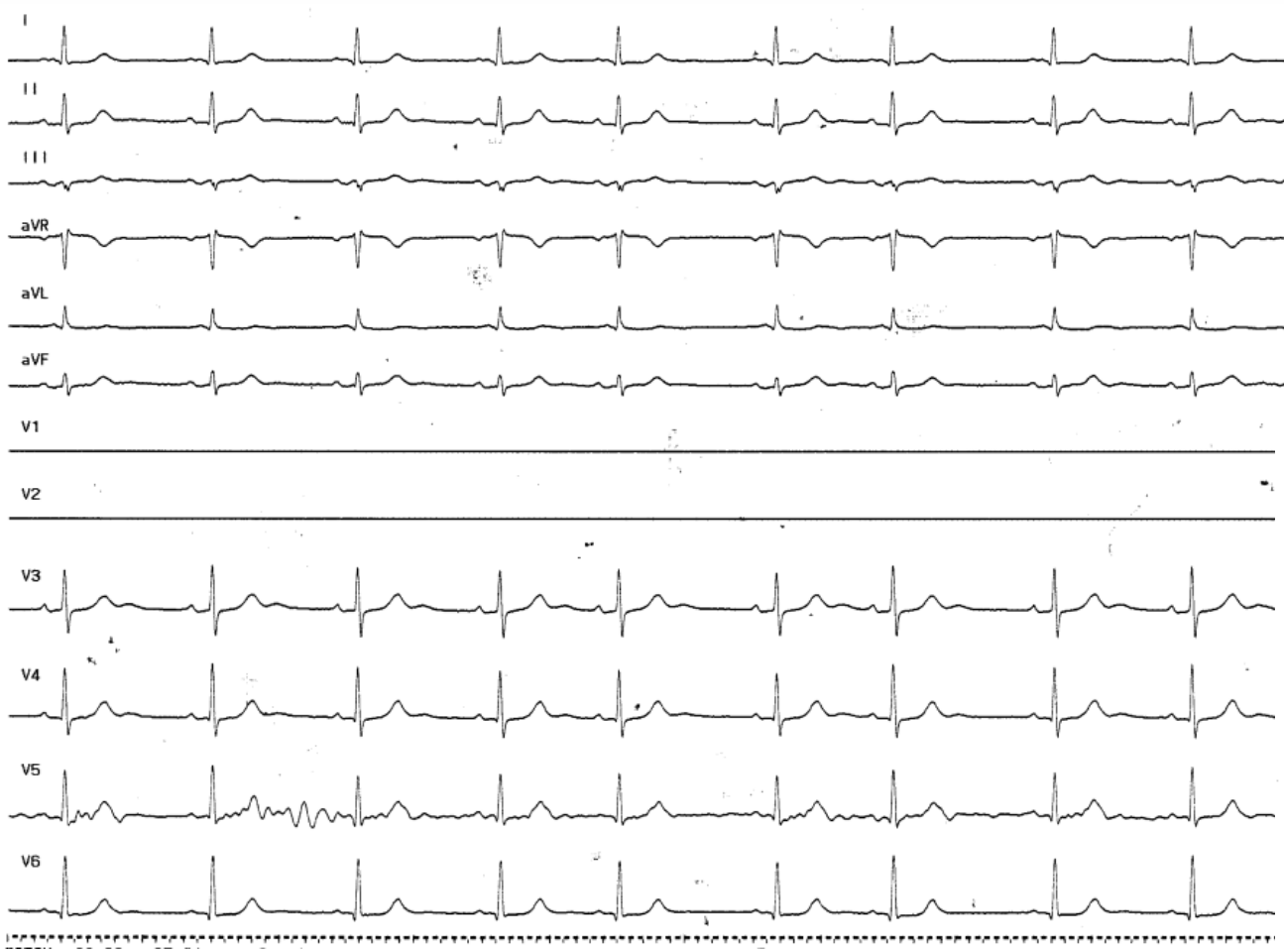
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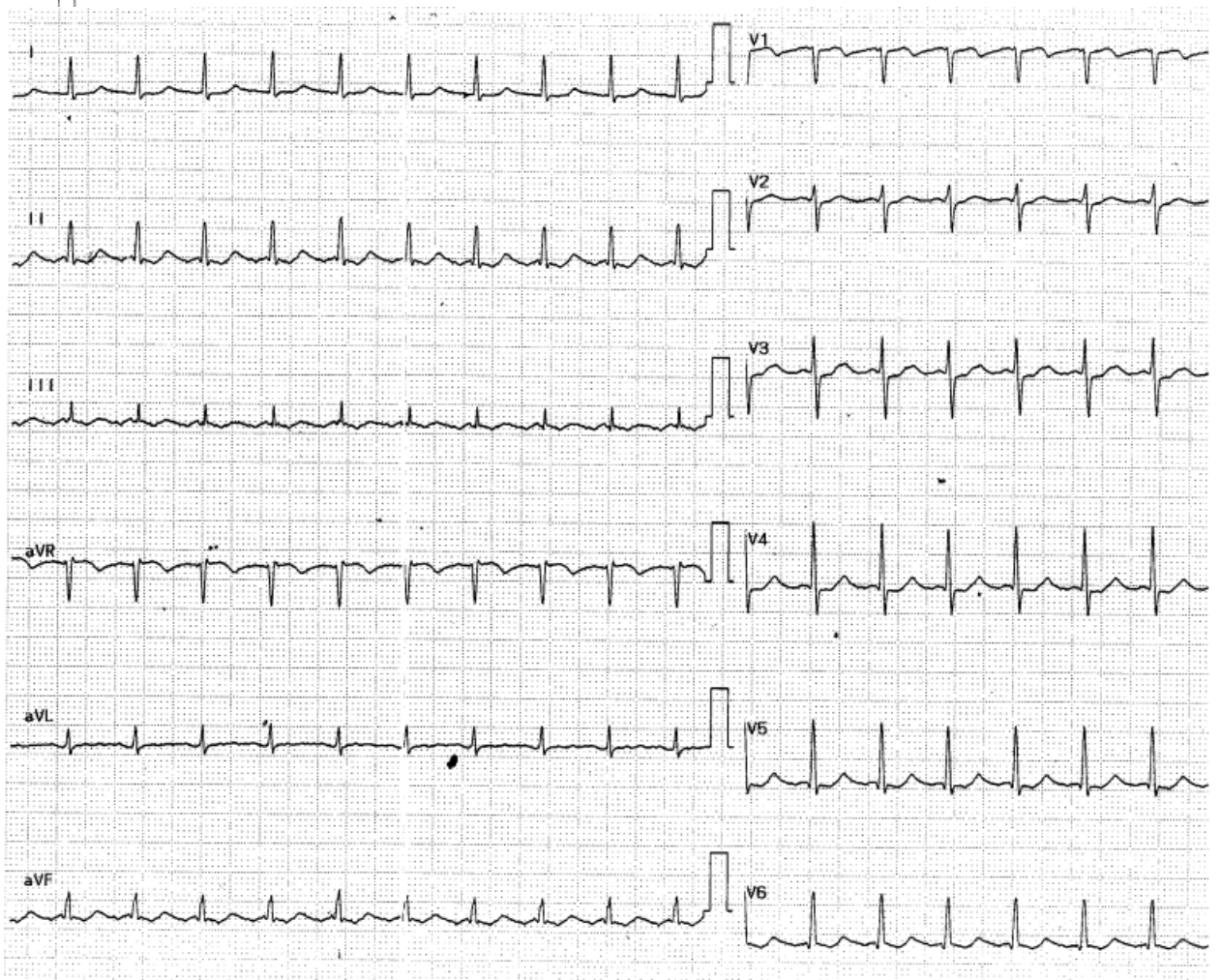
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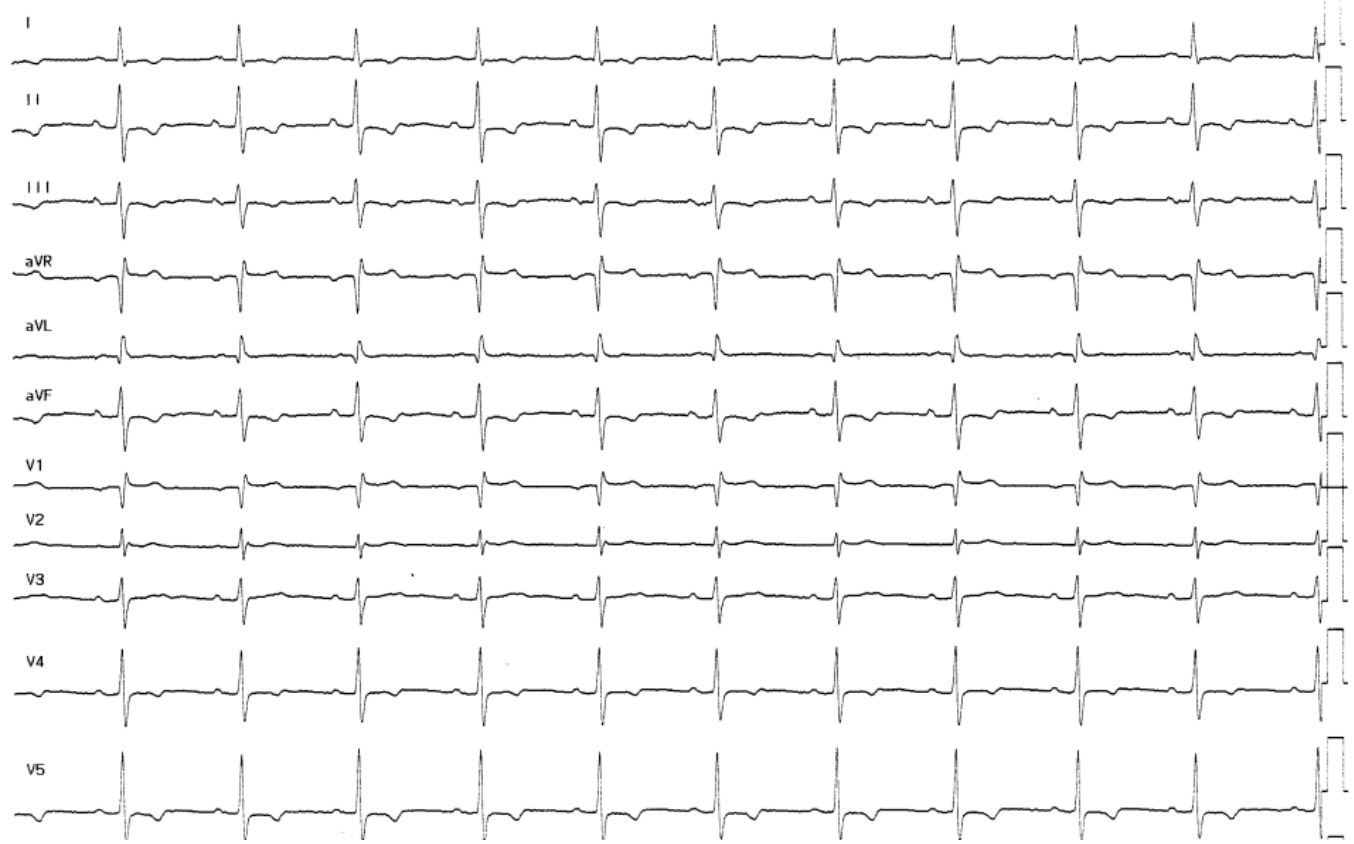
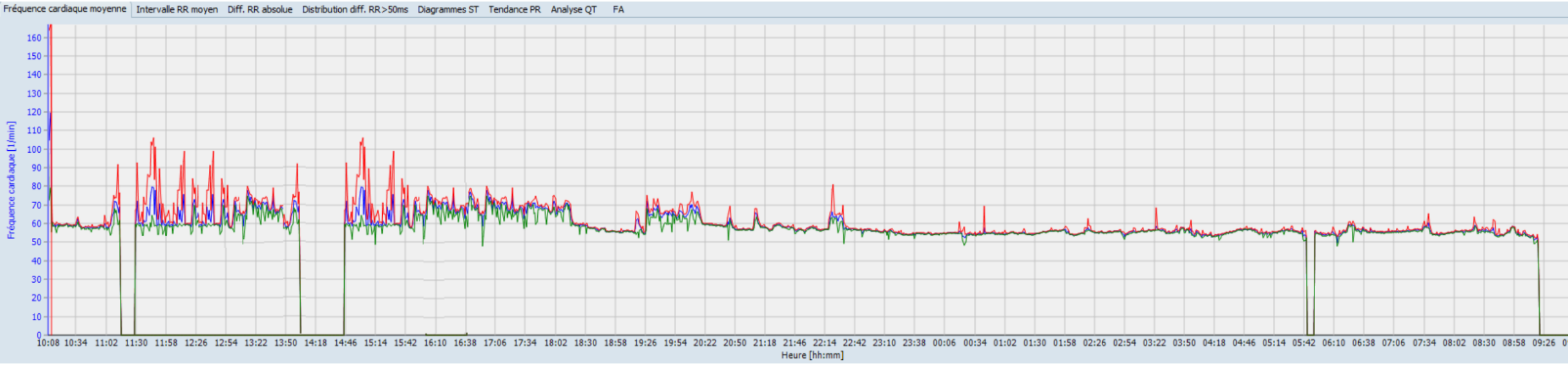


- 77 ans
- Dissection aortique type B
- dyspnée



SND – indications implantation

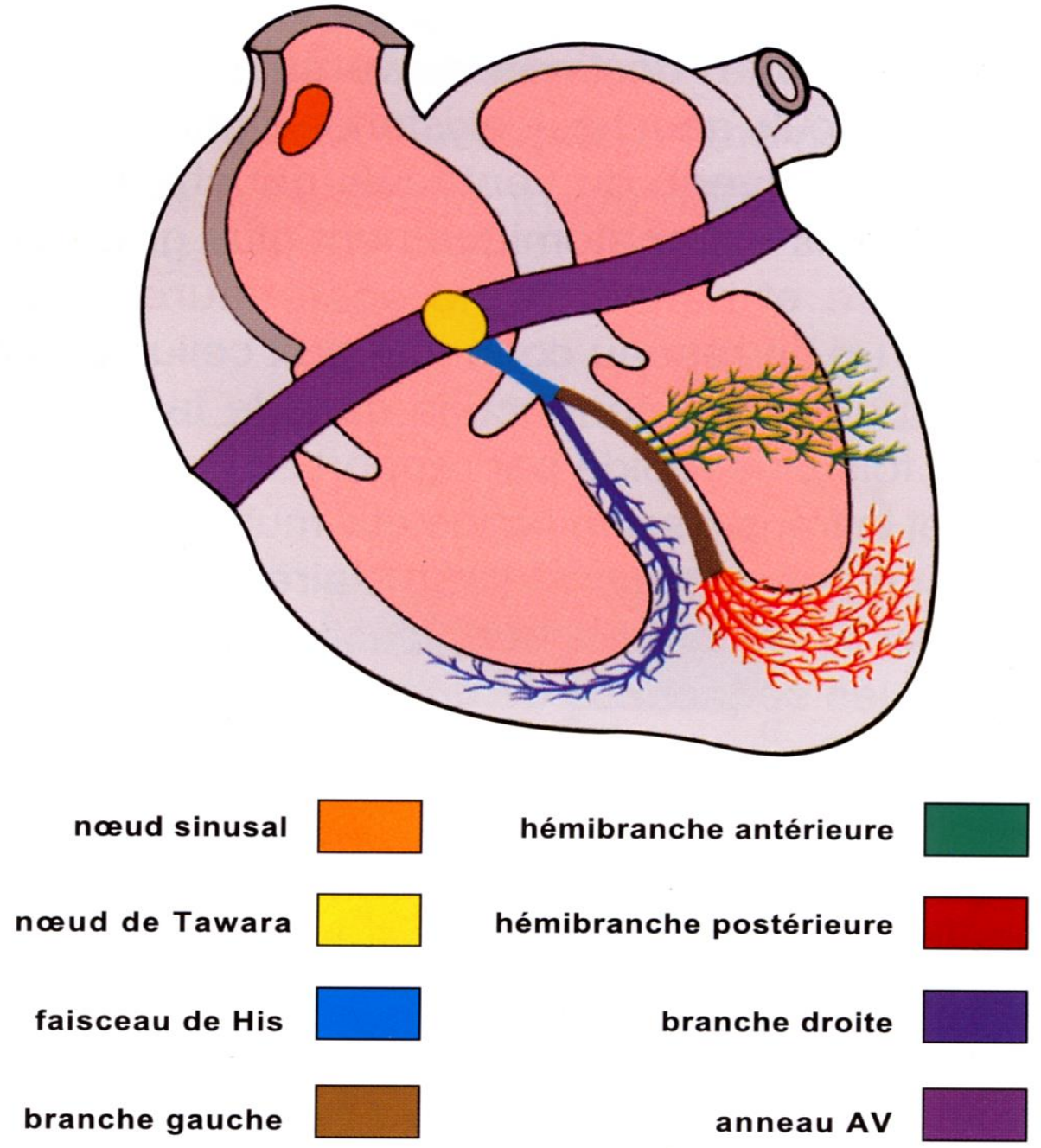
- Corrélation symptomes / bradycardie
- Brady / tachycardia syndrome
- Ins. chronotrope
- Pause > 6s (IIb) chez un patient présentant des antécédent de syncope

Recommendations	Class[a]	Level[b]
In patients with SND and a DDD pacemaker, minimization of unnecessary ventricular pacing through programming is recommended.[144,151,159,164,166–169]	I	A
Pacing is indicated in SND when symptoms can clearly be attributed to bradyarrhythmias.[14,128–131]	I	B
Pacing is indicated in symptomatic patients with the bradycardia–tachycardia form of SND in order to correct bradyarrhythmias and enable pharmacological treatment, unless ablation of the tachyarrhythmia is preferred.[17,20,21,136–138,170,171]	I	B
In patients who present chronotropic incompetence and have clear symptoms during exercise, DDD with rate-responsive pacing should be considered.[172,173]	IIa	B
AF ablation should be considered as a strategy to avoid pacemaker implantation in patients with AF-related bradycardia or symptomatic pre-automaticity pauses, after AF conversion, taking into account the clinical situation.[136–139,174]	IIa	C
In patients with the bradycardia–tachycardia variant of SND, programming of atrial ATP may be considered.[164,165]	IIb	B
In patients with syncope, cardiac pacing may be considered to reduce recurrent syncope when asymptomatic pause(s) >6 s due to sinus arrest is documented.[133,134]	IIb	C
Pacing may be considered in SND when symptoms are likely to be due to bradyarrhythmias, when the evidence is not conclusive.	IIb	C
Pacing is not recommended in patients with bradyarrhythmias related to SND that are asymptomatic or due to transient causes that can be corrected and prevented.[33]	III	C

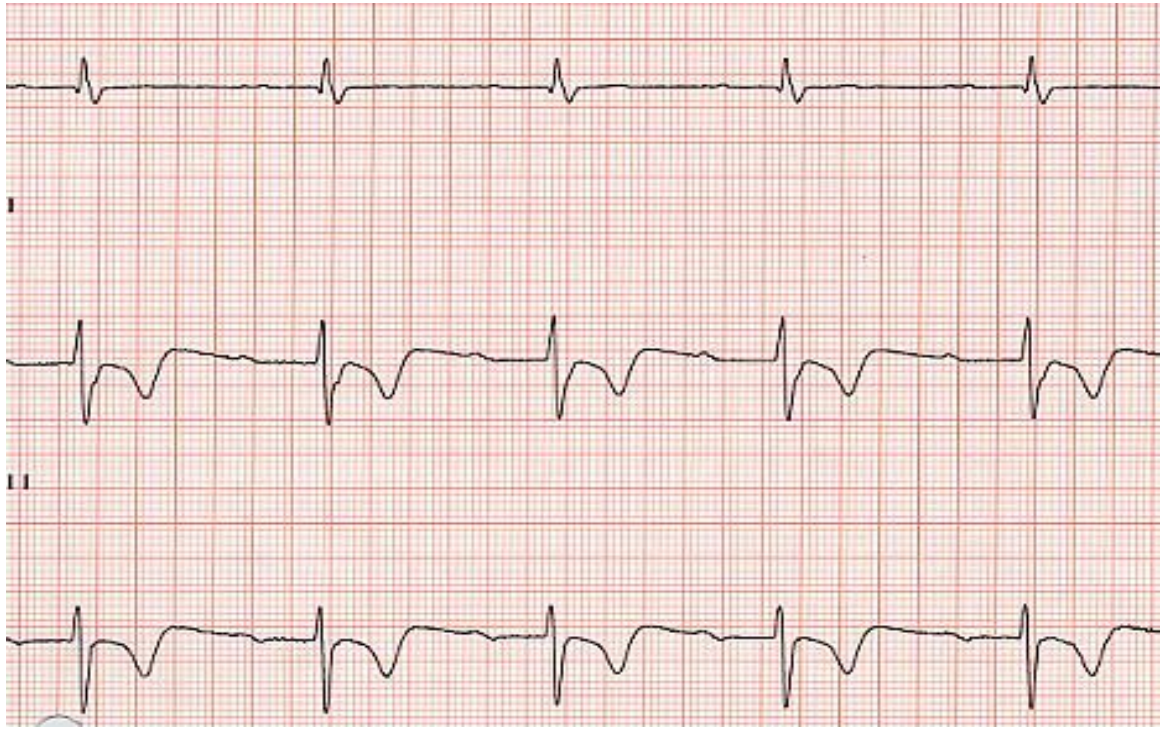
Atrio-ventricular Block

- <u>Rapport AV</u>
  - 1er degré: Fixe
  - 2ème degré: 1 onde p bloquée
  - 3ème degré: Dissocié

- <u>Largeur QRS</u>
  - Fins: utilisation toute les voies de conduction (His, branche droite et gauche)
  - Larges: pas d'utilisation de toute les voies de conduction

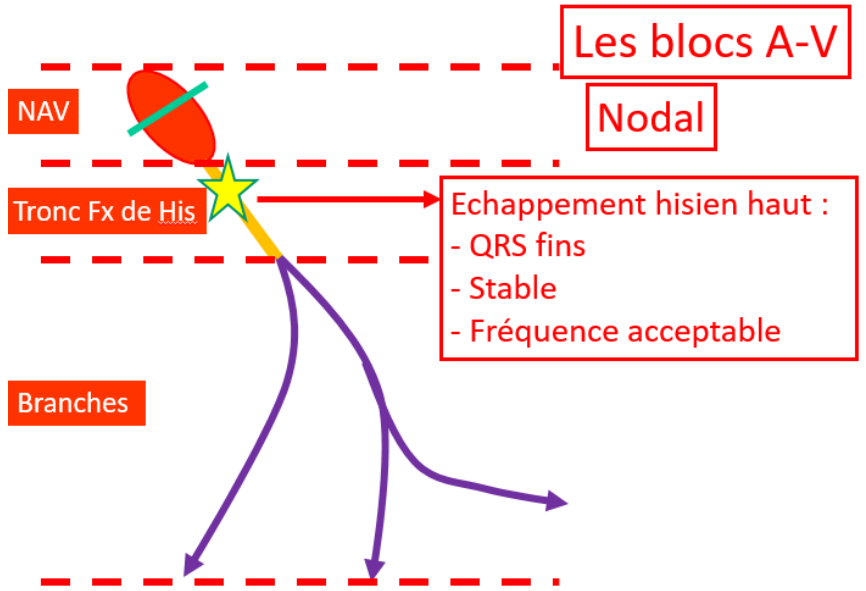


BAV 1er degré

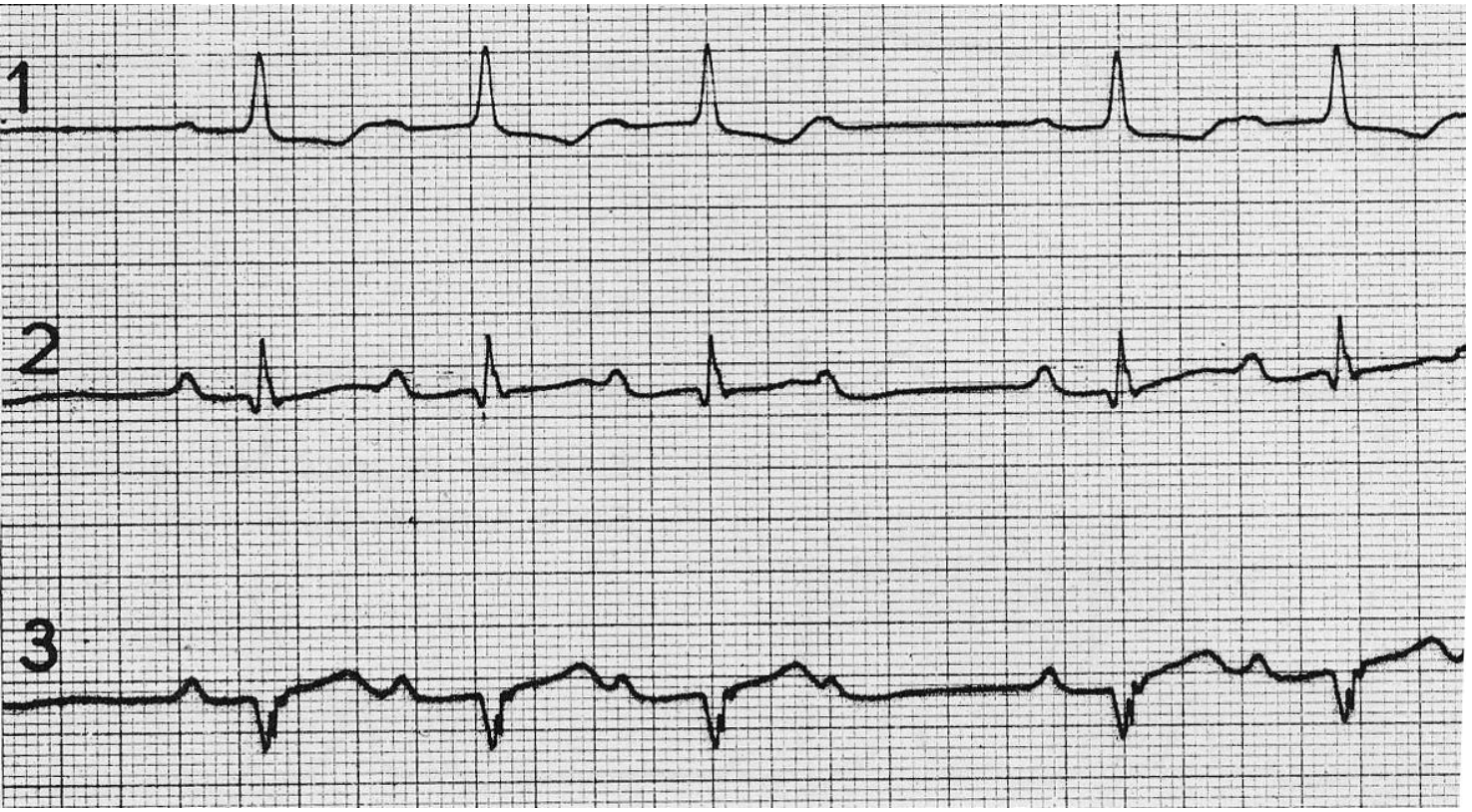


- Allongement PR seul / pas d'onde p bloquée
- QRS fins

→ Nodal +++ - BAV 1er degré



BAV 2ème degré - mobitz 1



- 1 seule onde p bloquée

= BAV 2

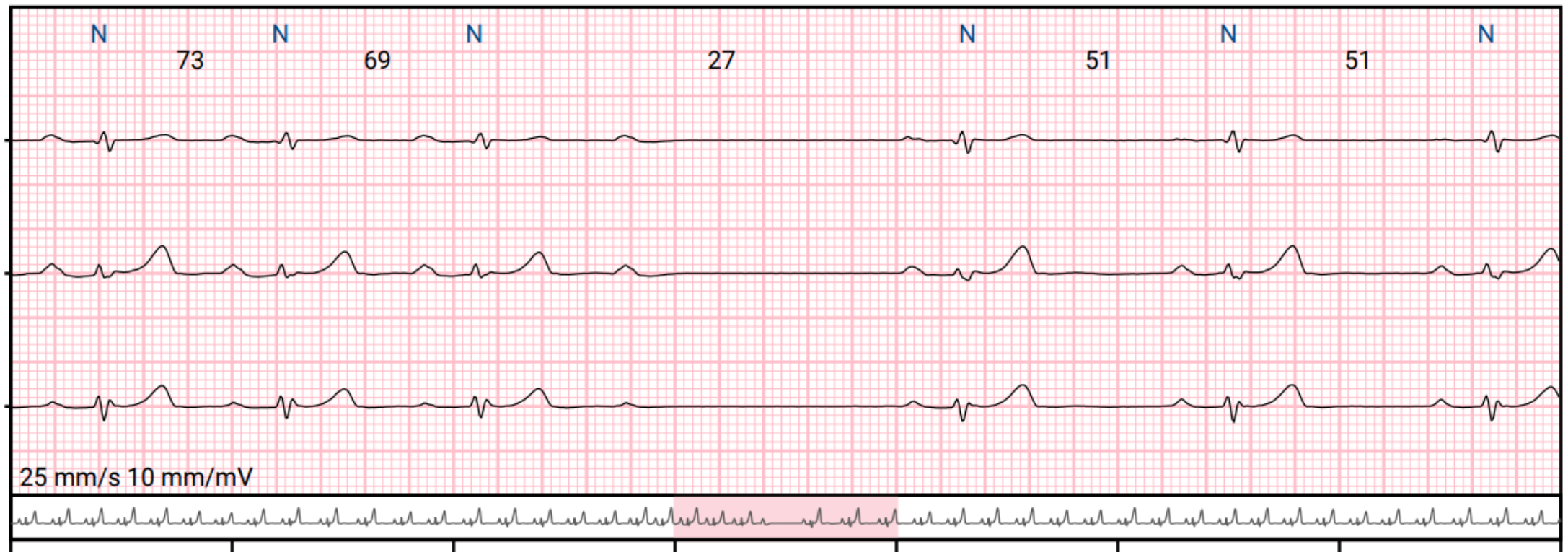
- Allongement progressif du PR

= mobitz 1

- QRS fins

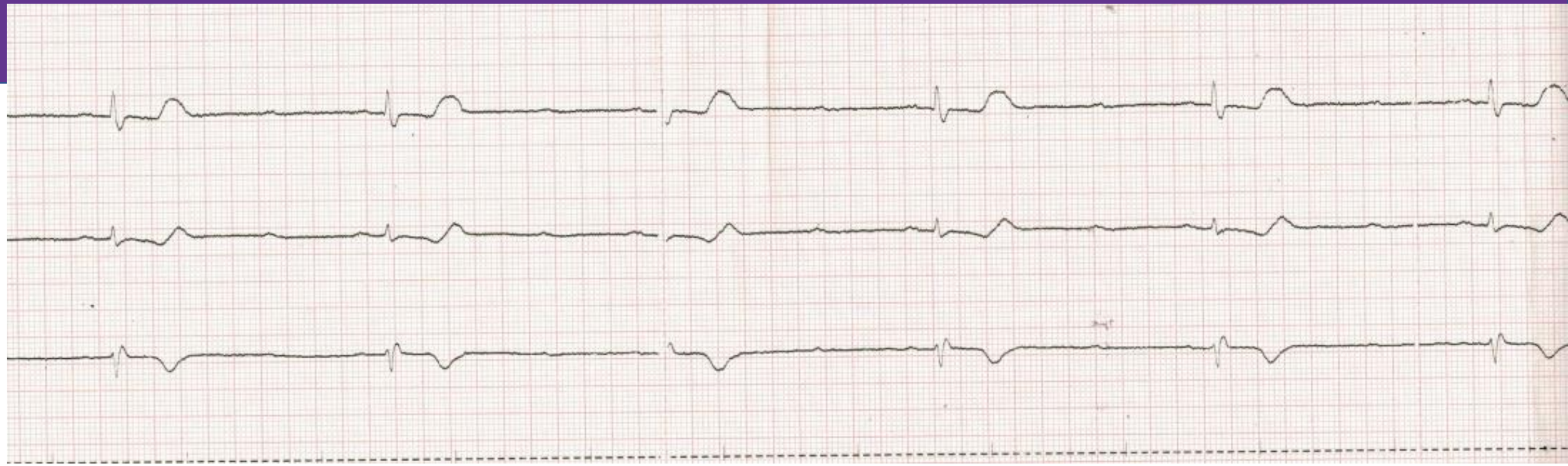
→ BAV bas grade

BAV 2ème degré - mobitz 2



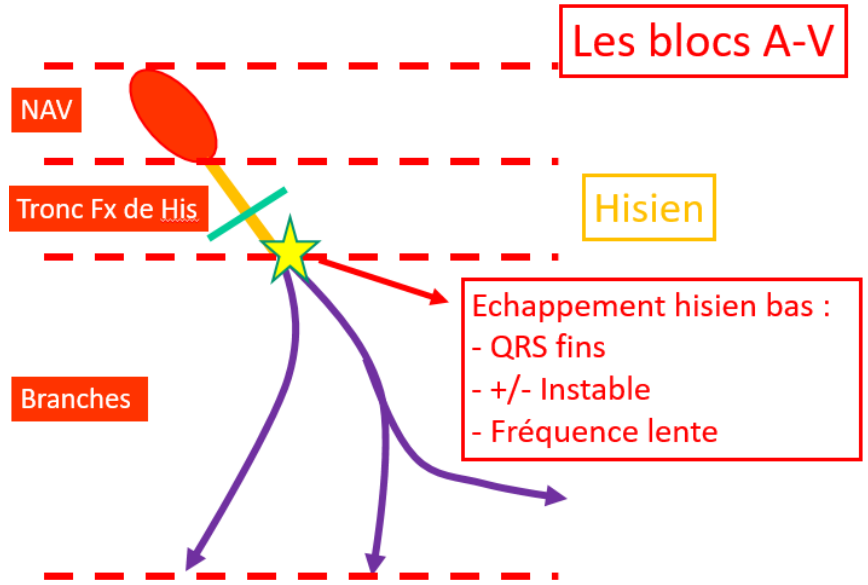
- QRS fins
- 1 seule onde p bloquée
- PR fixe

→ Haut grade

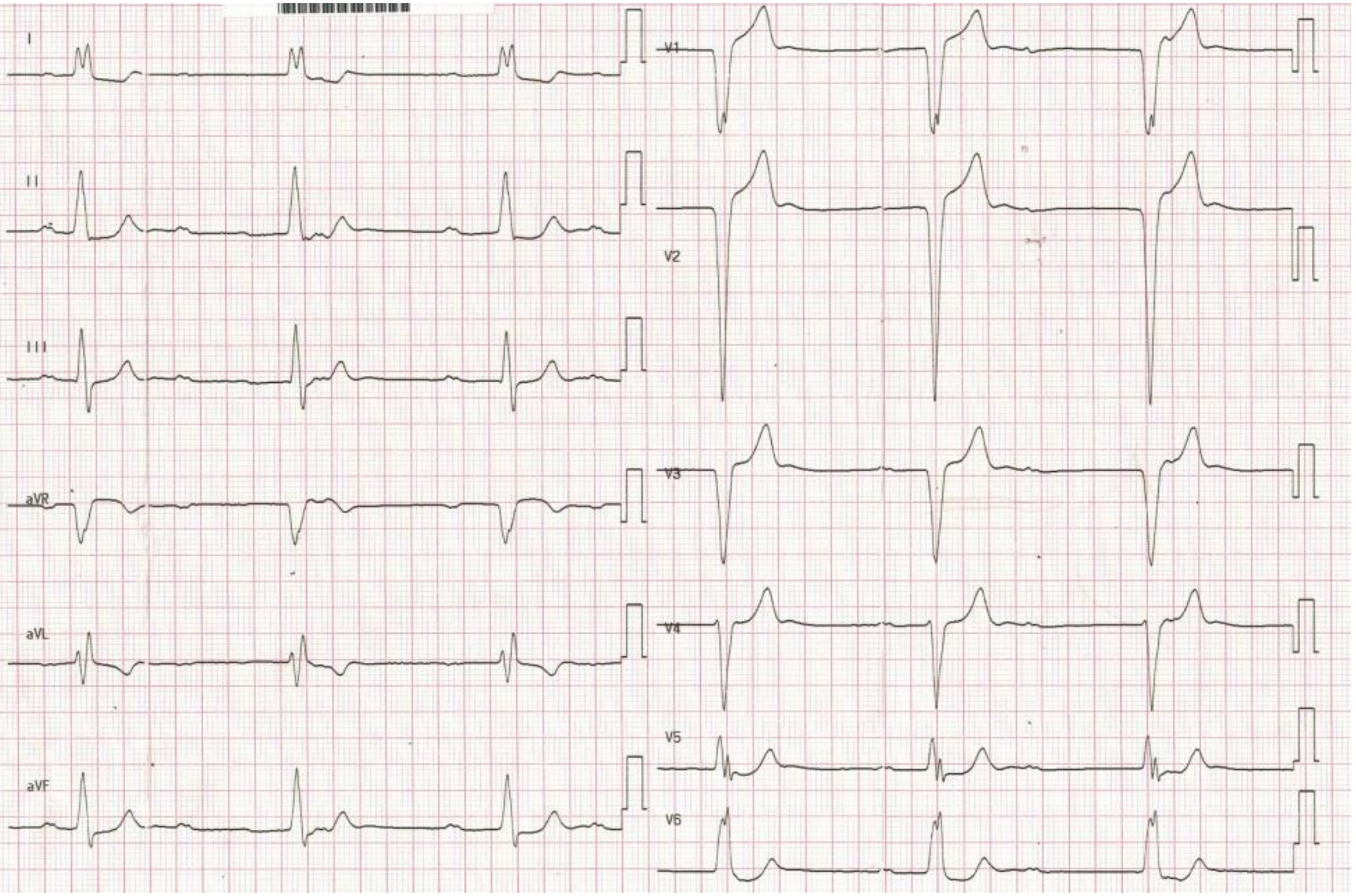


- BAV 3/1
- QRS fins

→ BAV haut grades intra hissien

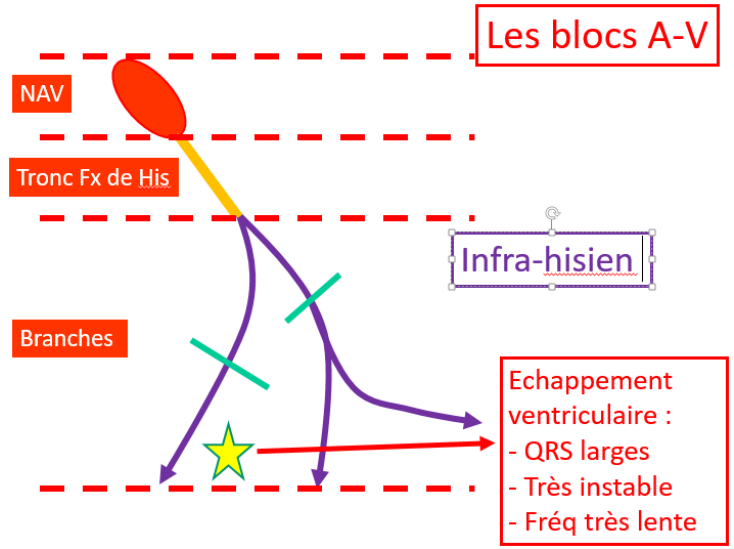


BAV complet

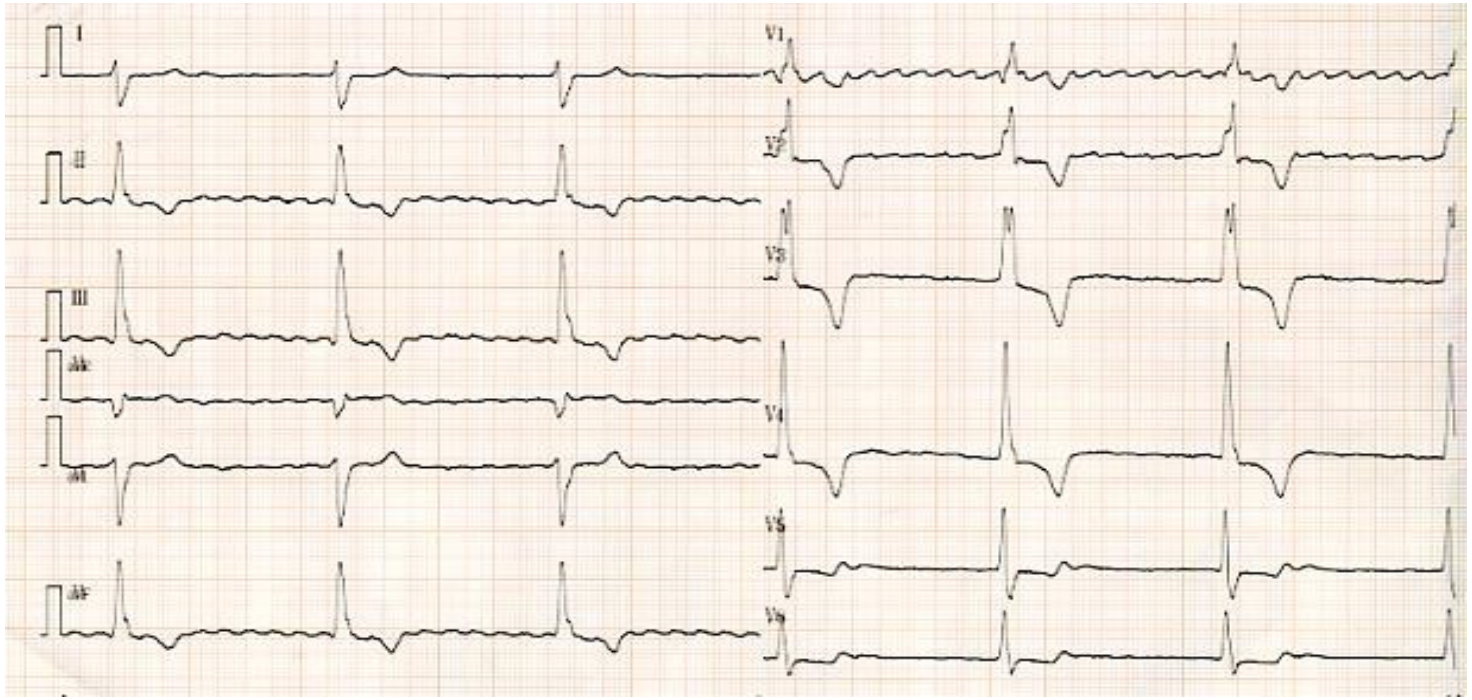


- Dissociation AV
- QRS larges

→ BAV haut grade infra nodal

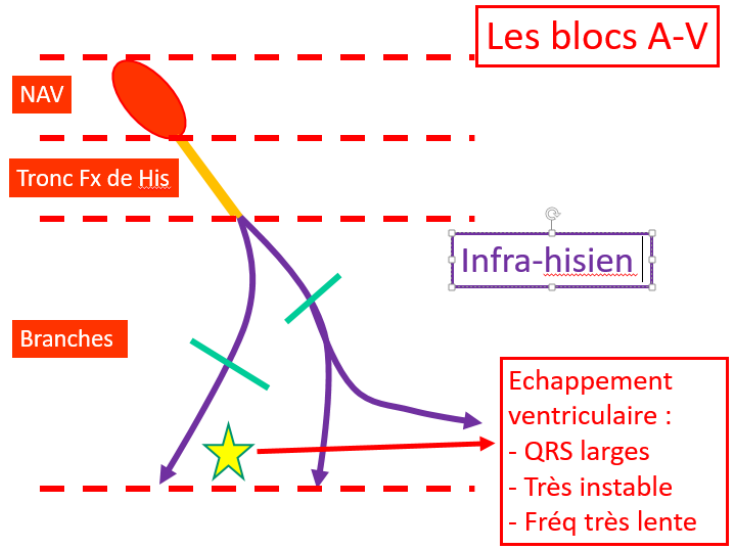


BAV complet - FA



- FA régulière
- QRS larges

→ BAV haut grade, infra hissien



AVB – indications d'implantation

- BAV haut grade (> = mobitz II):
  - 1 p bloquée avec PR fixe
  - > 1 p bloquée
  - Dissociation AV

→ Quelques soient les symptômes

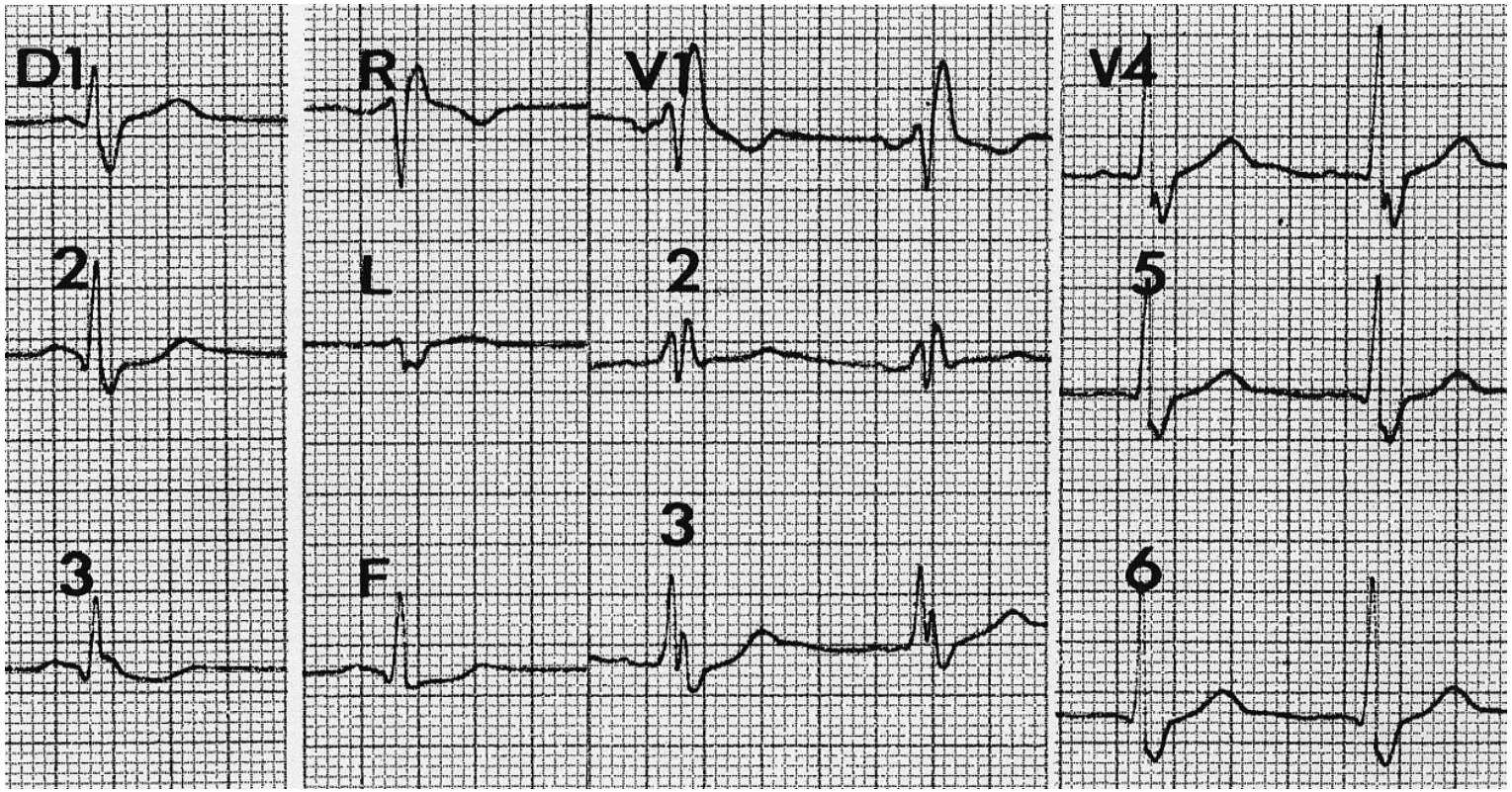
- BAV bas grade (I, II mobitz I)
  - 1 p bloquée avec allongement PR
  - PR long

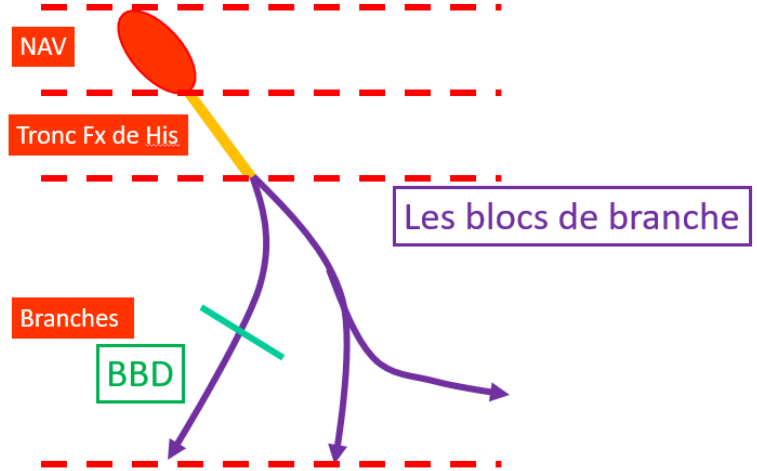
→ Corrélation symptomes indispensable

Recommendations for pacing for atrioventricular block

Recommendations	Class[a]	Level[b]
Pacing is indicated in patients in SR with permanent or paroxysmal third- or second-degree type 2, infranodal 2:1, or high-degree AVB, irrespective of symptoms.[c 9–12]	I	C
Pacing is indicated in patients with atrial arrhythmia (mainly AF) and permanent or paroxysmal third- or high-degree AVB irrespective of symptoms.	I	C
In patients with permanent AF in need of a pacemaker, ventricular pacing with rate response function is recommended.[201–204]	I	C

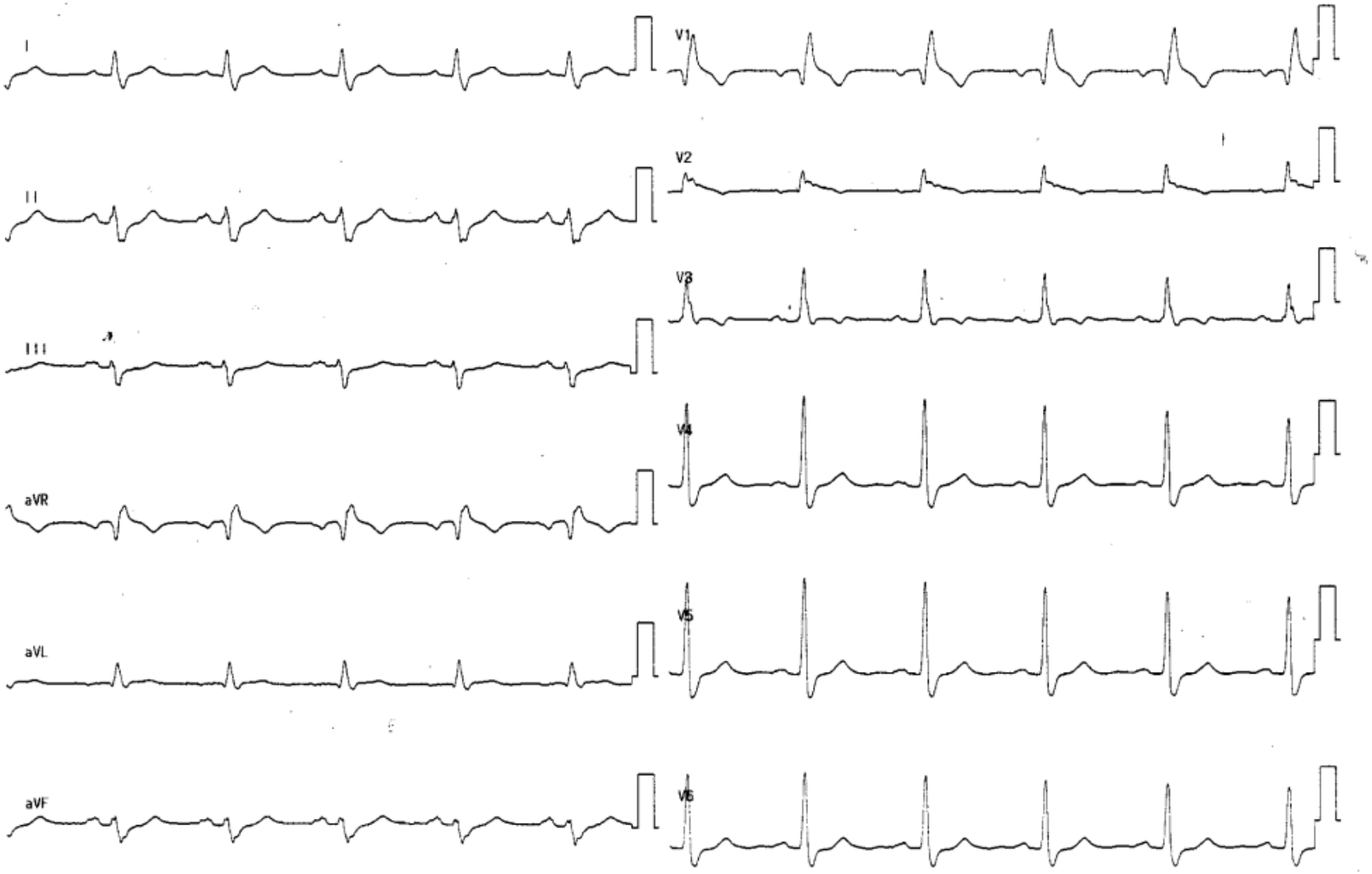
Bloc de branche droit - monofasciculaire

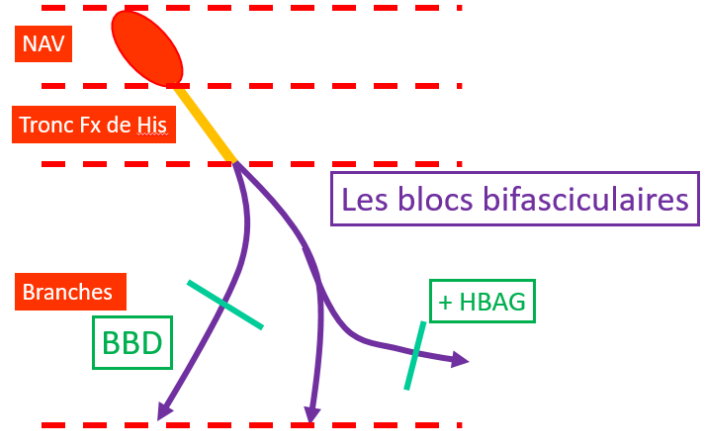




- QRS larges
- Rapport AV normal

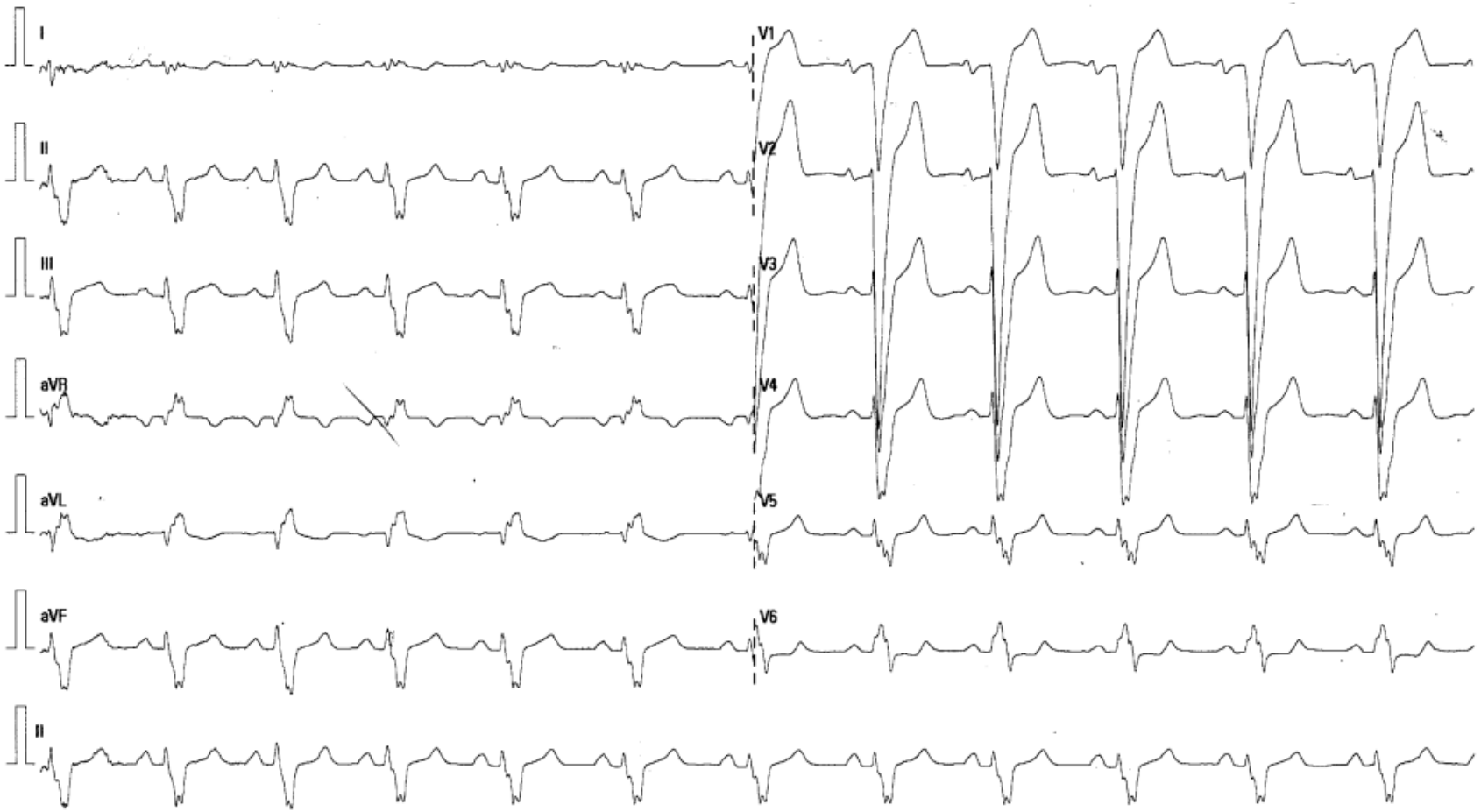
Bloc de branche droit - bifasciculaire

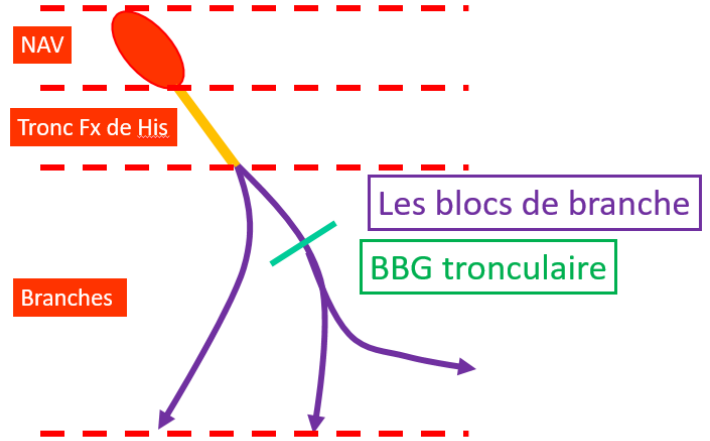


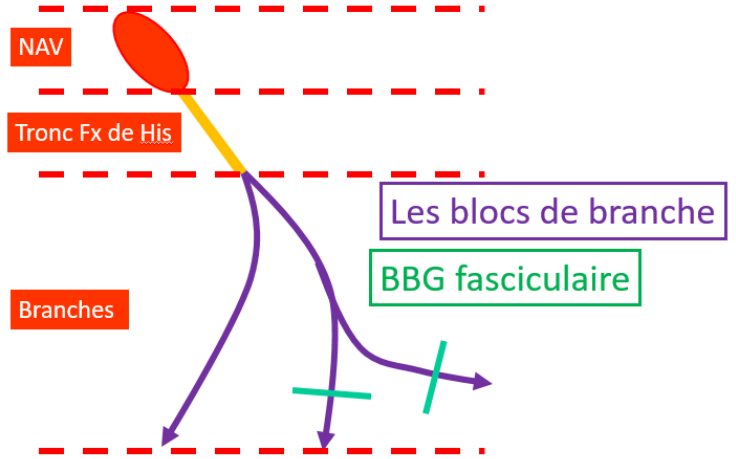


- QRS larges
- Rapport AV normal

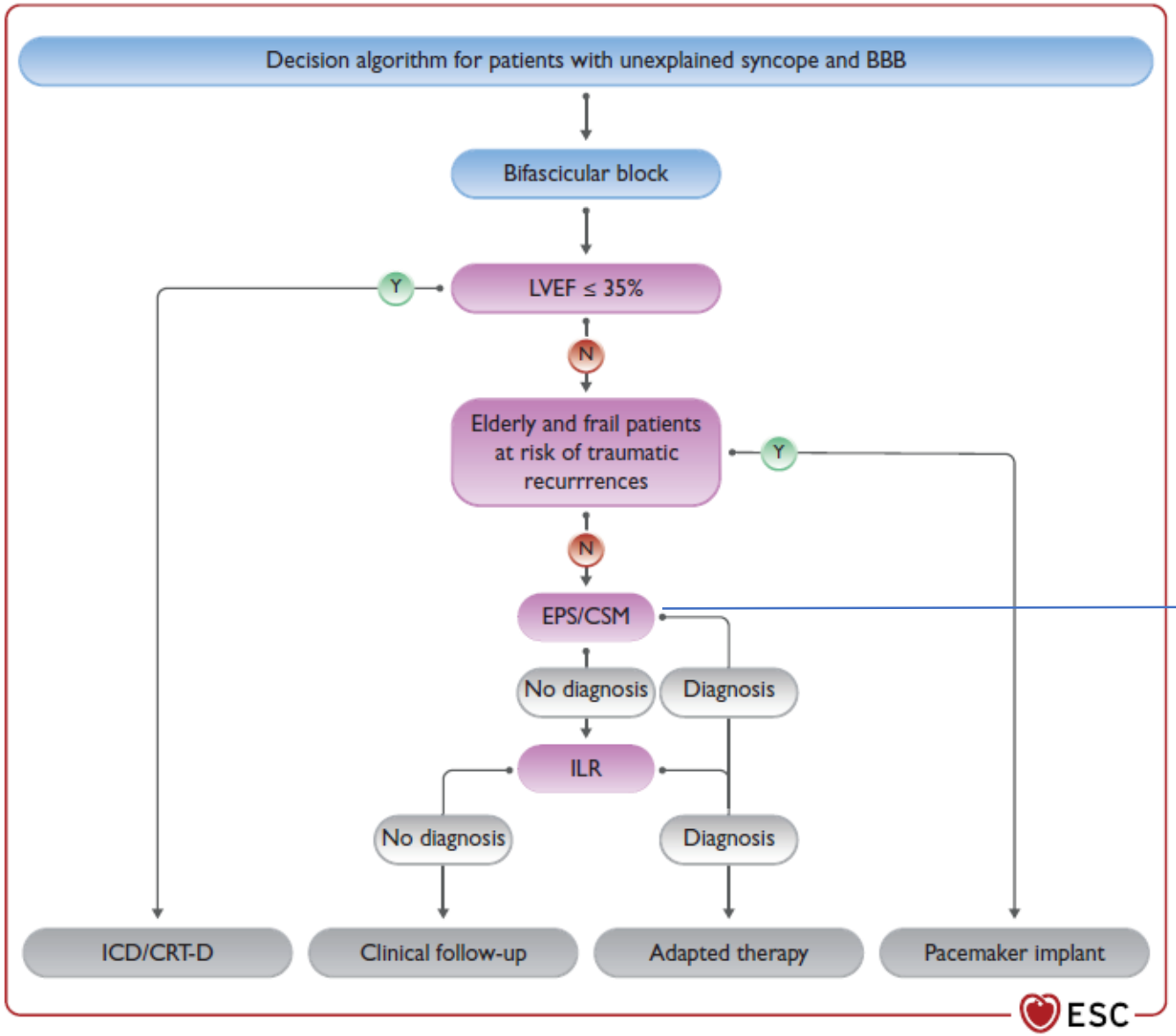
Bloc de branche gauche

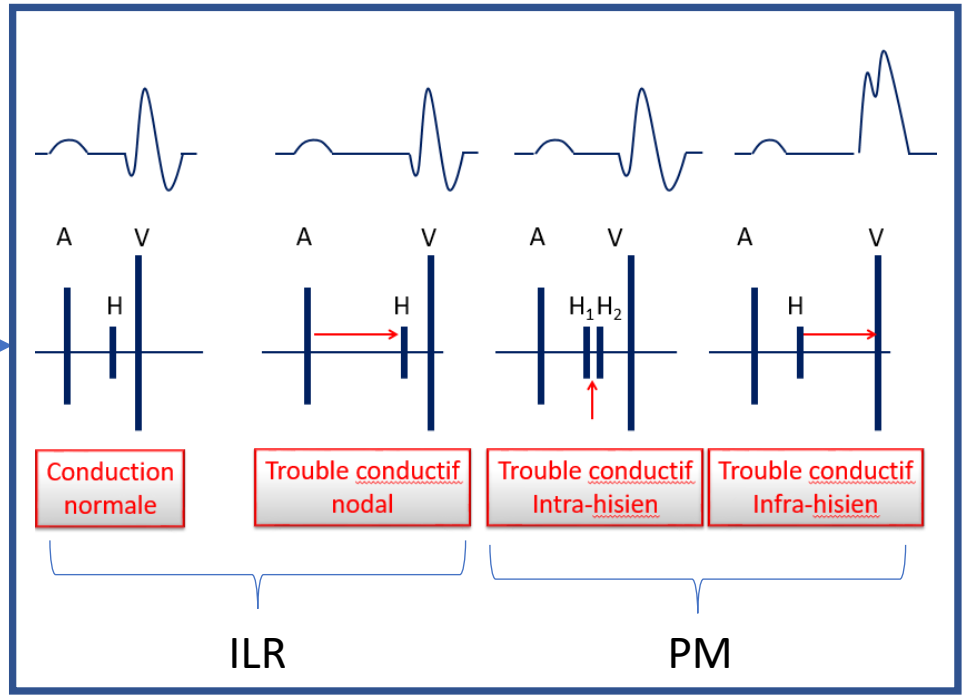






Bloc de Branche + Syncope





Conclusion

- Dysfonction sinusale: corrélation indispensable avec les symptômes
- BAV: toujours si > ou = à mobitz 2
- Bloc de branche + syncope
  - Mesure du HV
  - Moniteur ECG implantable ou stimulateur cardiaque.