Actualités sur les Maladies Aortiques
Quel traitement médical en 2023 ?

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62 pages

ESC GUIDELINES

2014 ESC Guidelines on the diagnosis and treatment of aortic diseases

Document covering acute and chronic aortic diseases of the thoracic and abdominal aorta of the adult

The Task Force for the Diagnosis and Treatment of Aortic Diseases of the European Society of Cardiology (ESC)

Circulation

149 pages

ACC/AHA CLINICAL PRACTICE GUIDELINE

2022 ACC/AHA Guideline for the Diagnosis and Management of Aortic Disease: A Report of the American Heart Association/American College of Cardiology Joint Committee on Clinical Practice Guidelines

Le programme !

- Anévrysme de l’aorte abdominale
- Anévrysme de l’aorte thoracique
- Dissection aortique

Le programme !

- **Anévrysme de l’aorte abdominale**
- Anévrysme de l’aorte thoracique
- Dissection aortique

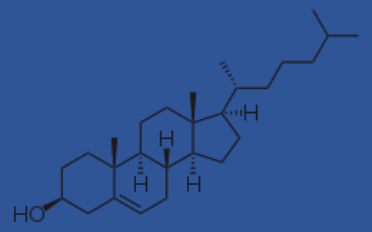
Hypertension artérielle

- L'HTA augmente aussi le risque cardiovasculaire des patients avec AAA
- L'HTA résistante augmente le risque de croissance et de rupture d'un AAA
- Cible PAS **≤ 130** mmHg et **≤ 80** mmHg, voire ≤ 120 mmHg
- Les anti-hypertenseurs les plus testés : B Bloquants et ISRA mais aucun n'a prouvé qu'il ralentissait la croissance de l'anévrysme

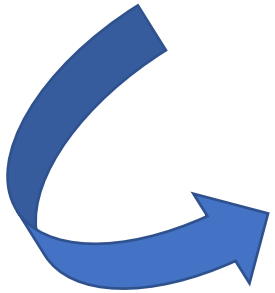
Recommendation for BP Management in AAA
Referenced studies that support the recommendation are summarized in the Online Data Supplement.

COR	LOE	Recommendation
1	B-NR	1. In patients with AAA and an average SBP of ≥130 mm Hg, or an average DBP of ≥80 mm Hg, the use of antihypertensive medication is recommended to reduce risk of cardiovascular events.[1-3]

Statines



- Réduire le LDL-cholestérol réduit la morbi-mortalité des patients ayant un AAA et des localisations d'athérome
- Cela pourrait aussi ralenti la croissance, réduire le risque de rupture et réduire la mortalité post-opératoire
- Cible : -50% de LDL-cholestérol



Recommendations for Treatment of AAA With Statins
Referenced studies that support the recommendations are summarized in the Online Data Supplement.

COR	LOE	Recommendations
1	B-NR	1. In patients with AAA and evidence of aortic atherosclerosis, statin therapy at moderate or high intensity is recommended.[1-3]
2b	C-LD	2. In patients with AAA but no evidence of atherosclerosis, statin therapy may be considered.[4,5]

Sevrage tabagique

- Tabac : facteur de risque d'apparition, de croissance et de complications d'un AAA
- Il faut encourager et aider au sevrage tabagique même en l'absence d'études randomisées
- L'accompagnement du patient est fondamental

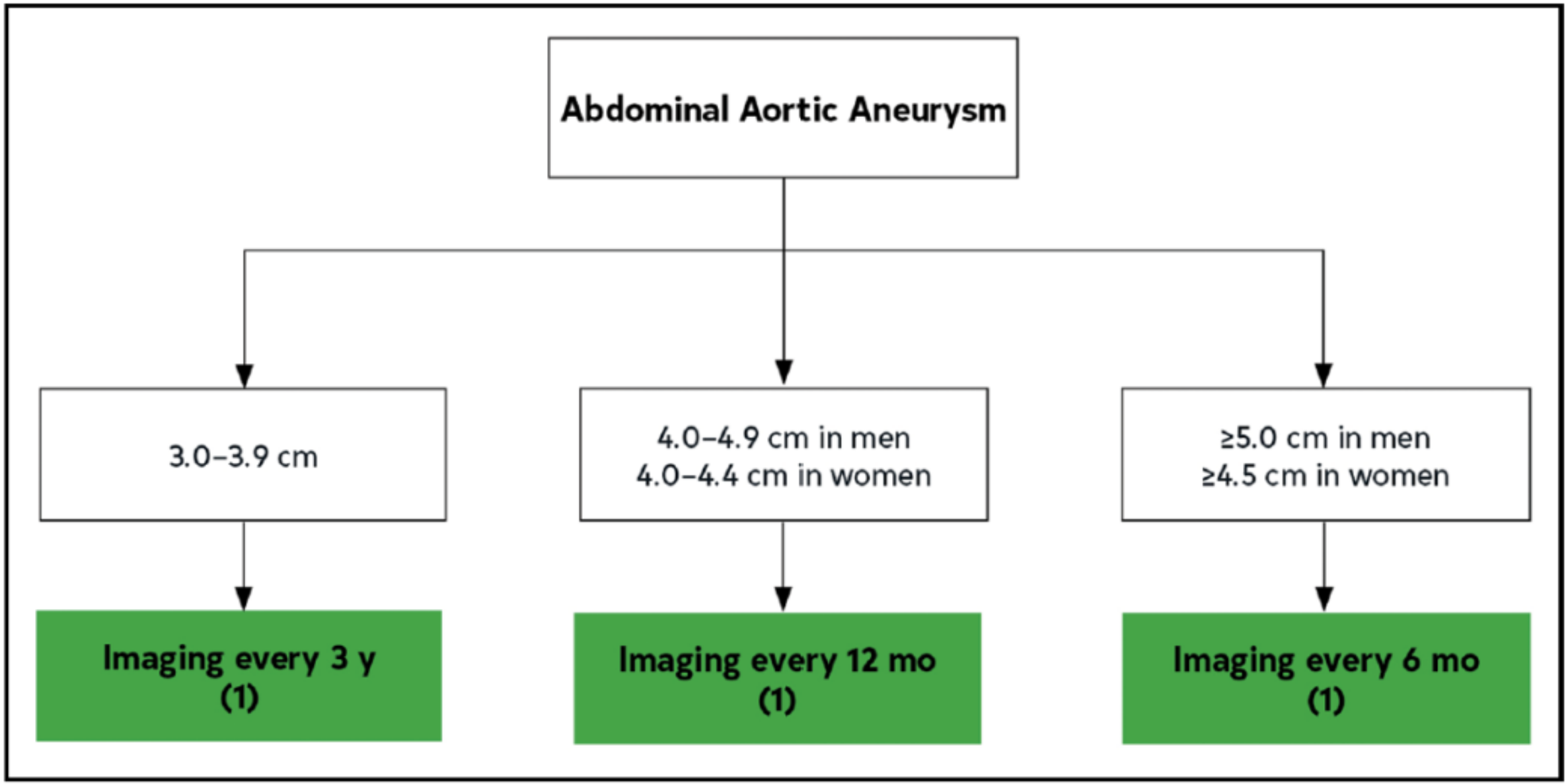
Recommendation for Smoking Cessation in AAA		
COR	LOE	Recommendation
1	C-LD	1. In patients with AAA who smoke cigarettes, smoking cessation efforts are recommended.[1-4]

Anti plaquettaire

- AAA : morbi-mortalité cardiovasculaire > 20% à 10 ans
- Pour réduire ce risque : possibilité d'utiliser de l'aspirine 75 -160 mg
- Hypothèse locale : réduction du thrombus intra anévrysmal → ralentit la vitesse de croissance ?
- Mais : augmentation de la mortalité des AAA rompus étant sous aspirine préalable …

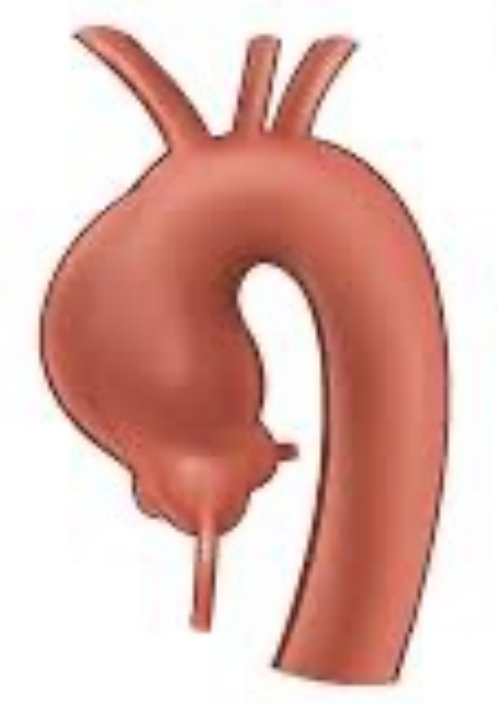
Recommendation for Antithrombotic Therapy in AAA

COR	LOE	Recommendation
2b	C-LD	1. In patients with AAA with concomitant atheroma and/or PAU, the use of low-dose aspirin may be considered, unless contraindicated.[1]


Abdominal Aortic Aneurysm
3.0–3.9 cm
4.0–4.9 cm in men
4.0–4.4 cm in women
≥5.0 cm in men
≥4.5 cm in women
Imaging every 3 y
(1)
Imaging every 12 mo
(1)
Imaging every 6 mo
(1)

Le programme !

- Anévrysme de l’aorte abdominale
- **Anévrysme de l’aorte thoracique**
- Dissection aortique



Pour l'hypertension artérielle

- Dans le Marfan : l'atenolol 200mg/jour réduit la croissance et les complications aortiques (1 étude randomisée en ouvert)
- Pour les ISRA : chez le Marfan, ralentit aussi la croissance de l'AAT (1540 études randomisées) – Mais pas de différence en compararion aux béta-bloquants

Recommendations for BP Management in TAA (Continued)

COR	LOE	Recommendations
2a	C-LD	2. In patients with TAA, regardless of cause and in the absence of contraindications, use of beta blockers to achieve target BP goals is reasonable.[1,4,5]
2a	C-EO	3. In patients with TAA, regardless of etiology and in the absence of contraindications, ARB therapy is a reasonable adjunct to beta-blocker therapy to achieve target BP goals.[6]

Pour les statines

Recommendations for Treatment of TAA With Statins		
COR	LOE	Recommendations
2a	C-LD	1. In patients with TAA and imaging or clinical evidence of atherosclerosis, statin therapy at moderate or high intensity is reasonable.[1,2]
2b	C-LD	2. In patients with TAA who have no evidence of atherosclerosis, the use of statin therapy may be considered.[3-6]

- Action des statines sur les MMP ??

Recommendations for Surveillance of Thoracic Aortic Dilation and Aneurysm		
COR	LOE	Recommendations
1	C-LD	1. In patients with a dilated thoracic aorta, a TTE is recommended at the time of diagnosis to assess aortic valve anatomy, aortic valve function, and thoracic aortic diameters.[1-4]
2a	C-LD	2. In patients with a dilated thoracic aorta, a CT or MRI at the time of diagnosis is reasonable to assess thoracic aortic anatomy and diameters.[1,3,5-7]
2a	C-LD	3. In patients with a dilated thoracic aorta, follow-up imaging (with TTE, CT, or MRI, as appropriate based on individual anatomy) in 6 to 12 months is reasonable to determine the rate of aortic enlargement; if stable, surveillance imaging every 6 to 24 months (depending on aortic diameter) is reasonable.[1,3,4]

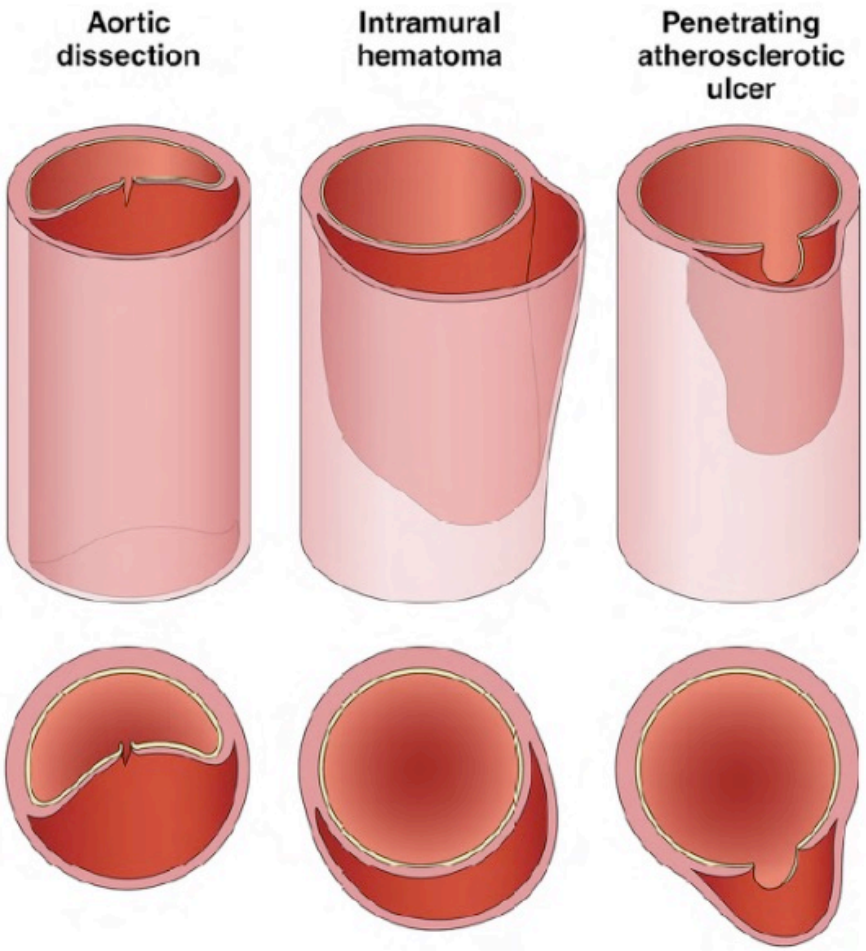
Le programme !

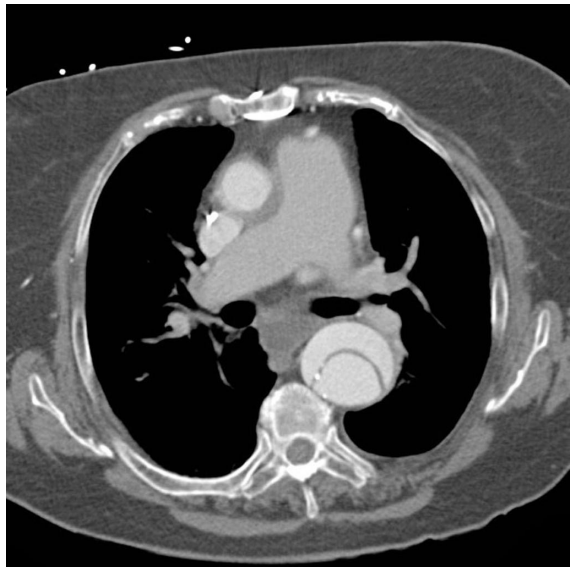
- Anévrysme de l’aorte abdominale

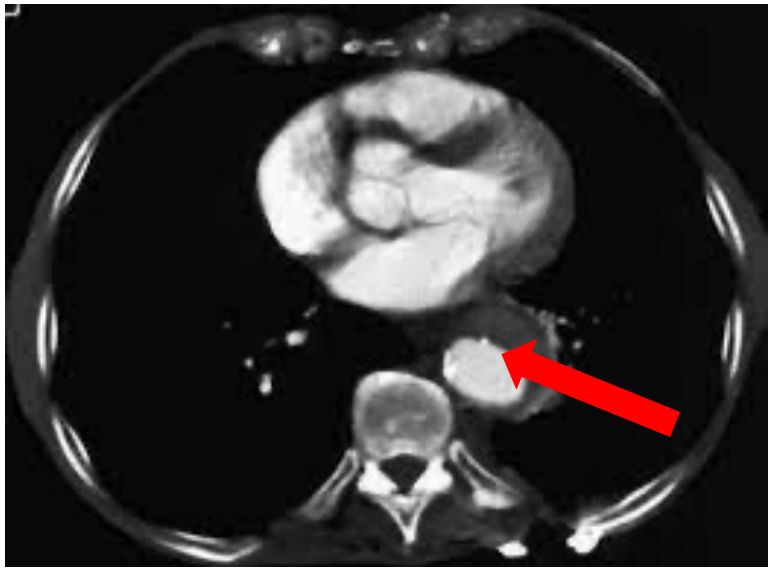
- Anévrysme de l’aorte thoracique

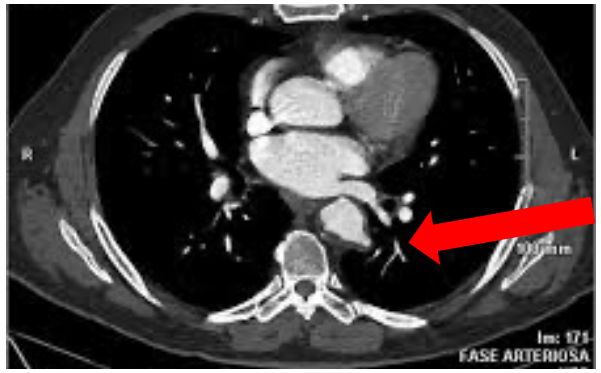
- **Dissection aortique**

Syndrome aortique aigu









Prise en charge initiale

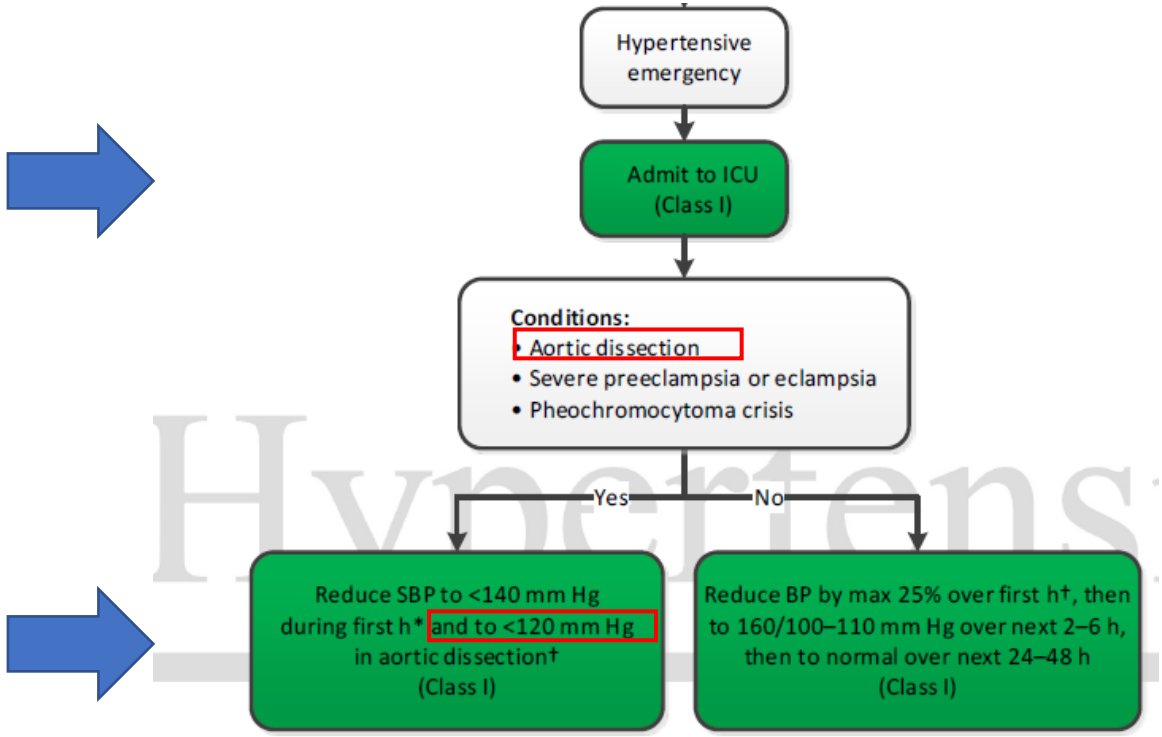
- Soins intensifs spécialisés : monitoring de la PA, traitement antalgique
- Prise en charge de la PA et de la FC
- Dépistage et traitement des complications précoces
- Bilan étiologique

Pression artérielle et fréquence cardiaque

Cible de PA systolique < 120 mmHg

1. Soins Intensifs

2. PAS < 120 mmHg



2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults

Pression artérielle et fréquence cardiaque

Cible de PA systolique < 120 mmHg – B bloquants

Table 20. Intravenous Antihypertensive Drugs for Treatment of Hypertensive Emergencies in Patients With Selected Comorbidities

Comorbidity	Preferred Drug(s)*	Comments
Acute aortic dissection	Esmolol labetalol	Requires rapid lowering of SBP to ≤120 mm Hg. Beta blockade should precede vasodilator (e.g., nicardipine or nitroprusside) administration, if needed for BP control or to prevent reflex tachycardia or inotropic effect; SBP ≤120 mm Hg should be achieved within 20 min.

2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults

Dépistage des complications précoces

- **Douleur persistante**
- **Croissance rapide de la dissection**
- **Signes de rupture** : hémothorax, hémomédiastin, hématome périaortique
- **Malperfusion d'organes** : ischémie digestive, ischémie rénale, ischémie de membre inférieur, ischémie médullaire

30% des dissections aortiques type B aigues

Imagerie (TDM ou IRM) répétée et au moindre signe d'appel clinique ou biologique

2022 ACC/AHA

Recommendations for Acute Medical Management of AAS
Referenced studies that support the recommendations are summarized in the Online Data Supplement.

COR	LOE	Recommendations
1	B-NR	1. In patients presenting to the hospital with AAS, prompt treatment with anti-impulse therapy with invasive monitoring of BP with an arterial line in an ICU setting is recommended as initial treatment to decrease aortic wall stress.[1-5]
1	C-LD	2. Patients with AAS should be treated to an SBP <120 mm Hg or to lowest BP that maintains adequate end-organ perfusion, as well as to a target heart rate of 60 to 80 bpm.[3,6]
1	B-NR	3. In patients with AAS, initial management should include intravenous beta blockers, except in patients with contraindications.[2,5,7]
2a	B-NR	In those with contraindications or intolerance to beta blockers, initial management with an intravenous non-dihydropyridine calcium channel blocker is reasonable for heart rate control.[1,2,5]
1	C-LD	4. In patients with AAS, initial management should include intravenous vasodilators if the BP is not well controlled after initiation of intravenous beta-blocker therapy.[8]
1	C-EO	5. Patients with AAS should be treated with pain control, as needed, to help with hemodynamic management.

Recommendations for the Management of Acute Type B Aortic Dissection Referenced studies that support the recommendations are summarized in the Online Data Supplement.		
COR	**LOE**	**Recommendations**
1	**B-NR**	1. In all patients with uncomplicated acute type B aortic dissection, medical therapy is recommended as the initial management strategy.[1-3]
1	**C-LD**	2. In patients with acute type B aortic dissection and rupture or other complications (Table 27), intervention is recommended.[4-6] In patients with rupture, in the presence of suitable anatomy, endovascular stent grafting, rather than open surgical repair, is recommended. In patients with other complications, in the presence of suitable anatomy, the use of endovascular approaches, rather than open surgical repair, is reasonable.[4-6,7]
1	**C-EO**	
2a	**C-LD**	
2b	**B-R**	3. In patients with uncomplicated acute type B aortic dissection who have high-risk anatomic features (Table 28), endovascular management may be considered.[8,9]

Table 27. Consensus Features of Complicated Acute Type B Aortic Dissection

Feature	Comment
Aortic rupture[1]	This can be either free or contained (including hemothorax, increasing periaortic hematoma, or both; or mediastinal hematoma) and should be addressed promptly.
Branch artery occlusion and malperfusion[2]	Complete or partial occlusion of a major branch, with or without clinical evidence of ischemia; this includes visceral, renal, and peripheral arterial branches.
Extension of dissection[3]	Extension of the dissection flap either distally or proximally (ie, retrograde type A dissection)
Aortic enlargement	Progressive enlargement of the true, false, or both lumens while in the acute phase may require prompt intervention.
Intractable pain[15]	
Uncontrolled hypertension[15]	

Traitement au long cours

Recommendation for Subsequent Medical Management of AAS
Referenced studies that support the recommendation are summarized in the Online Data Supplement.

COR	LOE	Recommendation
1	B-NR	1. In patients with AAS, it is recommended to treat with long-term beta blockers (unless contraindicated) to control heart rate and BP to reduce late aortic-related adverse events.[1-7] Additional antihypertensive agents (particularly ARBs and ACEIs) should be added, as necessary, to adequately control BP.

Messages – Traitement médical des maladies aortiques

- La pression, la pression et encore la pression !
- Rare place des B-bloquants : baisse de PA et FC
- Sevrage tabagique en cas de maladie anévrysmale
- Statines, anti plaquettaires : à discuter selon l'ambiance athéromateuse

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