# ĐIỀU TRỊ BỆNH NHÂN RUNG NHĨ: CẬP NHẬT 2016

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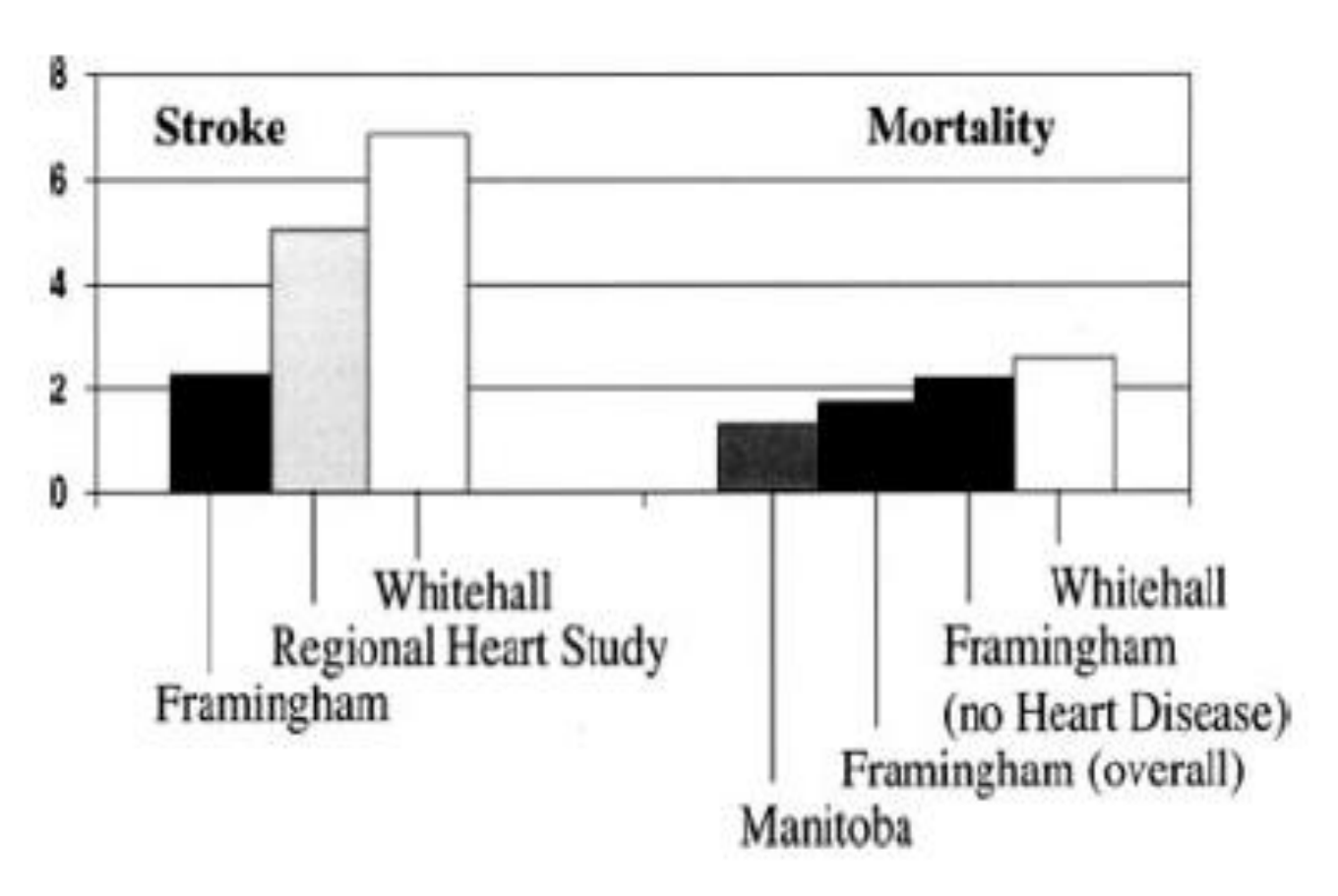
# Định nghĩa Rung nhĩ

| Term | Definition |
|---|---|
| **Paroxysmal AF** | • AF that terminates spontaneously or with intervention within 7 d of onset.<br>• Episodes may recur with variable frequency. |
| **Persistent AF** | • Continuous AF that is sustained >7 d. |
| **Longstanding persistent AF** | • Continuous AF of >12 mo duration. |
| **Permanent AF** | • Permanent AF is used when there has been a joint decision by the patient and clinician to cease further attempts to restore and/or maintain sinus rhythm.<br>• Acceptance of AF represents a therapeutic attitude on the part of the patient and clinician rather than an inherent pathophysiological attribute of the AF.<br>• Acceptance of AF may change as symptoms, the efficacy of therapeutic interventions, and patient and clinician preferences evolve. |
| **Nonvalvular AF** | • AF in the absence of rheumatic mitral stenosis, a mechanical or bioprosthetic heart valve, or mitral valve repair. |

AF indicates atrial fibrillation.

TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Nguy cơ tương đối đột quỵ và tử vong ở bệnh nhân rung nhĩ so với người không rung nhĩ

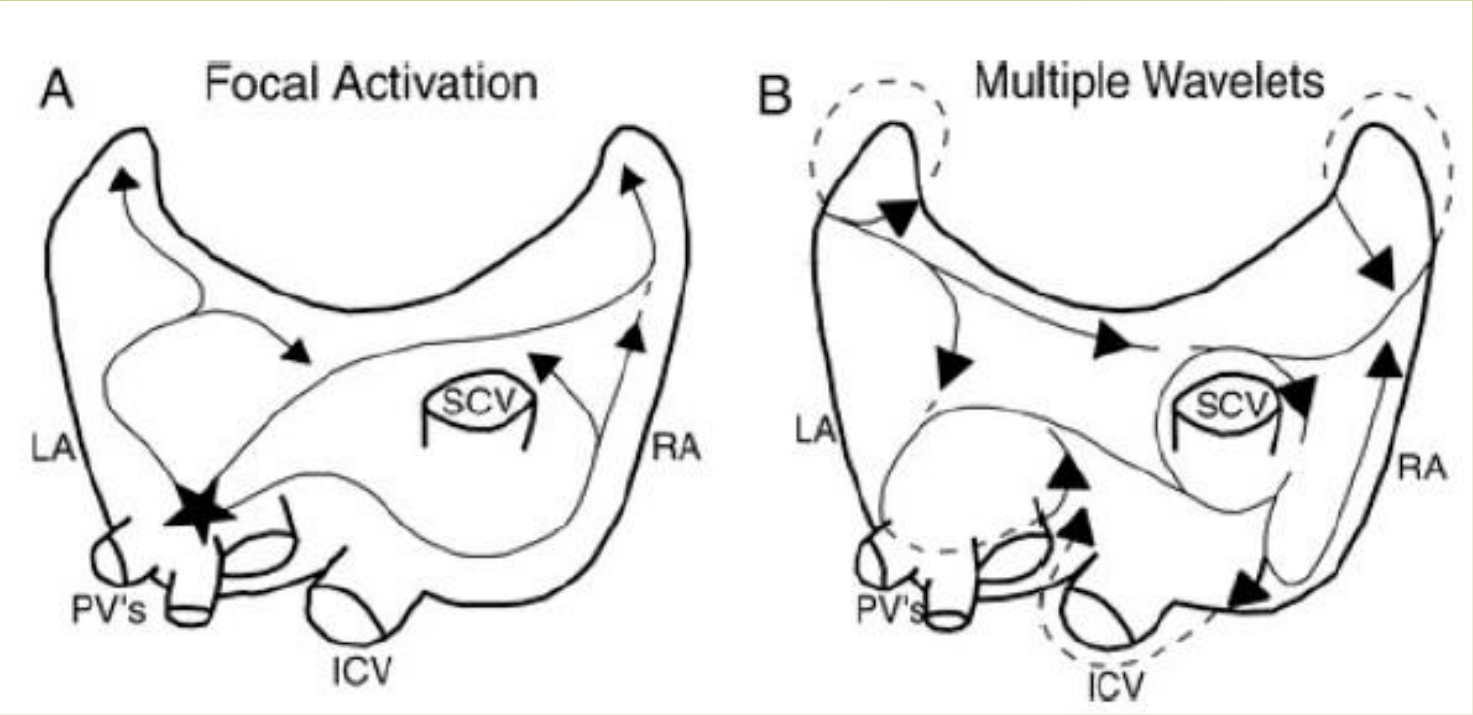



*TL : Circulation 2006 : 114 ; e 257 – e 354*

# Cơ chế sinh lý bệnh Rung nhĩ

- Yếu tố nhĩ : sợi hóa, sau mổ tim
- Dẫn truyền nhĩ thất : có hay không đường phụ
- Hậu quả huyết động và cơ tim của rung nhĩ
- Huyết khối thuyên tắc

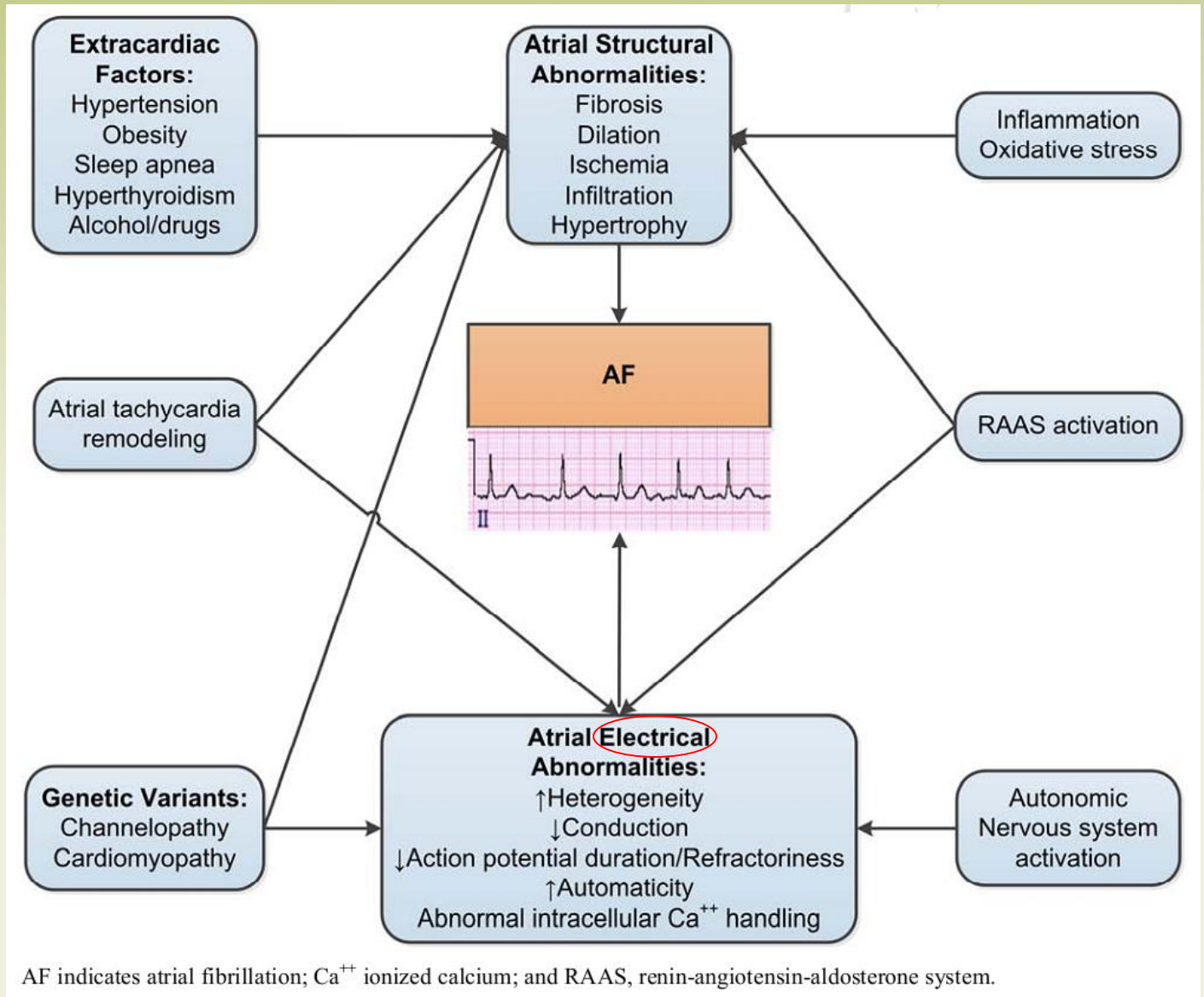
# Hai cơ chế của rung nhĩ




- Ổ tự động (automatic focus)
- Vào lại đa sóng nhỏ (Multiple Wavelet Reentry)

*TL : Circulation 2006 : 114 ; e 257 – e 354*

# Các cơ chế của rung nhĩ




AF indicates atrial fibrillation; $Ca^{++}$ ionized calcium; and RAAS, renin-angiotensin-aldosterone system.



TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Điều trị rung nhĩ

- 3 mục tiêu :
- Kiểm soát tần số thất
- Phòng ngừa huyết khối thuyên tắc
- Chuyển nhịp và duy trì

*TL : Circulation 2006 : 114 ; e 257 – e 354*

# Khuyến cáo phòng ngừa rung nhĩ

- Loại IIa: UCMC hoặc ARB giúp phòng ngừa tiên phát bệnh nhân mới rung nhĩ có suy tim PXTM giảm (MCC:B)
- Loại IIb:
  - UCMC hoặc ARB giúp phòng ngừa tiên phát bệnh nhân mới bị rung nhĩ có THA (MCC: B)
  - Statin giúp phòng ngừa tiên phát bệnh nhân mới bị rung nhĩ sau phẫu thuật BCĐMV (MCC: A)

TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Các nghiên cứu so sánh kiểm soát tần số với kiểm soát nhịp (1)

| Trial | Reference | Patients (n) | AF Duration | Follow-Up (y) | Age (mean y ±SD) | Patients in SR* |
|---|---|---|---|---|---|---|
| AFFIRM (2002) | 296 | 4060 | †/NR | 3.5 | 70±9 | 35% vs. 63% (at 5 y) |
| RACE (2002) | 293 | 522 | 1 to 399 d | 2.3 | 68±9 | 10% vs. 39% (at 2.3 y) |
| PIAF (2000) | 294 | 252 | 7 to 360 d | 1 | 61±10 | 10% vs. 56% (at 1 y) |
| STAF (2003) | 343 | 200 | 6±3 mo | 1.6 | 66±8 | 11% vs. 26% (at 2 y) |
| HOT CAFÉ (2004) | 344 | 205 | 7 to 730 d | 1.7 | 61±11 | NR vs. 64% |

*TL : Circulation 2006 : 114 ; e 257 – e 354*

# Các nghiên cứu so sánh kiểm soát tần số với kiểm soát nhịp (2)

| Clinical Events (n) | | | |
|---|---|---|---|
| Stroke/Embolism | | Death | |
| Rate | Rhythm | Rate | Rhythm |
| 88/2027 | 93/2033 | 310/2027 | 356/2033 |
| 7/256 | 16/266 | 18/256 | 18/266 |
| 0/125 | 2/127 | 2/125 | 2/127 |
| 2/100 | 5/100 | 8/100 | 4/100 |
| 1/101 | 3/104 | 1/101 | 3/104 |

Không khác biệt về tử vong và đột quỵ giữa 2 nhóm nghiên cứu

*TL : Circulation 2006 : 114 ; e 257 – e 354*

# Phối hợp thuốc/kiểm soát tần số thất bệnh nhân rung nhĩ

- Digoxin + chẹn bêta hoặc đối kháng calci không dihydropyridine (class IIa-B)
- Phối hợp Digoxin + chẹn bêta hoặc đối kháng calci không dihydropyridin chưa đủ, có thể thêm amiodarone (class IIb-C)

*TL : Circulation 2006 : 114 ; e 257 – e 354*

# Kiểm soát tần số tim/ Rung nhĩ (1)

| Recommendations | COR | LOE | References |
|---|---|---|---|
| Control ventricular rate using a beta blocker or nondihydropyridine calcium channel antagonist for paroxysmal, persistent, or permanent AF | I | B | (94-96) |
| IV beta blockers or nondihydropyridine calcium channel blocker recommended to slow ventricular heart rate in the acute setting in patients without pre-excitation. In hemodynamically unstable patients, electrical cardioversion is indicated | I | B | (97-100) |
| For AF, assess heart rate control during exertion, adjusting pharmacological treatment as necessary | I | C | N/A |

TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Kiểm soát tần số tim/ Rung nhĩ (2)

| | | | |
|---|---|---|---|
| A heart rate control (resting heart rate <80 bpm) strategy is reasonable for symptomatic management of AF | IIa | B | (96, 101) |
| IV amiodarone can be useful for rate control in critically ill patients without pre-excitation | IIa | B | (102-104) |
| AV nodal ablation with permanent ventricular pacing is reasonable when pharmacological management is inadequate and rhythm control is not achievable | IIa | B | (105-107) |
| Lenient rate control strategy (resting heart rate <110 bpm) may be reasonable with asymptomatic patients and LV systolic function is preserved | IIb | B | (101) |
| Oral amiodarone may be useful for ventricular rate control when other measures are unsuccessful or contraindicated | IIb | C | N/A |

TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Kiểm soát tần số tim/ Rung nhĩ (3)

| | | | |
|---|---|---|---|
| AV nodal ablation should not be performed without prior attempts to achieve rate control with medications | III: Harm | C | N/A |
| Nondihydropyridine calcium channel antagonists should not be used in decompensated HF | III: Harm | C | N/A |
| With pre-excitation and AF, digoxin, nondihydropyridine calcium channel antagonists, or amiodarone, should not be administered | III: Harm | B | (108) |
| Dronedarone should not be used to control ventricular rate with permanent AF | III: Harm | B | (109, 110) |

AF indicates atrial fibrillation; AV, atrioventricular; COR, Class of Recommendation; HF, heart failure; IV, intravenous; LOE, Level of Evidence; LV, left ventricular; and N/A, not applicable.

TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Phòng ngừa huyết khối thuyên tắc/ Rung nhĩ (1)

| Recommendations | COR | LOE | References |
|---|---|---|---|
| Antithrombotic therapy based on shared decision-making, discussion of risks of stroke and bleeding, and patient's preferences | I | C | N/A |
| Antithrombotic therapy selection based on risk of thromboembolism | I | B | (65-68) |
| $CHA_2DS_2$-VASc score recommended to assess stroke risk | I | B | (69-71) |
| Warfarin recommended with mechanical heart valves. Target INR intensity should be based on the type and location of prosthesis | I | B | (72-74) |
| With prior stroke, TIA, or $CHA_2DS_2$-VASc score ≥2, oral anticoagulants recommended. Options include: | | | |
| • Warfarin | I | A | (69-71) |
| • Dabigatran, rivaroxaban, or apixaban | I | B | (75-77) |

TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Phòng ngừa huyết khối thuyên tắc/ Rung nhĩ (2)

| | | | |
|---|---|---|---|
| With warfarin, determine INR at least weekly during initiation and monthly when stable | I | A | (78-80) |
| Direct thrombin or factor Xa inhibitor recommended, if unable to maintain therapeutic INR | I | C | N/A |
| Re-evaluate the need for anticoagulation at periodic intervals | I | C | N/A |
| Bridging therapy with LMWH or UFH recommended with a mechanical heart valve if warfarin is interrupted. Bridging therapy should balance risks of stroke and bleeding | I | C | N/A |

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# Phòng ngừa huyết khối thuyên tắc/ Rung nhĩ (3)

| | | | |
|---|---|---|---|
| Without a mechanical heart valve, bridging therapy decisions should balance stroke and bleeding risks against the duration of time patient will not be anticoagulated | I | C | N/A |
| Evaluate renal function prior to initiation of direct thrombin or factor Xa inhibitors, and re-evaluate when clinically indicated and at least annually | I | B | (81-83) |
| For atrial flutter, antithrombotic therapy is recommended as for AF | I | C | N/A |
| With nonvalvular AF and $CHA_2DS_2$-VASc score of 0, it is reasonable to omit antithrombotic therapy | IIa | B | (81, 82) |
| With $CHA_2DS_2$-VASc score ≥2 and end-stage CKD (CrCl <15 mL/min) or on hemodialysis, it is reasonable to prescribe warfarin for oral anticoagulation | IIa | B | (83) |

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# Lựa chọn liều lượng thuốc kháng đông/ RN không bệnh van tim kèm bệnh thận mạn

| Renal Function | Warfarin (93) | Dabigatran† (75) | Rivaroxaban† (76) | Apixaban† (77) |
|---|---|---|---|---|
| Normal/Mild Impairment | Dose adjusted for INR 2.0–3.0 | 150 mg BID (CrCl >30 mL/min) | 20 mg HS (CrCl >50 mL/min) | 5.0 or 2.5 mg BID‡ |
| Moderate Impairment | Dose adjusted for INR 2.0–3.0 | 150 mg BID or 75 mg BID§ (CrCl >30 mL/min) | 15 mg HS (CrCl 30–50 mL/min) | 5.0 or 2.5 mg BID‡ |
| Severe Impairment | Dose adjusted for INR 2.0–3.0‖ | 75 mg BID§ (CrCl 15–30 mL/min) | 15 mg HS (CrCl 15–30 mL/min) | No recommendation, See section 4.2.2.2.¶ |
| End-Stage CKD Not on Dialysis | Dose adjusted for INR 2.0–3.0‖ | Not recommended¶ (CrCl <15 mL/min) | Not recommended¶ (CrCl <15 mL/min) | No recommendation, See section 4.2.2.2.¶ |
| End-Stage CKD on Dialysis | Dose adjusted for INR 2.0–3.0‖ | Not recommended¶ (CrCl <15 mL/min) | Not recommended¶ (CrCl <15 mL/min) | No recommendation, See section 4.2.2.2.¶# |

- Severe impairment RF: Clor 15-30 ml/m

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# Chỉ định phòng ngừa đột quỵ và thuyên tắc hệ thống của Rivaroxaban/NICE Guideline 2014

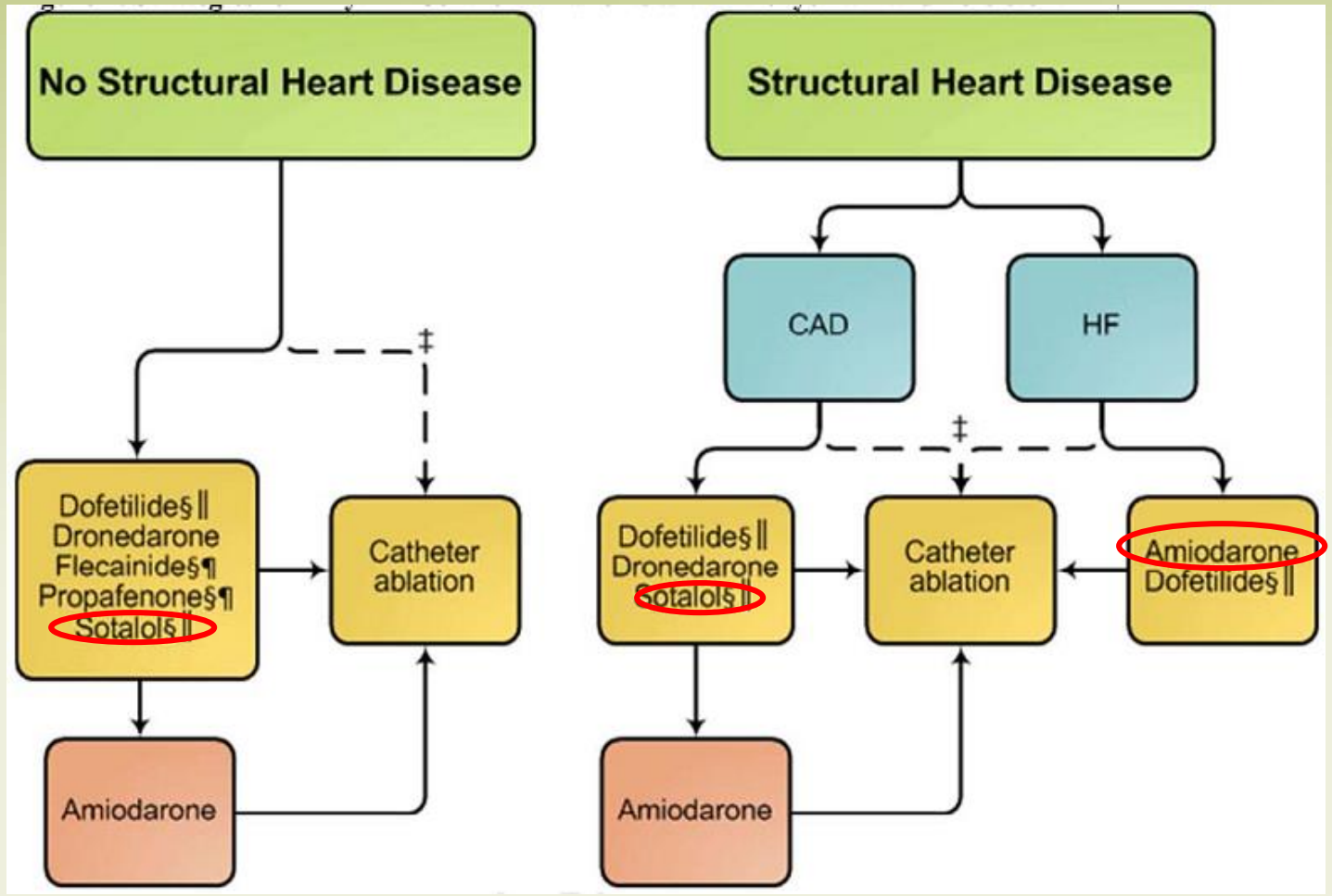
- B/n RN không van tim, có kèm 1 trong các YTCN
  - Suy tim
  - THA
  - ≥ 75 tuổi
  - ĐTĐ
  - Tiền sử đột quỵ hay cơn TM não thoáng qua

TL: NICE Guideline for the management of AF patient. NICE. ORG. UK/guidance/cg 180- June 2014

- Bít tiểu nhĩ trái hoặc cắt bỏ tiểu nhĩ trái khi bệnh nhân phẫu thuật tim: giúp phòng ngừa huyết khối thuyên tắc (Class IIb, MCC:C)

TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Chiến lược kiểm soát nhịp/bệnh nhân RN cơn hay RN kéo dài




TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Kiểm soát nhịp/Rung nhĩ (1)

| Recommendations | COR | LOE | References |
|---|---|---|---|
| **Thromboembolism prevention** | | | |
| With AF or atrial flutter for ≥48 h, or unknown duration, anticoagulate with warfarin for at least 3 wk prior to and 4 wk after cardioversion | I | B | (111-114) |
| With AF or atrial flutter for >48 h or unknown duration requiring immediate cardioversion, anticoagulate as soon as possible and continue for at least 4 wk | I | C | N/A |
| With AF or atrial flutter <48 h and high stroke risk, IV heparin or LMWH, or factor Xa or direct thrombin inhibitor, is recommended before or immediately after cardioversion, followed by long-term anticoagulation | I | C | N/A |
| Following cardioversion of AF, long-term anticoagulation should be based on thromboembolic risk | I | C | N/A |

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# Kiểm soát nhịp/Rung nhĩ (2)

| | | | |
|---|---|---|---|
| With AF or atrial flutter for ≥48 h or unknown duration and no anticoagulation for preceding 3 wk, it is reasonable to perform a TEE prior to cardioversion, and then cardiovert if no LA thrombus is identified, provided anticoagulation is achieved before TEE and maintained after cardioversion for at least 4 wk | IIa | B | (115) |
| With AF or atrial flutter ≥48 h, or unknown duration, anticoagulation with dabigatran, rivaroxaban, or apixaban is reasonable for ≥3 wk prior to and 4 wk after cardioversion | IIa | C | (116-118) |
| With AF or atrial flutter <48 h and low thromboembolic risk, IV heparin, LMWH, a new oral anticoagulant, or no antithrombotic may be considered for cardioversion | IIb | C | (119) |

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# Kiểm soát nhịp/Rung nhĩ (3)

| | | | |
|---|---|---|---|
| **Direct-current cardioversion** | | | |
| Cardioversion is recommended for AF or atrial flutter to restore sinus rhythm. If unsuccessful, repeat cardioversion attempts may be made | I | B | (120) |
| Cardioversion is recommended for AF or atrial flutter with RVR, that does not respond to pharmacological therapies | I | C | N/A |
| Cardioversion is recommended for AF or atrial flutter and pre-excitation with hemodynamic instability | I | C | N/A |
| It is reasonable to repeat cardioversions in persistent AF when sinus rhythm is maintained for a clinically meaningful time period between procedures | IIa | C | N/A |

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# Kiểm soát nhịp/Rung nhĩ (4)

| | | | |
|---|---|---|---|
| **Pharmacological cardioversion** | | | |
| Flecainide, dofetilide, propafenone, and IV ibutilide are useful for cardioversion of AF or atrial flutter provided contraindications to the selected drug are absent | I | A | (121-126) |
| Amiodarone is reasonable for pharmacological cardioversion of AF | IIa | A | (127, 128) |
| Propafenone or flecainide ("pill-in-the-pocket") to terminate AF out of hospital is reasonable once observed to be safe in a monitored setting | IIa | B | (121) |
| Dofetilide should not be initiated out of hospital | III: Harm | B | (125, 129) |

AF indicates atrial fibrillation; COR, Class of Recommendation; IV, intravenous; LA, left atrial; LOE, Level of Evidence; LMWH, low-molecular-weight heparin; N/A, not applicable; RVR, rapid ventricular response; and TEE, transesophageal echocardiogram.

TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Liều lượng và thuốc duy trì nhịp xoang (1)

| Drug | Usual Doses | Exclude/Use with Caution | Major Pharmacokinetic Drug Interactions |
|---|---|---|---|
| **Vaughan Williams Class IA** | | | |
| Disopyramide | • Immediate release: 100–200 mg once every 6 h<br>• Extended release: 200–400 mg once every 12 h | • HF<br>• Prolonged QT interval<br>• Prostatism, glaucoma<br>• Avoid other QT interval-prolonging drugs | • Metabolized by *CYP3A4*: caution with inhibitors (e.g., verapamil, diltiazem, ketoconazole, macrolide antibiotics, protease inhibitors, grapefruit juice) and inducers (e.g., rifampin, phenobarbital, phenytoin) |
| Quinidine | • 324–648 mg every 8 h | • Prolonged QT interval<br>• Diarrhea | • Inhibits *CYP2D6*: ↑concentrations of tricyclic antidepressants, metoprolol, antipsychotics; ↓efficacy of codeine<br>• Inhibits P-glycoprotein: ↑digoxin concentration |
| **Vaughan Williams Class IC** | | | |
| Flecainide | • 50–200 mg once every 12 h | • Sinus or AV node dysfunction<br>• HF<br>• CAD<br>• Atrial flutter<br>• Infranodal conduction disease<br>• Brugada syndrome<br>• Renal or liver disease | • Metabolized by *CYP2D6* (inhibitors include quinidine, fluoxetine, tricyclics; also genetically absent in 7%–10% of population) and renal excretion (dual impairment can ↑↑plasma concentration) |
| Propafenone | • Immediate release: 150–300 mg once every 8 h<br>• Extended release: 225–425 mg once every 12 h | • Sinus or AV node dysfunction<br>• HF<br>• CAD<br>• Atrial flutter<br>• Infranodal conduction disease<br>• Brugada syndrome<br>• Liver disease<br>• Asthma | • Metabolized by *CYP2D6* (inhibitors include quinidine, fluoxetine, tricyclics; also genetically absent in 7%–10% of population)—poor metabolizers have ↑beta blockade<br>• Inhibits P-glycoprotein: ↑digoxin concentration<br>• Inhibits *CYP2C9*: ↑warfarin concentration (↑INR 25%) |

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# Liều lượng và thuốc duy trì nhịp xoang (2)

Exclude/ use with caution

| Vaughan Williams Class III | | | |
|---|---|---|---|
| Amiodarone | • Oral: 400–600 mg daily in divided doses for 2-4 wk; maintenance typically 100-200 mg QD<br>• IV: 150 mg over 10 min; then 1 mg/min for 6 h; then 0.5 mg/min for 18 h or change to oral dosing; after 24 h, consider decreasing dose to 0.25 mg/min | • Sinus or AV node dysfunction<br>• Infranodal conduction disease<br>• Lung disease<br>• Prolonged QT interval | • Inhibits most CYPs to cause drug interaction: ↑concentrations of warfarin (↑INR 0%–200%), statins, many other drugs<br>• Inhibits P-glycoprotein: ↑digoxin concentration |
| Dofetilide | • 125–500 mcg once every 12 h | • Prolonged QT interval<br>• Renal disease<br>• Hypokalemia<br>• Diuretic therapy<br>• Avoid other QT interval prolonging drugs | • Metabolized by *CYP3A*: verapamil, HCTZ, cimetidine, ketoconazole, trimethoprim, prochlorperazine, and megestrol are contraindicated; discontinue amiodarone at least 3 mo before initiation |

TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Liều lượng và thuốc duy trì nhịp xoang (3)

| | | | |
|---|---|---|---|
| Dronedarone | • 400 mg once every 12 h | • Bradycardia<br>• HF<br>• Long-standing persistent AF/flutter<br>• Liver disease<br>• Prolonged QT interval | • Metabolized by *CYP3A*: caution with inhibitors (e.g., verapamil, diltiazem, ketoconazole, macrolide antibiotics, protease inhibitors, grapefruit juice) and inducers (e.g., rifampin, phenobarbital, phenytoin)<br>• Inhibits *CYP3A*, *CYP2D6*, P-glycoprotein: ↑concentrations of some statins, sirolimus, tacrolimus, beta blockers, digoxin |
| Sotalol | • 40–160 mg once every 12 h | • Prolonged QT interval<br>• Renal disease<br>• Hypokalemia<br>• Diuretic therapy<br>• Avoid other QT interval prolonging drugs<br>• Sinus or AV nodal dysfunction<br>• HF<br>• Asthma | • None (renal excretion) |



TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Huỷ rung nhĩ bằng catheter để duy trì nhịp xoang

- Loại I: RN cơn có triệu chứng cơ năng kháng trị hoặc không dung nạp ít nhất một thuốc nhóm I hoặc III, khi mới kiểm soát nhịp
- Loại III:
  - Không huỷ RN ở bệnh nhân không thể điều trị bằng kháng đông trong lúc và sau thủ thuật (MCC: C)
  - Không huỷ RN chỉ với một mục tiêu tránh dùng kháng đông (MCC: C)

TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Khuyến cáo điều trị RN/ nhóm bệnh đặc biệt (1)

| Recommendations | COR | LOE | References |
|---|---|---|---|
| **Hypertrophic cardiomyopathy** | | | |
| Anticoagulation indicated in HCM with AF independent of the $CHA_2DS_2$-VASc score | I | B | (170, 171) |
| Antiarrhythmic drugs can be useful to prevent recurrent AF in HCM. Amiodarone, or disopyramide combined with beta blockers or nondihydropyridine calcium channel antagonist are reasonable | IIa | C | N/A |
| AF catheter ablation can be beneficial for HCM to facilitate a rhythm-control strategy when antiarrhythmics fail or are not tolerated | IIa | B | (172-175) |
| Sotalol, dofetilide, and dronedarone may be considered for a rhythm-control strategy in HCM | IIb | C | (13) |

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# Khuyến cáo điều trị RN/ nhóm bệnh đặc biệt (2)

| | | | |
|---|---|---|---|
| **AF complicating ACS** | | | |
| Urgent cardioversion of new onset AF in setting of ACS is recommended for patients with hemodynamic compromise, ongoing ischemia, or inadequate rate control | I | C | N/A |
| IV beta blockers are recommended to slow RVR with ACS and no HF, hemodynamic instability, or bronchospasm | I | C | N/A |
| With ACS and AF with $CHA_2DS_2$-VASc (score ≥2), anticoagulation with warfarin is recommended unless contraindicated | I | C | N/A |
| Amiodarone or digoxin may be considered to slow a RVR with ACS and AF, and severe LV dysfunction and HF or hemodynamic instability | IIb | C | N/A |
| Nondihydropyridine calcium antagonists might be considered to slow a RVR with ACS and AF only in the absence of significant HF or hemodynamic instability | IIb | C | N/A |

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# Khuyến cáo điều trị RN/ nhóm bệnh đặc biệt (3)

| | | | |
|---|---|---|---|
| **Hyperthyroidism** | | | |
| Beta blockers are recommended to control ventricular rate with AF complicating thyrotoxicosis, unless contraindicated | I | C | N/A |
| Nondihydropyridine calcium channel antagonist is recommended to control the ventricular rate with AF and thyrotoxicosis when beta blocker cannot be used | I | C | N/A |
| **Pulmonary diseases** | | | |
| Nondihydropyridine calcium channel antagonist is recommended to control the ventricular rate with COPD and AF | I | C | N/A |
| Cardioversion should be attempted with pulmonary disease patients who become hemodynamically unstable with new onset AF | I | C | N/A |

TL: January CT et al. 2014 AHA/ACC/HRS Guideline for the management of patients with atrial Fibrillation. JACC 2014

# Điều trị rung nhĩ/ cường giáp

- Loại I

1. Chẹn beta giúp kiểm soát tần số thất (MCC: B)
2. Chống chỉ định chẹn beta: sử dụng ức chế calci, không DHP (MCC:B)
3. Kháng đông (INR 2-3) phòng ngừa huyết khối thuyên tắc (MCC: C)
4. Đã bình giáp: sử dụng kháng đông phòng ngừa huyết khối tương tự b/n không bị bệnh tuyến giáp (MCC:C)

TL: Practice Guideline of Management of Patients with Atrial Fibrillation. J Am. Coll. Cardiol; vol 61, No 8, 2013

# Khuyến cáo điều trị RN/ nhóm bệnh đặc biệt (4)

| | | | |
|---|---|---|---|
| **WPW and pre-excitation syndromes** | | | |
| Cardioversion recommended with AF, WPW, and RVR who are hemodynamically compromised | I | C | (176) |
| IV procainamide or ibutilide to restore sinus rhythm or slow ventricular rate recommended with pre-excited AF and RVR who are not hemodynamically compromised | I | C | (176) |
| Catheter ablation of accessory pathway is recommended in symptomatic patients with pre-excited AF, especially if the accessory pathway has a short refractory period | I | C | (176) |
| IV amiodarone, adenosine, digoxin, or nondihydropyridine calcium channel antagonists with WPW who have pre-excited AF is potentially harmful | III: Harm | B | (177-179) |

- RVR: rapid Ventricular rate

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# Khuyến cáo điều trị RN/ nhóm bệnh đặc biệt (5)

| | | | |
|---|---|---|---|
| **Heart failure** | | | |
| Beta blocker or nondihydropyridine calcium channel antagonist is recommended for persistent or permanent AF in patients with HF*p*EF | I | B | (96) |
| In the absence of pre-excitation, IV beta blocker (or a nondihydropyridine calcium channel antagonist with HF*p*EF) is recommended to slow ventricular response to AF in the acute setting, exercising caution in patients with overt congestion, hypotension or | I | B | (180-183) |
| HF*r*EF | | | |
| In the absence of pre-excitation, IV digoxin or amiodarone is recommended to acutely control heart rate | I | B | (104, 181, 184, 185) |
| Assess heart rate during exercise and adjust pharmacological treatment in symptomatic patients during activity | I | C | N/A |
| Digoxin is effective to control resting heart rate with HF*r*EF | I | C | N/A |

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# Khuyến cáo điều trị RN/ nhóm bệnh đặc biệt (6)

| | | | |
|---|---|---|---|
| Combination digoxin and beta blocker (or a nondihydropyridine calcium channel antagonist with HF*p*EF), is reasonable to control rest and exercise heart rate with AF | IIa | B | (94, 181) |
| Reasonable to perform AV node ablation with ventricular pacing to control heart rate when pharmacological therapy insufficient or not tolerated | IIa | B | (96, 186, 187) |
| IV amiodarone can be useful to control the heart rate with AF when other measures are unsuccessful or contraindicated | IIa | C | N/A |
| With AF and RVR, causing or suspected of causing tachycardia-induced cardiomyopathy, it is reasonable to achieve rate control by AV nodal blockade or rhythm control strategy | IIa | B | (188-190) |
| In chronic HF patients who remain symptomatic from AF despite a rate-control strategy, it is reasonable to use a rhythm-control strategy | IIa | C | N/A |

- RVR: rapid Ventricular rate

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# Khuyến cáo điều trị RN/ nhóm bệnh đặc biệt (7)

| | | | |
|---|---|---|---|
| **Familial (Genetic) AF** | | | |
| With AF and multigenerational AF family members, referral to a tertiary care center for genetic counseling and testing may be considered | IIb | C | N/A |
| **Postoperative cardiac and thoracic surgery** | | | |
| Beta blocker is recommended to treat postoperative AF unless contraindicated | I | A | (191-194) |
| A nondihydropyridine calcium channel blocker is recommended when a beta blocker is inadequate to achieve rate control with postoperative AF | I | B | (195) |

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# Khuyến cáo điều trị RN/ nhóm bệnh đặc biệt (8)

| | | | |
|---|---|---|---|
| Preoperative amiodarone reduces AF with cardiac surgery and is reasonable as prophylactic therapy for high risk of postoperative AF | IIa | A | (196-198) |
| It is reasonable to restore sinus rhythm pharmacologically with ibutilide or direct-current cardioversion with postoperative AF | IIa | B | (199) |
| It is reasonable to administer antiarrhythmic medications to maintain sinus rhythm with recurrent or refractory postoperative AF | IIa | B | (195) |
| It is reasonable to administer antithrombotic medications for postoperative AF | IIa | B | (200) |
| It is reasonable to manage new-onset postoperative AF with rate control and anticoagulation with cardioversion if AF does not revert spontaneously to sinus rhythm during follow-up | IIa | C | N/A |
| Prophylactic sotalol may be considered for patients with AF risk following cardiac surgery | IIb | B | (194, 201) |
| Colchicine may be considered postoperatively to reduce AF following cardiac surgery | IIb | B | (202) |

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# Điều trị rung nhĩ/ thai kỳ (1)

- Loại I

1. Digoxin, chẹn beta, ức chế calci không DHP: kiểm soát tần số thất bệnh nhân RN kèm có thai (MCC: C)
2. Sốc điện trực tiếp khi có rối loạn huyết động do RN (MCC:C)
3. Điều trị phòng ngừa huyết khối thuyên tắc tuỳ theo giai đoạn thai kỳ và theo khuyến cáo kháng đông (MCC: C)

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# Điều trị rung nhĩ/ thai kỳ (2)

- Loại IIb

1. Heparin không phân đoạn TM hoặc TDD (giữa aPTT khoảng 1,5-2 chứng) – MCC: B
2. Heparin trọng lượng phân tử thấp (MCC:C)
3. Kháng đông uống vào tam cá nguyện thứ 2 của thai kỳ (MCC:C)
4. Quinidine hoặc procainamide: chuyển nhịp/RN kèm thai kỳ có huyết động ổn định (MCC:C)

TL: Practice Guideline of Management of Patients with Atrial Fibrillation. J Am. Coll. Cardiol; vol 61, No 8, 2013

# Kết luận

- Rung nhĩ:
  - "Bệnh dịch"
  - Tần suất tăng theo tuổi
- Kiểm soát tần số tim ≥ kiểm soát nhịp
- Kháng đông cũ, kháng đông mới
- Nguyên nhân RN; biến chứng của RN