AFib In One Page

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1. Stroke Risk

a i. Determine your patient's $CHADS_2$ score:

$CHADS_2$ risk stratification does not apply to AFib patients with mitral stenosis. They should be anticoagulated.

	Findings	Points
C	Congestive Heart Failure	1
H	Hypertension	1
A	Age ≥ 75 years	1
D	Diabetes	1
S	Prior Stroke or TIA	2

ii. Determine your patient's recommended treatment:

$CHADS_2$ = 0 , most still require treatment
Stroke risk is 1.9 (1.2 – 3.0)

- ≥ 65 yrs (estimated annual stroke risk 2.1%) → **OAC***
- Vascular disease (i.e. CAD, PAD etc) → **ASA**
- No additional risk factors for stroke → **No antithrombotic**

$CHADS_2$ 1 or more

$CHADS_2$ Score	Stroke Rate per 100 patient years (95% CI)	Recommended therapy
1	2.8 (2.0 – 3.8)	OAC*
2	4.0 (3.1 – 5.1)	OAC
3	5.9 (4.6 – 7.3)	OAC
≥ 4	≥ 8.5	OAC

*OAC = Oral Anticoagulant Therapy

b Determine your patient's risk of bleeding. One way to do this is the HAS-BLED score:

Hypertension SBP > 160 mmHg	Abnormal renal or liver function†	Stroke	Bleeding history	Labile INR†	Elderly age > 65 years	Drugs or ETOH†	Max. score
1	1 or 2	1	1	1	1	1 or 2	9

Score ≥ 3 indicates high risk & warrants some caution/regular patient evaluation of antithrombotic therapy. The incidence of major bleeding with a HAS-BLED score of 0 to 1 is 1.0%/year, 2 is 1.9%/year, 3 is 3.7%/year, 4 is 8.7%/year, 5 is 12.5%/year.
†RENAL: ESRD or Cr>200umol/L; LIVER: cirrhosis or bilirubin>2xULN with AST/ALT/ALP>3xULN.
†less than 60% of INRs in therapeutic range or frequent unstable INRs. †DRUGS: antiplatelets/NSAIDs.

c Summary of Available Treatments:

Stroke Prevention	Major Bleeding	Comments
• Compared to warfarin, dabigatran 150 mg BID is superior in preventing stroke, while dabigatran 110 mg BID has similar efficacy • Compared to warfarin, rivaroxaban 20 mg once daily is at least as good at preventing strokes • Compared to warfarin, apixaban 5mg BID is superior in preventing stroke • Warfarin is superior to ASA. (Efficacy based on achieving a time in therapeutic range (INR 2-3) at least 60% of the time) • 2014 Canadian AFib Guidelines recommend apixaban, dabigatran or rivaroxaban over warfarin	• Compared with warfarin, dabigatran 150 mg BID and rivaroxaban 20 mg once daily are associated with similar rates of major bleeding but more GI bleeds • Compared with warfarin, dabigatran 110 mg BID is associated with less major bleeding and is the preferred dose for patients over 80 years or over 75 years with risk factors for bleeding • Compared with warfarin, apixaban 5mg bid is associated with less major bleeding • Apixaban, dabigatran and rivaroxaban are associated with less intracranial hemorrhage (ICH) than warfarin	• No clinical trials directly comparing the new anticoagulants (apixaban, dabigatran, rivaroxaban) to each other are available • 2014 Canadian AFib Guidelines do not recommend routine anticoagulation for dialysis pts. • Dabigatran and rivaroxaban should be avoided in signifi cant renal dysfunction (i.e., CrCl < 30 mL/min); Apixaban should be avoided if CrCl<25ml/min • Dabigatran is contraindicated in combination with strong P-gp inhibitors/inducers. Rivaroxaban and apixaban are contraindicated in combination with strong inhibitors of both P-gp and CYP 3A4. Refer to prescribing information for details • Discuss cost and coverage of new OACs with patient

Adapted from the Canadian Cardiovascular Pharmacists Network Stroke Prevention in Atrial Fibrillation (SPAF) Pocket Reference

2. Symptoms/Quality of Life (QOL)

a i. MD to determine impact of AFib using Severity of Atrial Fibrillation (SAF) class:

SAF	Impact on QOL	Example
0	Asymptomatic	
1	Minimal effect on QOL	Single episode of AFib without syncope or heart failure (CHF)
2	Minor effect on QOL	Mild awareness of symptoms or rare (less than a few per year) episodes
3	Moderate effect on QOL	Moderate awareness of symptoms on most days, or more severe symptoms
4	Severe effect on QOL	Highly symptomatic, or frequent episodes, or AFib related syncope or CHF

ii. Assess *apical* HR. If resting HR > 100 or SAF class is > 2 follow preferred rate control strategy below:

- **MI or CHF** → Beta blocker (BB) → Titrate to resting apical HR < 100 and SAF Class 0-2. If not achieved → Add digoxin
- **No previous MI, no CHF** → Calcium Channel Blockers (CCB)† or BB → Titrate to resting apical HR < 100 and SAF Class 0-2. If not achieved → Add or sub CCB/BB Add digoxin

→ **If still not achieved, may need rhythm control**

†Use only non-dihydropyridine CCB for heart rate control (diltiazem, verapamil)

iii. Rate control drug dosing information:

Class	Medication	Starting Dose	Usual Range
Beta blocker (BB)	Bisoprolol Metoprolol Atenolol	2.5-5 mg daily 12.5-25 mg BID 25-50 mg daily	2.5-10 mg daily 25-150 mg BID 50-150 mg daily
CCB	Diltiazem CD‡ Verapamil SR‡	120 mg daily 120 mg BID	120-360 mg daily 120-240 mg BID
Digitalis	Digoxin‡	0.0625-0.125 mg daily	0.125-0.25 mg daily

‡Caution when combining CCB and digoxin

b Assess AFib pattern (paroxysmal, persistent, permanent):

Pattern	Definition	Action
Paroxysmal	AFib is self-terminating within 7 days	Educate and **REASSURE** patient that this rarely requires cardioversion§ or urgent intervention. **REFER** if rhythm control needed.
Persistent	AFib is not self-terminating within 7 days	If symptoms (SAF > 2) persist despite HR control, **REFER** for cardioversion§
Permanent	Longstanding AFib where a decision not to pursue sinus rhythm has been made	Focus on **RATE CONTROL** to achieve resting HR < 100. Rhythm control not indicated

§Pharmacologic or electrical

All management recommendations are in accordance with Canadian Cardiovascular Society Atrial Fibrillation Guidelines Canadian Journal of Cardiology 2014, available at http://www.ccs.ca/index.php/en/guidelines/guidelines-library.

Was this tool helpful to you? Do you have any suggestions for improvement? Please email your feedback to **afib@uhn.ca**