

Atrial Fibrillation Clinical Collaboration Guide

Right patient, right service, right time

Last Reviewed: January 2024 – FINAL			
Manish Mehta/Brendan Daly	LMG Cardiology		
Benjamin John	The Vancouver Clinic Cardiology		
Sandeep Gupta	The Oregon Clinic Cardiology		

Atrial Fibrillation (AF)

confirmed by EKG/Holter/Event Recorder

<u>Unstable</u>

Chest Pain, Hypotension, Altered Mental Status **Refer to ED**

Stable



Definitions

Paroxysmal: Terminates within 7 days with or without intervention, may recur with variable frequency.

Persistent: Continuous AF >7days

Long-standing Persistent: Continuous AF >12 mos.

Permanent AF: After patient and clinician make joint decision not to restore sinus rhythm



Anticoagulation

- Shared decision making: balance risk/benefit with CHA2DsDS2VASc and HASBLED (see tables below)
- 2019 updated AHA guidelines suggest Direct Oral Anticoagulant (see table below) over Warfarin (except with mod-severe mitral stenosis or a mechanical heart valve)
- Patients stable on warfarin can continue.



Initial Evaluation

Labs: CBC, BMP, TSH, INR. Troponin only if ischemia

suspected

ECHO: If not done in previous 12 months Sleep Study: If clinical concern for OSA Risk factor Management: BP control, weight

management, alcohol abstinence



Consider Referral for Rhythm Control

No proven mortality benefit, but should be considered if:

- First episode of AF
- AF precipitated by acute illness
- Symptomatic
- Difficulty with rate control
- Younger age
- Tachycardia related cardiomyopathy

Of note: Paroxysmal AF often progresses to persistent AF, and remodeling happens, complicating future efforts to control rhythm.

Rate Control (if HR >110):				
Titrate to resting HR 80				
No CV	HTN or	HFrEF	COPD	
disease	HFpEF			
Beta-blocker	Beta-blocker	Beta-blocker	Beta-Blocker	
Diltiazem	Diltiazem	Digoxin	Diltiazem	
Verapamil	Verapamil		Verapamil	
	Amiodarone			

Indications for referral to Cardiology at any point:

New Dx Contraindication to anticoagulation

HR > 110 at rest despite max beta blockade Symptomatic bradycardia despite reduction of nodal blockers

Persistent symptoms Candidate for cardioversion or ablation

CHA ₂ DS ₂ VASc	Points
CHF	1
HTN	1
Age>75	2
Diabetes	1
Prior CVA or TIA	2
Vascular Disease	1
Age 65-74	1
Female	1

0= low risk, no anticoag
1= low-mod risk, consider
anticoag
≥2 men, ≥3 in women= high risk,
anticoag or consider other options

Stroke
Risk
(%/year)
0
1.3
2.2
3.2
4.0
6.7
9.8
9.6
6.7
15.2

HASBLED	Points
SBP >160mm	1
Elevated Creat/AST/ALT	1 or 2
CVA	1
Bleeding Hx	1
Labile INR (<60% time	1
therapeutic	
Age >65	1
Drugs	1 or 2
(NSAID/AntiPlatelet) or	
EtOH >8 per week	
Scaro > 2 Consider alternative	oc to

Score > 3 Consider alternatives to anticoagulation.

HAS-	Bleeds/
BLED	100 Pt-
Score	years
0	1.13
1	1.02
2	1.88
3	3.74
4	8.70
5	12.5
Score ≥3	indicates

Score ≥3 indicates higher risk of bleeding

	Dabigatran (Pra	daxa)	Rivaroxaban ()	Karelto)	Apixaban (Elic	quis)
Mechanism	Thrombin inhib. Fact		Factor Xa inhib.		Xa inhib.	
Frequency	BID Daily		BID			
½ life	17 hours (multiple doses) 9 hours healthy		12 hours			
	7-9 (single dose))	12 hours elder	ly		
Reversible	Yes (Idaricuzma	b)	Yes (Andexanet alpha)		Yes (Andexanet alpha)	
Dosing	CrCl>30: 150	Omg BID	CrCl > 50: 2	20mg QHS	5mg BID	
	15-30: 75	mg BID	30-50: 15	mg QHS	2.5mg BID if 2	/3: Cr ≥1.5,
	<15: Not Recc.		<15: Not Recc.		>80 y/o, or weight ≤60Kg.	
Days to Hold Prior	Low Risk	High Risk	Low Risk	High Risk	Low Risk	High Risk
to Procedure	CrCl >50:1 d	2 d	CrCl >50: 1d	2d	CrCl >50: 1d	2d
	30-50: 2d	4 d	30-50: 1d	2d	30-50: 2d	3d
	<30: 4d	>5 d	<30: 2d	3d	<50: 2d	3d
Other Small signal for		MI risk			Less GI bleed	ing risk than
	Dyspepsia in 109	%			others	

Management of supratherapeutic INR without significant bleeding:				
< 4.5	Decrease or hold dosage and increase frequency of monitoring			
4.5-10 Hold 1-2 doses, monitor and resume lower dose. No Vitamin K unless signif				
	risk (previous bleeding, post-op, malignancy)			
> 10	Hold Warfarin, give Vitamin K			
	Resume at lower dose once therapeutic			

Disclaimer: No guideline can anticipate all the unique circumstances of patient care, and as such, there are times when good clinical judgement will result in and require deviation from this guideline. In those settings, the reason for such deviation from this guideline should be documented in the medical record.

Contact: If you have questions or comments about this guide or are interested in the development of future collaboration guides, please email LHP medical director Albert Chaffin, M.D., at achaffin@lhs.org.

References:

Updated Guidelines on Outpatient Anticoagulation, PATRICIA WIGLE, PharmD, BCPS, and BRADLEY HEIN, PharmD, HANNA E. BLOOMFIELD, MD, MPH, MATTHEW TUBB, MD, PhD, MICHAEL DOHERTY, PharmD, BCACP; Am Fam Physician. 2013 Apr 15;87(8):556-566

January CT, Wann LS, Calkins H, Chen LY, Cigarroa JE, Cleveland JC Jr, Ellinor PT, Ezekowitz MD, Field ME, Furie KL, Heidenreich PA, Murray KT, Shea JB, Tracy CM, Yancy CW. 2019 AHA/ACC/HRS focused update of the 2014 AHA/ACC/HRS guideline for the management of patients with atrial fibrillation: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Rhythm Society. *Circulation*. 2019; 139:e•••—e••. doi: 10.1161/CIR.0000000000000665

January CT, Wann LS, Alpert JS, Calkins H, Cigarroa JE, Cleveland JC Jr, Conti JB, Ellinor PT, Ezekowitz MD, Field ME, Murray KT, Sacco RL, Stevenson WG, Tchou PJ, Tracy CM, Yancy CW. 2014 AHA/ACC/HRS guideline for the management of patients with atrial fibrillation: executive summary: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and the Heart Rhythm Society. J Am Coll Cardiol. 2014; 64:2246–80.