PatientOrderSets

PATIENT INFORMATION

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Initiation of OAC for Atrial Fibrillation Order Set

ACTION

For Patients Clinically Unsuitable for DOACs

Clinician to consider warfarin for the following indications:

- ☐ Mechanical valve - warfarin is indicated to decrease the risk of thromboembolic complications
- ☐ Rheumatic Mitral stenosis - warfarin is indicated for patients with mitral stenosis
- ☐ Hemodialysis - warfarin is indicated to reduce the risk of stroke in hemodialysis patients

Stroke Risk

☒ CHA_2DS_2-VASc score [1; 2] : __________ To calculate the CHA_2DS_2-VASc score, refer to http://www.chadsvasc.org/

CHA_2DS_2-VASc Score

Risk Factors	Points
Congestive Heart Failure	1
Hypertension	1
Age 65 - 74	1
Age ≥ 75 years	2
Diabetes Mellitus	1
Prior stroke or TIA	2
Vascular disease (previous myocardial infarction, arterial disease or aortic plaque)	1
Female	1
	Max 9

Unadjusted Stroke Risk for Atrial Fibrillation based on CHA2DS2-VASc Score

Score	Unadjusted Stroke Risk (% per year)
0	0.2 %
1	0.6 %
2	2.2 %
3	3.2 %
4	4.8 %
5	7.2 %
6	9.7 %
7	11.2 %
8	10.8 %
9	12.2 %

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ACTION

Factors Influencing Drug Selection

Renal Function

☐ Calculate CrCl based on the following:

- Age: _________
- Actual body weight: __________
- Gender: _________
- Serum Creatinine: ___________ (mg/dL)
- CrCl: _________ (mL/minute)

To calculate CrCl using the Cockcroft-Gault formula, refer to https://www.kidney.org/professionals/KDOQI/gfr_calculatorCoc

Liver Function

☒ Liver Disease: ☐ No ☐ Yes: Child Pugh Grade: _________

Child Pugh Score

Measure	1 point	2 points	3 points
Total bilirubin (mg/dL)	< 2	2 - 3	> 3
Serum albumin (g/dL)	> 3.5	2.8 - 3.5	< 2.8
Prothrombin time, prolongation(s) or INR	< 4.0	4.0 - 6.0	> 6.0
Ascites	None	Mild (or suppressed with medication)	Moderate to Severe (or refractory)
Hepatic encephalopathy	None	Grade I-II	Grade III-IV

Note: The score employs five clinical measures of liver disease. Each measure is scored 1-3, with 3 indicating the worst condition. A total score of 5-6 is considered grade A (well-compensated disease); a total score of 7-9 is considered grade B (significant functional compromise); a total score of 10-15 is considered grade C (decompensated disease). These grades relate to one and two year patient survival [3].

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Initiation of OAC for Atrial Fibrillation Order Set

ACTION

Factors Influencing Drug Selection Continued…

Concomitant Medication [4]

Apixaban

- Recommended dose: 5 mg twice daily
- For patients with two or more of the following characteristics (age greater than/equal to 80 years, weight less than/equal to 60 kg, serum creatinine greater than/equal to 1.5 mg/dL): Recommended dose is 2.5 mg twice daily
- **Strong dual inhibitors** of CYP3A4 and P-gp (e.g. ketoconazole, itraconazole, ritonavir, clarithromycin) increase blood levels of apixaban: Recommended dose is 2.5 mg twice daily
- Simultaneous use of **strong dual inducers** of CYP3A4 and P-gp (e.g. rifampin, carbamazepine, phenytoin, St. John's wort) reduces blood levels of apixaban: Avoid concomitant use
- For patients with two or more of the following risk factors (age greater than/equal to 80 years, weight less than/equal to 60 kg, serum creatinine greater than/equal to 1.5 mg/dL) and are taking a **strong dual inhibitor** of CYP3A4 and P-gp: Apixaban is not recommended
- For patients with severe hepatic impairment (Child Pugh grade C): Apixaban is not recommended

Dabigatran

- For patients with CrCl greater than 30 mL/minute: Recommended dose is 150 mg twice daily
- For patients with CrCl 15 to 30 mL/minute: Recommended dose is 75 mg twice daily
- For patients taking P-gp inducers (e.g. rifampin): Avoid concomitant use
- For patients with CrCl 30 to 50 mL/minute and taking P-gp inhibitors (e.g. dronedarone or systemic ketoconazole): Recommended dose is 75 mg twice daily
- For patients with CrCl less than 30 mL/minute and taking P-gp inhibitors: Dabigatran is not recommended
- For patients with CrCl less than 15 mL/minute: Dabigatran is not recommended

Edoxaban

- For patients with CrCl greater than 50 mL/minute to less than/equal to 95 mL/minute: Recommended dose is 60 mg once daily
- For patients with CrCl greater than 95 mL/minute: Edoxaban is not recommended
- For patients with CrCl 15 to 50 mL/minute: Recommended dose is 30 mg once daily
- For patients with CrCl less than 15 mL/minute: Edoxaban is not recommended
- For patients taking other anticoagulants: Avoid concomitant use
- For patients taking rifampin: Avoid concomitant use
- For patients taking combined P-gp inhibitor and **moderate** CYP3A4 inhibitor (e.g. verapamil or dronedarone): Consider dose reduction
- For patients taking combined P-gp inhibitor and **weak** CYP3A4 inhibitor (e.g. quinidine): Consider dose reduction
- For patients with moderate or severe hepatic impairment (Child-Pugh grade B and C): Edoxaban is not recommended

Rivaroxaban

- For patients with CrCl greater than 50 mL/minute: Recommended dose is 20 mg once daily with the evening meal
- For patients with CrCl 15 to 50 mL/minute: Recommended dose is 15 mg once daily with the evening meal
- Combined P-gp and **strong** CYP3A4 inhibitors (e.g. ketoconazole, ritonavir): Avoid concomitant use
- Combined P-gp and **strong** CYP3A4 inducers (e.g. carbamazepine, phenytoin, rifampin, St. John's wort): Avoid concomitant use

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Initiation of OAC for Atrial Fibrillation Order Set

ACTION

- For patients with CrCl 15 to 80 mL/minute who are taking combined P-gp and **moderate** CYP3A4 inhibitors (e.g., erythromycin): Avoid concomitant use unless the potential benefit justifies the potential risk
- For patients with moderate or severe hepatic impairment (Child-Pugh grade B and C) or any degree of hepatic disease associated with coagulopathy: Rivaroxaban is not recommended
- For patients taking other anticoagulants: Avoid concomitant use unless the potential benefit outweighs the bleeding risk
- For patients with CrCl less than 15 mL/minute: Rivaroxaban is not recommended

History

☐ Medication history ☐ ____________________

Shared Decision Making Discussion

Note: If drug costs are a barrier to filling prescriptions for medication, refer patient to appropriate resources.

☒ Select all that have been discussed with patient

☐ Drug cost ☐ Dosing regimen options

☐ Drug specific/bleeding risk ☐ Lifestyle factors of drug (diet, blood draws, activities)

Orders

Direct Oral anticoagulants (DOACs)

Apixaban

☐ apixaban 5 mg PO twice daily

☐ apixaban 2.5 mg PO twice daily (For patient with at least 2 of the following: age greater than/equal to 80 years, weight less than/equal to 60 kg, serum creatinine greater than/equal to 1.5 mg/dL)

☐ ____________________

Dabigatran

☐ dabigatran 150 mg PO twice daily (CrCl greater than 30 mL/minute) (must leave in original package, take with full glass of water)

☐ dabigatran 75 mg PO twice daily (CrCl 15 to 30 mL/minute) (must leave in original package, take with full glass of water)

☐ ____________________

Edoxaban

☐ edoxaban 60 mg PO once daily (CrCl greater than 50 mL/minute to less than/equal to 95 mL/minute)

☐ edoxaban 30 mg PO once daily (CrCl 15 to 50 mL/minute)

☐ ____________________

Rivaroxaban

☐ rivaroxaban 20 mg PO once daily (CrCl greater than 50 mL/minute) (Take with evening meal)

☐ rivaroxaban 15 mg PO once daily (CrCl 15 to 50 mL/minute) (Take with evening meal)

☐ ____________________

Warfarin

☐ warfarin 5 mg PO once daily, then request MD/NP to reassess

Note: Consider lower starting doses of warfarin for elderly patients and/or those with low body weight.

☐ warfarin 2.5 mg PO once daily, then request MD/NP to reassess

☐ warfarin _________ PO once daily, then request MD/NP to reassess

☐ ____________________

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Initiation of OAC for Atrial Fibrillation Order Set

ACTION

Orders Continued…

Baseline Lab Orders

☐ Baseline CBC ☐ Baseline INR for warfarin
☐ ______________________________

Follow-up Lab Orders

DOACS

☐ Monitor renal function q3-12months (e.g. serum creatinine, CrCl)
☐ Anticoagulant clinic referral as per policy/procedure [7; 8]
☐ ______________________________

Warfarin

☐ Target INR 2 – 3
☐ INR q3-4days for 2 weeks, then as instructed by clinician or anticoagulation clinic
☐ ______________________________

Other Considerations

Antiplatelet Therapy

Note: Patients who take multiple anti-thrombotic agents (aspirin, NSAIDS, P2Y12 inhibitors and anticoagulants) are at increased risk for bleeding complications. Clinicians should review the risk-benefit ratio for each medication and consider minimizing bleeding risk whenever possible [9].

☐ Patient should continue current ASA therapy ☐ Patient should discontinue current ASA therapy
☐ ______________________________

Proton Pump Inhibitors (PPIs)

Note: Clinician to consider PPI for patients at high risk of GI bleeding [10; 11]. PPIs may decrease serum concentrations of the active metabolite(s) of dabigatran. PPIs are optimally taken 30 minutes before breakfast.

☐ dexlansoprazole 30 mg PO once daily
☐ esomeprazole 20 mg PO once daily (avoid concomitant use with clopidogrel)
☐ lansoprazole __________ mg PO once daily (15 – 30 mg)
☐ omeprazole 20 mg PO once daily (avoid concomitant use with clopidogrel)
☐ pantoprazole __________ mg PO once daily (20 – 40 mg)
☐ rabeprazole 20 mg PO once daily
☐ ______________________________

Not Prescribed an OAC

List Reasons:

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ACTION

Patient Education

Provide applicable education and discharge instruction to the patient as per policy/procedure. The following topics are important to include within patient education:

- ☐ Follow-up appointments for bloodwork
- ☐ Medication management, including missed doses
- ☐ Ensure patient is aware of the importance of medication adherence
- ☐ Bleeding and bruising risks
- ☐ When to seek medical attention
- ☐ Provide written education materials for patient/family/caregivers to review after discharge

Additional Orders

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All medications have been reviewed using Lexicomp Online.

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