

Guidelines in the Management of Warfarin/Coumadin Therapy

Indications of long term use with target INR

Prevention of systemic embolism

Mechanical prosthetic heart valve	2.0 – 3.5
Bioprosthetic heart valve	2.0 – 3.0
Nonvalvular atrial fibrillation	2.0 – 3.0
Myocardial infarction	2.0 – 3.0
Mitral valve disease in sinus rhythm	2.0 – 3.0

Prevention of recurrent disease

Ischemic stroke in atrial fibrillation	2.0 – 3.0
Myocardial infarction	2.0 – 3.0
Venous thromboembolism	2.0 – 3.0

Initiation of therapy

Starting dose of coumadin of 5 mg is currently suggested.

Frequency of INR determination

Initial daily until therapeutic range reached and sustained for two consecutive days.
Then 2 to 3 times weekly for 2 weeks. Followed by weekly for 4 weeks and then every 2 to 3 weeks.
Once INR is stabilized at least monthly.

Intensity of therapy

Current standard recommendation is given above.

Low intensity anticoagulation with INR of 1.5 to 2.0 is currently recommended after the initial 3 to 12 months at standard intensity.

Suggested duration of therapy

Prosthetic heart valves	Lifelong
Bioprosthetic heart valves with no atrial fibrillation	3 months
Myocardial infarction	3 months
DVT 1 ST distal with temporary risk factor	6 WK
1 ST distal with idiopathic risk factor, proximal	>6 Mo
2 nd , contralateral	>6 Mo
ipsilateral	>12 Mo
3 rd	Indefinite
PE	>12 Mo
Thrombophilic defects (protein C, S; factors V, VIII, antiphospholipid ab)	12 Mo to indefinite. Consult Hematology.

Interactions with vitamin K antagonists

Foods, drugs. Monitor INR more frequently and adjust dose.

Reversal of anticoagulation

INR 4 -5 with no bleeding - omit one or several doses with INR determination

INR 5-9 – two options

- a) If the patient has no bleeding and no risk factors for bleeding (age >65, h/o CVA, GI bleed, use of ASA, NSAID) next 2 or more doses should be held and PT/INR monitored daily.
- b) Administer small dose vitamin K -1 mg orally or 0.5 mg IV. SC is not recommended because of variable absorption. Higher doses of vitamin K leads to over-correction and resistance.
- c) Bleeding with any level of INR administer vitamin K and transfer to acute care hospital

References

1. NEJM 2003; 349: 675-83
2. NEJM 1997; 336; 1506-11
3. J Am Coll Cardiol 2003; 41:1633-52

