

Initiation of Warfarin Treatment Protocol

Practice Point – Target INR Ranges	
INR	Indication
2 - 2.5	Prophylaxis of DVT, including high risk surgery patients
2 – 3 (2.5)	Treatment of DVT, PE, Systemic embolism Mural thrombus following MI Mitral stenosis / rheumatic mitral valve disease Atrial fibrillation (AF), dilated cardiomyopathy Transient ischaemic attacks (TIA)
3 – 4.5 (3.5)	Recurrent DVT & PE despite being on warfarin treatment Mechanical prosthetic heart valve
<i>Warfarin should be given at 18:00 and the INR checked between 9:00 and 11:00 am.</i>	

Practice Point – drugs which potentiate Warfarin

Amiodarone; NSAIDs; fluconazole; cimetidine; omeprazole; erythromycin; ciprofloxacin; trimethoprim.

Note that this list is not exhaustive.

Initiation of Treatment

- Always undertake a coagulation screen and check liver function before initiating warfarin treatment.

Non-urgent anti-coagulation

- For non-urgent indications such as AF start with 1mg daily for one week and then check the INR. Increase the dose by 1mg a week and check the INR weekly until the desired INR is reached.

Rapid Anti-coagulation

- Patients being treated for active thrombo-embolic disease require treatment with heparin for 1 week, whilst warfarin is being initiated (see BNF).
- Patients with a raised INR or patients with heart failure, liver disease or on drugs that potentiate warfarin should be given a lower loading dose of 5mg.

	INR (Taken between 9:00 – 11:00)	Warfarin Dose (mg) (Given @ 18:00)
Day 1	<1.4	10
Day 2	<1.8	10
	1.8	1
Day 3	>1.8	0.5
	<2.0	10
	2.0 – 2.1	5
	2.2 – 2.3	4.5
	2.4 – 2.5	4
	2.6 – 2.7	3.5
	2.8 – 2.9	3
	3.0 – 3.1	2.5
	3.2 – 3.3	2
	3.4	1.5
	3.5	1.0
Day 4	3.6 – 4.0	0.5
	>4.0	0
	<1.4	>8
	1.4	8
	1.5	7.5
	1.6 – 1.7	7
	1.8	6.5
	1.9	6
	2.0 – 2.1	5.5
	2.2 – 2.3	5
	2.4 – 2.6	4.5
	2.7 – 3.0	4
	3.1 – 3.5	3.5
3.6 – 4.0	3	
4.1 – 4.5	Miss out next day's dose and then give 2mg	
>4.5	Miss out 2 day's doses and then give 1mg	

- Having achieved the desired INR the INR should be monitored weekly until the INR is stable.

Reference:

Guidelines for oral anti-coagulation: third addition, British Journal of Haematology 1998: 101. 374-387, BNF