Coag Review

October 26, 2014

Reports

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ANTICOAG REPORTS

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111. Heparin Induced Platelet Ab Test Orders
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- 10 reports (to be combined)
- Each runs for entire facility
- Most are only 1 page

20. Platelet Drop 50% in 7 Days

"Platelet drop > 50%"

10/21/14	0600	64	L	
10/21/14	0245	79	L	-18.99
10/20/14	2325	75	# L	-14.67
10/20/14	1750	110	L	-41.82
10/20/14	0335	147	L	-56.47
10/19/14	0131	190		-66.32
10/18/14	0318	182		-64.84
10/17/14	0316	209		-69.38
10/16/14	0611	211		-69.67
10/15/14	1313	224		-71.43

- Assess for possible HIT and if intervention needs to be made to recommend HIT Ab to be drawn
- 4 T Score Assessment Tool (on FormWeb)

50. Anticoag

“Renal Dose Adjustment”

- The “Lovenox” report – actually contains Lovenox, Arixtra, Pradaxa, Xarelto, Eliquis
- Most patients on prophylactic doses of Lovenox and Arixtra are suppressed if renal function normal.
  - ALL patients on Pradaxa, Xarelto, Eliquis will appear
- Assess if appropriate dose for weight, renal function, indication

50. Anticoag

"Renal Dose Adjustment"

- Lovenox:
  - Decrease to 30 mg daily if CrCl < 30 ml/min
  - *Cautiously* increase to 40 mg daily if CrCl > 30 ml/min (or recommend increase if clinical appropriateness uncertain)
  - Ortho dose: 30 mg q 12 hours for hip and knee – DO NOT automatically adjust if renal function poor. All recommendations for Lovenox adjustments in this patient population require a call to ortho surgeon.
  - BMI > 50: Recommend increase to 40 mg BID (see CI)
  - Assess if Anti-Xa needs to be drawn
    - Treatment dose only; document on Anti-Xa sheet in notebook (sheet on FormWeb)
    - Dialysis patients, CrCl < 20 ml/min, Wt > 190 kg

50. Anticoag

“Renal Dose Adjustment”

- Xarelto/Eliquis/Pradaxa:
  - Please call provider vs leaving CI if dose reduction/change in dose needs to be made based on indication, renal function, drug interactions
  - If need help addressing coverage for these medications, there are some monthly cards/freebies. Check websites to enroll patients (generally need name, address, telephone number) or check with Marissa for help on weekdays

50. Anticoag

"Renal Dose Adjustment"

- Xarelto – counsel patients that are new starts for DVT/PE
  - Written info for patient in the anticoag drawer (desk beside stewardship); if running out, please let Rodney, Patrick, or Shital know
  - Discuss change in dosing after 21 days, take with food, signs/symptoms of bleeding/clots
  - Make sure patient has 2 scripts in chart
  - Document progress note in chart – Pharmacy Xarelto Education
  - CI – MEDTEACHIN
- Eliquis – counsel new starts for DVT/PE

51. Coumadin with maoi, INR, CI

"Coumadin Interaction"

RUN DATE: 10/21/14
RUN TIME: 0827
RUN USER: PHAJGB

MEMORIAL HOSPITAL NPR PHARMACY *LIVE*
Patients Currently on Coumadin AND Select Other Meds

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ACCOUNT	NAME	UNIT #	ROOM/BED	TRADE NAME
[redacted]	[redacted]	[redacted]	227-P	Coumadin 1 MG Tab
			227-P	Coumadin 1 MG Tab
			227-P	Flagyl 500 MG/NS 100 ML Bag
INR:	2.2 3.3 10/21 0456			

- Assess for significance of interaction
- Send CI for Coumadin Drug Information notifying provider of drug-drug interaction

52. High INR with Warfarin, CI

"Elevated INR and on Warfarin"

		ADM IN 69		
Coumadin Sliding Scale		Start Date: 10/15/14		
			INR: 3.3	10/21/14 0327
			3.4	10/20/14 0321
			3.6	10/19/14 0415
			1.8	10/18/14 0349
Clinical Intervention(s):	Kinetic Consultation	10/09/14		
	Coumadin Consultation	10/15/14		
		ADM IN 72		
Coumadin 2 MG Tab		Start Date: 10/18/14		
			INR: 4.5	10/21/14 0538
			3.2	10/20/14 0420
			2.7	10/19/14 0359
			2.9	10/18/14 0527

- Valves: Remember goal INR for mechanical valve replacement 2.5-3.5
- Check to see if MD holds dose or makes appropriate dose reduction. Usually wait for MD to round so they have time to make decision.

53. INR>2 Enoxaparin Heparin Fondaparinux

"Therapeutic INR with Anticoagulant"

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10/20/14 HEPA50006

CI: ADE Prevention Anticoag Minor

INR:	2.1	10/18/14	1628
INR:	2.3	10/19/14	0422
INR:	2.5	10/20/14	0432
INR:	2.8	10/21/14	0543
HGB:	8.7	10/21/14	0543
PLT:	430	10/21/14	0543
AST:	18	10/21/14	0543
ALT:	16	10/21/14	0543
ALKP:	85	10/21/14	0543

- If treatment dose for bridge therapy, consider indication:
  - Acute DVT/PE: Need bridge therapy to continue x5 day overlap with Coumadin and INR therapeutic x 24 hrs
  - A.fib: can d/c bridge therapy once INR >/= 2

54. HGB<7 and Anticoagulants

"Low HGB and on Anticoagulant"

10/21/14 PROTONIXDR

P

HGB:	8.6	10/20/14	1919
HGB:	8.9	10/20/14	2138
HGB:	6.7	10/21/14	0712
INR:	2.8	10/21/14	0712

- Assess for GI bleed and if patient on any anticoagulants that may need to be stopped

55. Brilinta

"Brilinta"

[redacted]		[redacted]	105102	5NO	5113	P
10/20/14	-	ASAB				
10/20/14	-	TICA90TA				
[redacted]		[redacted]	137443	5NO	5130	P
10/19/14	-	TICA90TA				
10/18/14	-	ASAB				

- Assess what dose aspirin patient is on (should be on 81 mg daily)
- First loading dose may be 325 mg
- Call provider to assess if reason patient is not on aspirin

56. Thrombocytopenia

"Thrombocytopenia"

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10/25/14    ARIXTRA2.5
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                         7NO                 P
PLT:      67  10/24/14  1855
PLT:      64  10/26/14  1220
PLT:      62  10/27/14  0547
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- Assess PLT count and risk/benefit of patient continuing on anticoagulants
- Hem/Onc generally will continue anticoagulants until PLT < 40k, other MDs will continue until PLT < 100k

57. Direct Thrombin Inhibitors

"Direct Thrombin Inhibitors"

10/16/14	ANGIOMAX
10/16/14	ANGIOMAX
CI: Kinetic	Consultation
CI: Kinetic	Consultation

INR:	4.3	10/18/14	0409
PLT:	24	10/18/14	0409
PLT:	27	10/18/14	1005
PLT:	26	10/18/14	1530
PLT:	23	10/18/14	2200
INR:	2.9	10/19/14	0400
PLT:	25	10/19/14	0400
PLT:	22	10/19/14	1008
INR:	2.8	10/19/14	1027
PLT:	22	10/19/14	1027
INR:	2.7	10/19/14	1600
PLT:	21	10/19/14	1600
PLT:	25	10/19/14	2245
INR:	3.7	10/20/14	0355
PLT:	21	10/20/14	0355
PLT:	21	10/20/14	0943
PLT:	26	10/20/14	1601
PLT:	23	10/20/14	2143
INR:	7.7	10/21/14	0350
PLT:	21	10/21/14	0350
TBILI:	19.1	10/21/14	0350
AST:	2587	10/21/14	0350
ALT:	729	10/21/14	0350
ALKP:	180	10/21/14	0350

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- Bivalirudin/argatroban flowsheets and protocols available on FormWeb
- Rates must be visually checked on pump once daily
- For bivalirudin, 2 entries in the pump that RN can choose from (Cath lab and Weight-based)
  - Weight-based should be used for HIT patients

111. Heparin Induced Platelet Ab Test Orders

"HIT Panel"

CVICU	10/16/14 0949	[redacted]		
	10/16/14 1116	HIT PTT	68.4	COMP
	10/16/14 1401	XHEPIP	NEGATIVE	COMP
	10/18/14 0852	HIT PTT	66.8	COMP
	10/20/14 1344	XHEPIP	NEGATIVE	COMP

- HIT Ab is found in special chemistry
- HIT Ab is run Mon-Fri @ 1100 and return in the afternoon 1400-1500
- Assess risk of HIT and if needs d/c heparin products and/or initiation of direct thrombin inhibitor
- Enter heparin allergy
- F/U HIT antibody and take out allergy if negative
- If HIT Ab returns positive, lab will send SRA out automatically (takes 3-5 days)
  - SRA results found in Reference Frozen

Clinical Interventions

- DOSADJ-ARI
  - Can change Arixtra to Lovenox for CrCl < 30 ml/min
- DOSADJ-LOB
  - For BMI > 50, recommend increasing Lovenox to 40 mg q 12 hours
- DOSADJ-LOV
  - Used for documentation of all automatic Lovenox adjustments

Clinical Interventions

- DI-COUMADI
  - Counted as a “Drug Info” intervention
  - Used to notify prescribers of Coumadin interactions
- ADE-ANTICO
  - Counted as an “ADE Minor” intervention
  - Most common type of intervention
- ADE-COAMAJ
  - Counted as an “ADE Major” intervention
  - Rarely used
- MEDTEACHIN
  - For documentation of patient education

Warfarin Dosing

- INR Goal Range:
  - 2.5-3.5: mechanical prosthetic heart valves, antiphospholipid syndrome with risk factors, or recurrent VTE
  - 2-3: DVT/PE, A.fib, tissue heart valves, orthopedic surgery PX, cardiomyopathy
- Previously on Warfarin:
  - In range: Use home dose
  - Low: Consider 25-75% one day increase
  - High: Consider 25-75% one day decrease

Warfarin Dosing

- Dosing nomograms available on FormWeb
- Initial Dose:
  - 5 - 7.5 mg
  - Larger doses: patients who are younger, heavier, no drug interactions
  - Lower doses: patients who are frail/elderly, malnourished, significant disease-drug or drug-drug interactions (e.g. Flagyl, Bactrim, Diflucan, decomp. CHF)
- Second Dose:
  - If INR increases by >/= 0.4, consider holding or decrease dose 25-50%
- Third/Ensuing Dose:
  - After two days of the same dose:
    - < 0.3 increase in INR, consider increasing dose 25-50%
    - 0.3 – 0.5 increase in INR, consider giving the same dose
    - > 0.5 – 1.5 increase in INR after two days, consider decreasing dose by 25-75%

Warfarin Dosing

- Dosing When INR in Range:
  - How many mg's of warfarin did the patient require to get therapeutic?
  - How will the clinical conditions of the patient or interacting meds affect INR?
- When to Hold Warfarin:
  - > 1.5 increase in INR in 1 day, regardless of INR value
  - INR >/= 3.5 (if goal INR 2 – 3)
  - INR >/= 4 (if goal INR 2.5 – 3.5)
- Risk factors for Warfarin Sensitivity and/or increased bleed risk:
  - Decompensated CHF, recent surgery, Hct < 30, Age > 60, Albumin < 3 / malnutrition, active liver disease, elevated baseline INR (1.2 – 1.5)

Warfarin Dosing - Procedures

- Enter COUCONSULT CI with consulting MD's name
- Enter COUSCALE per PHARMACY
- Double-check home doses with patient to confirm
- Required to counsel all NEW start warfarins and any other warfarins you feel will benefit from counseling
  - Document progress note in chart; may utilize Coumadin education sticker
  - Document on back of Coumadin flowsheet
- Discharge:
  - Double-check discharge dose; consider discharge dose recc. sticker
  - Make sure appointment made for INR f/u
  - Fax Coumadin flow sheet to next provider; scan Coumadin flow sheet and leave in notebook under completed patients

Questions?