Anticoagulation Update June 2018

Apixaban - Eliquis (Xa inhibitor) - currently less bleeding risk than other DOACs, can be used in dialysis patients (due to high protein binding is not readily cleared by dialysis), due to short half life more risk of clotting when missing doses, caution if CrCl <15 and caution with severe liver impairment, consider using if extreme obesity and extreme low weight, no antidote, cost of 30 day supply **U.S.**: $359.92

Rivaroxaban - Xarelto (Xa inhibitor) - consider that it is primarily renally excreted so half life and bleeding risks increase in renal impairment. Caution if CrCl <30 but can be used in dialysis patients due to high protein binding, consider using if extreme obesity, no antidote, cost of 30 day supply **U.S.**: $333.27

Dabigatran - Pradaxa (IIa inhibitor) - consider that it is primarily renally excreted so half life and bleeding risks increase in renal impairment. Consider avoiding if CrCl <30, has antidote, cost of 30 day supply **U.S.**: $333.57

Betrixaban - Bevyxxa - new for extended VTE prophylaxis in high risk populations (older, poor mobility, heart failure) but expensive and questionable efficacy over others, don't recommend it

Edoxaban - Savaysa - not able to identify any distinguishing reasons to use it other than slightly less expensive, cost for 30 day supply **U.S.**: $291.30

Warfarin - Coumadin - still only choice with prosthetic heart valve, preferred for CrCl <15, better for outpatient compliance due to monitoring, good for dialysis pts, best for severe liver impairment, still cost effective if infrequent monitoring, best if history of bariatric surgery

Antidotes/Reversal Agents

- *Praxbind* (idarucizumab), is approved for reversal for dabigatran (Pradaxa) before emergency surgery or urgent procedures, or life-threatening or uncontrolled bleeding. Cost/dose: $3,500
- *Andexxa* is a reversal agent for Xa inhibitors, Data on efficacy are limited but show good reversal of anti-factor Xa activity. This will be in some hospitals in June 2018, remember ICH is main mortality concern and risk is lower with Xa inhibitors over coumadin
- Vitamin K for wafarin
- Activated charcoal may reduce apixaban (Eliquis), rivaroxaban (Xarelto) and dabigatran (Pradaxa) absorption

- Dialysis is effective for dabigatran (Pradaxa)

Afib: apixaban (Eliquis) is more effective and less risky than coumadin and best choice when bleeding risk is main concern, rivaroxaban (Xarelto) is as effective and risky as coumadin, dabigatran (Pradaxa) is more effective and as risky as coumadin. No head to head trials of efficacy with new DOACs in Afib yet...

DVT: Consider apixaban (Eliquis) or rivaroxaban (Xarelto), as these can be started immediately after confirming VTE and do not require a parenteral anticoagulant and have the best evidence. Studies are lacking a bit for long-term (>1 year) VTE prevention efficacy

Stroke Prevention: dabigatran (Pradaxa) is best if CrCl >30 and no GI bleed hx, apixaban (Eliquis) prevents more strokes and deaths than coumadin, and poses a lower risk of major bleed

Post Hip/Knee Surgery: consider apixaban (Eliquis) or rivaroxaban (Xarelto)

Dual Therapy:

- DAPT (Aspirin and Plavix) indicated for 12 months following stent placement following PCI(percutaneous coronary intervention) then Plavix is dropped and Aspirin continues indefinitely, if they have stable CAD and are over 75 or other increased bleeding risks then it is reasonable to stop the Plavix at 6 months. Evidence to continue DAPT beyond 12 months is not clear and should be individualized
- Anticoag plus Antiplatelet in complicated CAD and a suboptimal result with PCI, the indication is for an Anticoag plus Plavix, change Plavix to ASA after 6 months then re-eval need for both Anticoag and ASA at a year
- For Atrial Fibrillation patients when an anticoagulant is indicated AND who have received a stent then triple therapy with DAPT and an anticoag is indicated. This is not well supported in the evidence when weighed against bleeding risk. Therefore dual therapy is preferred with any bleeding concerns (anyone over 75) and only for a finite period of time which is also not well defined but appears to be for one year in most cases.

- Anticoag and Antiplatelet combo for confirmed symptomatic Peripheral Artery Disease and ACS or PCI in the past 12 months
- Dual Anticoag and Antiplatelet therapy indicated in non-ST elevation Acute Coronary Syndrome (unstable angina and non-ST elevation MI)
- DAPT is indicated in patients with ACS (NSTE-ACS or STEMI) who undergo coronary artery bypass grafting (CABG) for 12 months following surgery

Aspirin:

- Doses of ASA 81mg are still not more effective for CV prevention but 325mg are used in some post CABG patients for up to a year post-op and it is still recommended to take 325mg if you are having an MI
- Enteric coated ASA doesn't reduce bleeding risk but may help dyspepsia