Transcript Antiplatelets After Stenting

Dr. Sharonne Hayes: Welcome back to the Mayo Clinic cardiovascular podcast series, interviews with the experts. I'm your host, Sharonne Hayes. I'm a non-invasive cardiologist and vice chair of faculty development and academic advancement for the Department of Cardiovascular Medicine here in Rochester, Minnesota. So today I'm joined by Dr. Malcolm Bell, who you all know because he's one of our regular podcast co-hosts. And today he's gonna be our expert. Malcolm is professor of medicine and he's vice chair of the cardiovascular department and an interventional cardiologist here in Rochester. His areas of expertise and focus have for a long time being critical care cardiology and then acute coronary syndromes, and then all of the things that go along with antithrombotic therapy and the complications. So that's what he's gonna be talking about. And in particular, Dr. Bell, who I'd love to welcome you here.

Dr. Malcolm Bell: Thank you for inviting me and happy to join you today, Sharonne.

Dr. Sharonne Hayes: So he's gonna be discussing the rationale for shortening the duration of dual antiplatelet therapy after coronary stenting and continuing P2Y12 inhibitor in preference to continuing aspirin. And obviously, you know, from a practice standpoint, the potential benefits might include a reduced risk of significant bleeding without increasing ischemic thrombotic events. So this is a particularly attractive thing for many of the patients I care for who have multiple comorbidities and needs for procedures. So Malcolm, we know that patients undergoing coronary stenting require dual antiplatelet therapy for varying durations. And recently we've been hearing about some changes that might lead to changes in the use of dual therapy. What's new? Give us some context.

Dr. Malcolm Belle: Well, Sharonne, I think first of all, I think you've already laid the, the groundwork with that to description of the, the, the, the needs and the, the of their patients. But, but maybe just allow me to, to highlight three things, which I think will just really give context to this discussion. The first is that, yes, bleeding really is an important thing for us to consider you know prior to the patient going into the cath lab, particularly in the acute coronary syndrome setting. It's all about the ischemic risk following the procedure. It generally then becomes more about a bleeding risk. So that's something that we, we just really need to focus on. The, the second thing is that there is no doubt that in the last few decades we've seen significant improvements in the secondary prevention world. And I think you are, particularly with the use and high use of high dose, high potency statins. I think this really changed the landscape. And the third thing is that stents struggling stents have got so much better, they're more effective than bare metal stance. They're safer. And we, we should not see stent thrombosis rates like we saw before. And then in with current generation, second, third generation drug lung stents, we shouldn't expect to see stent thrombosis rates of, of more than 1%. And in many trials we can see that this is actually about half a percent. So as you said, you know, there, there, there are some changes and the concept or the practice of what we call say short depth is becoming an increasingly popular strategy to try to

decrease the risk of bleeding while at the same time by preserving the, the benefit in terms of preventing ischemic and thrombotic events. And so I think that as we think about short, that what we're really talking about is are we, we will be shortening the duration of dual antiplatelet therapy or uh DAPT you know, for our uh viewers and listeners, but also decreasing the intensity. And particularly at that point of, instead of decreasing the intensity by discontinuing that P2Y12 inhibitor clopidogrel, ticagrelor, prasugrel, in fact discontinuing aspirin and then using the P2Y12 inhibitor as monotherapy. So that's what short depth is all about.

Dr. Sharonne Hayes: So I love when I get a cath report or a sign out, a dismissal summary that gives me some direction as a non-invasive cardiologist who's gonna be caring for these individuals. But I, I, you know, we're talking about dropping aspirin, we cardiologists love aspirin, and I often get questions from our primary care colleagues. So this seems quite radical. And tell us why it's safe and why we drop the aspirin and, and not the P2Y12 inhibitor.

Dr. Malcolm Bell: Yeah, well absolutely and no surprise that you get those questions or those run reactions. They're, aspirin is embedded in that mindset that this is the cornerstone of antiplatelet therapy, of ischemic heart disease. And I think for good reason, you know, historically, but this has been challenged more recently and there've been several trials, randomized trials, some of which were blinded. The majority though were open label, but very carefully done large trials looking at patients who've undergone PCI in various settings of stable angina or acute coronary syndromes, including STEMI that have then shown that in a randomized, your fashion, that whether it's a one month or three months that discontinuing the aspirin and continuing the P2Y12 inhibitors. So again, agents such as clopidogrel actually results in significant benefits in terms of decreased risk of bleeding, but at the same time with no penalty in terms of more ischemic or thrombotic events. And I think it's really important for people to also appreciate that historically when we first started doing, you know, using stents, there was no trial that showed that continuing aspirin as monotherapy compared to a P2Y12 inhibitor. The first one of course was clopidogrel was any different because that the charges wasn't done. It was always dual therapy versus aspirin. And so what we're trying to get at here is if all the benefit, or most of the benefit is with that P two, Y 12 inhibitor and aspirin's not adding anything to the benefit, which seems to be the signal from these trials, but only increasing the risk of bleeding, then we have to re-look at this. And that was really the impetus for these trials. And all of those trials showed very consistent results, everything in the right, in the same direction.

Dr. Sharonne Hayes: And it doesn't surprise me entirely because I have patients who are just put on, you know, even for, for secondary prevention, not even after a stent put on aspirin, and they don't tolerate it from a GI standpoint, and they seem to tolerate clopidogrel and the other medications much better. It, the bleeding that we are preventing is, is it disproportionately GI or is it just all bleeding?

Dr. Malcolm Bell: So it it, it's all bleeding. But you've brought up a really good point with, with your observation and that is that with GI bleeding, so bleeding from from the stomach actually appears to be less with clopidogrel than it is with aspirin. And I think you are just a reminder to everyone, you know, we should listen to what the surgeons tell us and our patients aspirin causes people to bleed. I mean there is, there is no question. And we know also that in people with had stents, and particularly in the setting of non STEM and stemi, if they have a bleed particularly early on, that is associated with a higher short-term and long-term mortality risk. So we should never underestimate the impact of bleeding in, in their patients.

Dr. Sharonne Hayes: So when and in which patients do you switch to monotherapy with a P2Y12 inhibitor?

Dr. Malcolm Bell: Yeah, so that's a, that's a really very good - practical question. And my colleagues and I, you know, starting to do a lot more of this in the last year or so, but it's, you know, it hasn't been, you know, universal. But I think that, as I said earlier, this is an increasingly popular strategy. I think the patients to start with are those who are at high bleeding risk. And these were for some of these trials actually were identified as high bleeding risk patients. The patient who's had an actionable bleed, I mean, that person who had a bleed three or four weeks after the standard placed. I mean, I, I think this becomes an easy decision. We've got really good data, you know, to, to, to support that. And I think also just thinking about the types of patients that you're dealing with. So there are two distinct categories of patients. One is the patient who has stable angina, comes in, walks in, has an angiogram, has PCI, same day dismissal, stable ischemic heart disease. The prognosis and outcome in those patients is all much better than it is in the second car compared to the second category. These are the ones with the non STEMIs and stem. So I think if people wanna get comfortable with this, these are the patients, you know, the ones that we're seeing as an outpatient, these are the ones that we should probably target. But we still have patients. I mean, we see a lot of bleeding in our a CS patients in new alluded to it earlier, older patients, more comorbidities. It's not infrequent. And very often your patients coming back and with bleeding neuro complications. And in fact our guidelines are really up to date with this. And in the last couple of years, it's now a two-way recommendation that you can switch to monotherapy with a P2Y12 inhibitor after that first one to three months. And as I said, the patients I would start targeting first would be the, those high risk patients for bleeding and an actionable bleed.

Dr. Sharonne Hayes: So, but for acute coronary syndrome though, isn't the recommendation still dual antiplatelet therapy for a year, even if they're not revascularized?

Dr. Malcolm Bell: Yeah, that's, that's, thanks for bringing that up. So as, and just as an aside, you know, to again put context to this stable angina, these are lower risk patients. And so the guidelines are still there, six months of dual antiplatelet therapy. But the guidelines have always stated, you know, that to continue for six months or 12 months, just as you said for a a CS patients. So the non

standing STEMIs, that's still the recommendation, 12 months of dual antiplatelet therapy. But there was always a caveat, as long as the patient is not at increased risk of bleeding and the patients who bled, and then you felt that you had to stop something, it was usually the P two Y 12 inhibitor, these trials, although they didn't compare it to aspirin alone. And that, I think that's something we need to, to look out for these trials would really challenge that and say instead of stopping the aspirin, you should stop the P2Y12 inhibitor. And so type of patients that you're seeing in your clinic who may have had a, you know, non STEMI a few weeks ago, we may say, you know, JUUL antiplatelet therapy for one month, three months, but then we're gonna switch to monotherapy for the P2Y12 inhibitor. And well among that I, I think we have to be really cautious about stopping the P2Y12 inhibitor in those higher risk a CS patients within the first six months. 'cause we do not have any good safety data of using aspirin as monotherapy in those patients, if that makes sense.

Dr. Sharonne Hayes: So do you have a preference or is it a patient match for particular P2Y12 inhibitors in this setting where you're thinking you may be stopping the aspirin?

Dr. Malcolm Bell: Yes, I, I think it's important to point out that the trials, which you know, have been conducted, probably two thirds of those were with the use of clopidogrel. And some of our listeners of viewers may say, well, that's sort of the weaker P two, Y 12 inhibitor. That's maybe not necessarily the case. And about a third of them were with reor. So I think either of those two agents, we don't have enough data with pagle, but I suspect it would be the same as we see with Reor and clopidogrel in our practice. We have defaulted a number of years ago to using clopidogrel as our default P2Y12 inhibitor in all of our patients. And, and, and I know in other practice that they may be using trol or there's really good data with karrol or to be used as monotherapy. So those are the two agents that I would recommend, but I'm not sure that we can say that pagal would be or should or should not be used as monotherapy.

Dr. Sharonne Hayes: So Malcolm, what I'm seeing is, so we do six, 12 months of monotherapy of say, clopidogrel. So we've done their, their course and what I, I'm actually, I've done a few times and I'm seeing more commonly is not putting them back on aspirin, which I think is what we used to do, but just continuing the clopidogrel, what evidence is there for, for doing that and what should we be thinking about in terms of making choices for those patients?

Dr. Malcolm Bell: Yeah, it's a, it's a great question, Sharonne, because I think that while general cardiologists primary care, you know, providers, physicians, nurse practitioners, et cetera, they may be sort of comfortable saying, okay, we're gonna go with monotherapy for three months, six months, 12 months, but at 12 months we are go, we, we know that patients should be on aspirin. And we, we know that we have data now showing that aspirin actually may actually cause more, more bleeding than then and an agent such as clopidogrel. But we have really good data. If we go back almost three decades, the Capri trial, very large trial, about 20,000 patients as I recall, they randomized patients with vascular disease, many of whom had, you know, coronary disease and

had MIs and it had procedures that wasn't sort of a stent population, but many of these patients may well have had stents and they randomized patients to clopidogrel at aspirin. And these are stable patients in sort of long-term secondary prevention. And as I said, it was double blinded, a really well done study. And it showed that clopidogrel was superior to aspirin in preventing ischemic and thrombotic events. And maybe unexpectedly for many of our viewers and listeners, there was no increased risk of major bleeding in the co comparable treated patients. And in fact, it was the same with aspirin, you know, compared to aspirin. So you got the benefit of clopidogrel

Dr. Sharonne Hayes: Without excess risk,

Dr. Malcolm Bell: With no excess of bleeding. Yeah. And I think that that was, and that's something that's probably gonna take a while to get used to, but this is really what the challenges us. And, but anyway, I I hope that sort of answers your question there, but,

Dr. Sharonne Hayes: And I think that's very helpful, particularly when we have aspirin intolerant patients, aspirin allergy patients where we may be used to where we worry that we weren't doing the right thing for them and now we can, you know, I think be more comfortable with that.

Dr. Malcolm Bell: Yeah. And this, and there's one trial and it was a Korean study where, you know, in stable patients after PCI and acute myocardial infarction in many of them, they again did a similar thing. It was open label, but they randomized patients to considerable or aspirin. And so no one on dual therapy at, you know, after pure six, 12 months or so. And they showed the same thing as in Capri, that clopidogrel actually prevented more events than aspirin did. But in this study, there was actually significantly less bleeding in the patients who received clopidogrel versus aspirin. So I think there's really challenges what our belief about the risk of bleeding is with aspirin.

Dr. Sharonne Hayes: Well, I think the other barrier that we've overcome is now that clopidogrel is so affordable, it is still prescription, but we are not, for those individuals who dropping any copay or, or high drug cost, it was, is really important at that year. And that often I think, drove decisions and still does, obviously. Yes. And, and now I'm seeing that there's less resistance from, from that side.

Dr. Malcolm Bell: Yeah, I mean it's, nothing's as cheap as aspirin, but maybe all aspirin is doing is just increasing your risk of bleeding. But you're absolutely right. I mean, once clore went, you know, generic, this is really quite an affordable drug. It's very interesting. We've talked about valor, I mean the out of pocket ex cost for Tibor, depending which state you're in, you know, could be up to $500 a month. And, and we're talking about, you know, less than a hundred dollars for clore and it's actually not much more expensive for ugal. But by the way, now if you've got your good insurance,

good copay, that's fine. But, but someone's paying for this, you know, it's insured insurance company and your premiums and, and the government.

Dr. Sharonne Hayes: We are,

Dr. Malcolm Bell: Yeah. So I, I just think you, when, when you actually show those numbers in front of you, and well, of course, you know, we have patients who don't have, you know, good protein, they put them on a, an expensive agent up such as ker or that's really a, a non-starter. I mean, they're gonna be calling up very, very quickly and wanting a, a, a cheaper agent.

Dr. Sharonne Hayes: Right. Well, I'm just really appreciative that my colleagues in the Mayo Clinic cath lab, after doing a procedure have been really good about specifying, because we are more customizing this. I can see that. And it's, you know, and I know our primary care, they read the dismissal notes and they know what to do and they're getting used to it. So I am, I'm hoping that that practice of being mindful and individually individualizing our recommendations, taking both bleeding and robotic risks, and using the evidence that you've presented with us to us today, we'll just keep, keep getting greater. And I'm hoping it's happening at other centers.

Dr. Malcolm Bell: Yeah, I mean, it'll be a slow sea change, but, and I think people get more and more comfortable, and as I said, you know, all of the trial data results all very consistent in, in this direction.

Dr. Malcolm Bell: I just wanna thank you, Malcolm, for trading seats Being in the expert seat today. It was really great to have you.

Dr. Malcolm Bell: Oh, it was my pleasure. Thank you.

Dr. Sharonne Hayes: Well, this wraps up this week's episode of Interviews with the Expert. Thank you, Dr. Bell again for discussing this important topic. We look forward to you joining us again next week for another interview with the expert, maybe with Dr. Bell. Be well.