



SPRING 2019 PULMONARY UPDATES

The Impact of Anticoagulation Use on IPF Patient Outcomes: A Warning about Warfarin

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We performed an analysis of the Pulmonary Fibrosis Foundation registry and our specific question was, does the use of anticoagulation and patients with IPF have any future or have any impact on their outcomes? And I think the basis for this study was really looking at in Japan, there had been a study that reported the use of heparin during acute exacerbation, perhaps people had better outcomes. And then they went, they did a study here randomized control study here in the States, as we know, with warfarin for patients with IPF without any reason for anticoagulation. And that was stopped early due to harm. So I think there's been some residual questions about the role of anticoagulation in this population. Using the Pulmonary Fibrosis Foundation registry, we were able to collect information on patients with IPF and find out how many kind of real world patients out there are on anticoagulation and what kinds and so it looked like about 91% of patients were not on anticoagulation. And with IPF in the registry, but then it was a pretty even split between those on DOACs, and those on warfarin, about four and a half percent each. And then we just looked at the outcomes data to date, which again, the registry hasn't been in existence that long. So we looked at transplant, we looked at all-cause mortality for the follow up time that we have. And it did seem to be some separation between those who were on anticoagulation and not on anticoagulation, meaning there seemed to be less or reduced transplant free survival and those on anticoagulation. And even with a multivariate analysis, adjusting for factors like coronary artery disease and atrial fibrillation that that may be their indications for being on anticoagulation and age. It did seem like the use of anticoagulation, there was a signal there. When you split it out between warfarin and the novel oral anticoagulants, the warfarin really seemed to drive the signal in terms of worse outcomes, because after adjusting in the multivariate analysis, the use of DOACs was not different in terms of transplant free survival compared to the placebo or those not on the anticoagulation, whereas warfarin still appeared to be associated with reduced transplant free survival. So I think for the clinicians that's interesting and provocative, its registry data. It's not a prospective randomized control trial. But it makes you wonder if there's something inherent about warfarin, maybe it's the difficulty managing the INR in this elderly group of patients with IPF and then they're at risk for different GI bleed or bleeding events, etc. But it does seem to raise the question of if patients are on anticoagulation for an appropriate indication and at this time, we don't believe IPF alone would be an indication, but for atrial fibrillation or another reason, it makes us maybe take pause in starting warfarin and perhaps choose an oral anticoagulant, direct oral anticoagulant preferentially. I think clearly we need to do perspective trials to gain more insight.