The Latest in IPF: Implications for Clinical Practice

Dr. Lisa Lancaster: Hi, I'm Dr. Lisa Lancaster. I'm here in Toronto with the pilot team, and with Dr. Maria Padilla reporting on what's new in IPF. Maria, can you comment on biomarkers and how that research may be influencing our treatment and diagnosis ultimately of IPF?

Dr. Maria Padilla: Well thank you Lisa, it's nice to be here with you, and enjoying Toronto. The biomarkers, and the new genomics and proteomics that are coming out of the conference, as well as in the literature is the most exciting thing, I think, that is happening in IPF. I think that, with the help of these biomarkers and the molecular biology of the disease, we will be able to get to the precision medicine that we're looking for in order to treat our patients.

Coupling the biomarkers with the CT scan, and with even the transbronchial lung biopsy, we are able to more precisely diagnose IPF or UIP, and be able to treat our patients more appropriately. It’s wonderful to have this and it's very exciting, so I'm looking forward to hearing more about these bio markers and the molecular biology of this disease.

Dr. Lisa Lancaster: Absolutely. I think, as we understand this injury pattern better, understand the genetics, we'll be, just like you said, tailoring therapies toward our patients, depending on those biomarkers and the genetics that the patients have.

Dr. Maria Padilla: Absolutely. So exciting to see that we can make even earlier diagnoses, if we couple these, they can occur at a time when patients are relatively asymptomatic, and we can follow them to determine when it's the right time to intervene with the medications and alter their course.

Dr. Lisa Lancaster: Absolutely, that's a good point, because what we have now slows disease progression, we haven't had anything to completely abrogate the disease yet. So trying to diagnose patients as early as possible is critical so they can maintain as much lung function as possible for longer. I'm hoping to hear more at the conference about biomarkers, ways to diagnose patients, short of VATS lung biopsy, and on the horizon are the cryobiopsies. But certainly, how they're done, the freeze time, the technical aspect of it, really needs to be honed in for that.

Dr. Maria Padilla: Yeah, there is a learning curve.

Dr. Lisa Lancaster: Absolutely.

Dr. Maria Padilla: These procedures, they're exciting, their potential to offer our patients, but some of the studies that are being done now, looking at the bronchial alveoli. So we're going back to the future with some of these things, where are before we used to say that we needed a VATS, now perhaps we'll be doing less invasive procedures, and being more accurate in our diagnosis of this.

Dr. Lisa Lancaster: Right, and I think those less invasive procedures are certainly like you said a service to our patients, because of the risk of exacerbations with surgical lung biopsy, maybe the anesthesia, we don't really understand that. But it all points to the direction that we really need to continue referring our patients to Pulmonary Fibrosis Foundation Centers of Excellence for all those points that you brought up, not just general clinical care, but clinical trials and consideration for transplant.

Dr. Maria Padilla: Absolutely. Those are things that we discuss, at the ILD center, and keeping those registries going is excellent, a way at least longitudinally seeing the natural course of this disease, or the course effected by the interventions that we do. There are various registries across the country, and there is the Pulmonary Fibrosis Foundation registry, which is probably one of the largest and very helpful and robust in providing some information, but there are other centers who also have. I think we need a consortium of registries, so that we all collect the same data that is going to be important, there should be a mandatory data collection, so that we can all, across the various registries, discuss the commonalities that we find for these diseases. So, I think it's an exciting time to be in ILD and in IPF particularly.

Dr. Lisa Lancaster: Absolutely, the more we learn about these patients, the better that we can care for them and their disease. The learning curve is steep right now, and we hope it gets even steeper, and we make greater gains in the next certainly few years or so with this disease.

Dr. Maria Padilla: I think that the high resolution CT scan has taken us to a different level with this disease, but in addition to that, now we are coupling it with things such as the optical coherence tomography that helps narrow the diagnosis or more precisely point to the diagnosis. So, these techniques, and you know, the ability to have artificial intelligence applied to looking at a CT scan and doing the various techniques and technologies that are available, and apply them to interstitial lung disease. We have all of this for COPD, for emphysema and things like that, but we are now moving to the area where the CT scan is going to provide a lot of information.

Much more granular, at the point of knowing what the fibrosis level is before we can see it radiographically, because we know that it exists before the CT scan shows it.

Dr. Lisa Lancaster: Absolutely, so really the big message is for everyone to stay tuned, as the information that we learn about idiopathic pulmonary fibrosis and how we manage our patients, hopefully accelerates over the next two years.

Dr. Maria Padilla: Absolutely.

Dr. Lisa Lancaster: Maria, thank you so much.

Dr. Maria Padilla: Oh it's a pleasure Lisa seeing you again, and being here.

Dr. Lisa Lancaster: My pleasure too, thank you.