The Clinical Importance of Interstitial Lung Abnormalities

Okay. In the session on clinical interstitial lung disease experienced from the multi-ethnic study of atherosclerosis. Dr. Anna Podolanczuk from New York City described the challenges related to the presence of interstitial lung disease in the setting of a subclinical disorder. So it's a challenge for clinical practice. So Dr. Podolanczuk from New York City, she actually introduced the concept of ILA. ILA means interstitial lung abnormalities. And another very important and specific word, which is subclinical.

So it's very clear now that we are moving another step forward from early pulmonary fibrosis, because patient with early pulmonary fibrosis, they have symptoms. These patients with ILA, interstitial lung abnormality, they do not have symptoms. They are subclinical. So it's an earlier stage of pulmonary fibrosis and many of these patients, they are detected incidentally. Now she showed that a very large, the so-called MESA study, which is multi-ethnic study of atherosclerosis. By doing a high resolution CT scan of the chest, identify a significant number of patient with subclinical interstitial lung abnormalities.

Now this is opening a completely new field and Anna was very, very, very good in dissecting these problem. Because what to do when you have a patient which is not symptomatic, but clearly is showing something in the high resolution CT scan of the chest, which we know is increasing the morbidity, the mortality, the long-term mortality, and probably can be early UIP. So can be early idiopathic pulmonary fibrosis.

This is opening a quite a new avenue, new arena. And she highlighted the fact that how is important is to follow up these patients in clinical practices and not to let them go. In particular, if they are young.

Clinical practice, we need to incorporate the presence of interstitial lung abnormalities in the context of a single patient. Even in patient without symptoms, without respiratory symptoms, because we know that the presence of pulmonary fibrosis, even if asymptomatic, is a risk factor for increased mortality over time. So I think that we need to make, in particular again, chest radiologists, aware of how important it is that they report correctly the presence of signs of fibrosis in the lung of our patients.

Because many times the radiologists are looking for something else. Maybe metastasis, maybe cancer, maybe emphysema. And very often they do not report the presence of signs of fibrosis in the lung. Now it's important because we know from large longitudinal studies that the presence of these signs are related to an increased risk of mortality over time. In the talk, “When and Why Interstitial Lung Abnormalities are Clinically Important,” Dr. Rachel Putman from Boston, in the US, clearly identified some signs that may identify an increased relevance for clinical practice of some interstitial lung abnormalities.

So clearly, the presence of interstitial lung abnormalities, even when they are detected incidentally, they need to be put into a clinical context. The older the patient, the more likely we are dealing with IPF. The symptoms of the patient, if there is any, of course, and the high-resolution CT features of the patients. In particular, the fetus of a fibrotic phenotype.

Again, the presence of micro honeycombing, minimal honeycombing, traction bronchiectasis. The fact that the interstitial lung abnormality are mainly subpleural, bilateral, basal. These are all red flags that should alert both their chest radiologist, and in particular, the pulmonologists on not to give up on these patients. At least to monitor these patients. So interstitial lung abnormalities are particularly important when the setting is the setting which is making most likely the diagnosis of IPF. Older patients, male, former smokers. These are the settings.

So again, I think this is a field in which the ability of the pulmonary physicians to assess the whole picture, not only the high resolution CT can become important. Of course, lung function testing is very important. And if we just see a minimal decrease in diffusion capacity, that would be a hint towards the clinical relevance of what we've been finding incidentally.

We are having now data from multiple studies from multiple countries, longitudinal studies showing that interstitial lung abnormalities constitute a risk factor for the development of IPF and for increased mortality. So I think we are at a stage now where ILA should be reported, should be considered clinically. Now we do not have yet the best protocol management and secondly, we don't have a treatment. What to do with ILA? There are no trials in patient with ILA. They will come that there are not at the moment.

So I think that currently, it's good clinical practice to identify ILA, to report them, and to follow the patients in the best way that the single physician thinks is relevant. Very important to include these patient into clinical trials, which are ongoing, observational. And in the future, I hope there'll be interventional clinical trial to see which patients will progress. And if there is any treatment, of course, that can stop that progression.