

Dr. Shousuke Sone at the 2006 Asahi Cancer Prize

TRANSCRIPT

(Applause.)

Thank you for the introduction, my name is Sone. I feel very honored to be receiving this prestigious award and I would like to express my continued commitment towards the advancement of lung cancer screening.

Carcinomas of the lung, liver and pancreas currently pose a big problem. Lung cancer especially has a high incidence- and death- rates, with a very low, poor survival rate. However, I believe that when the low-dose CT screening, for which this prize has been awarded to, is distributed more in the society, lung cancer death rate can be dramatically reduced.

The five-year survival rate of patients who do not receive lung cancer screenings is approximately 10% to 15%. Standard lung cancer screening techniques involving chest x-rays, though the results differ depending on the region, is said to improve it to nearly 30%. On the other hand, CT scans for lung cancer have an 80-90% survival rate; we had nearly 90% in Nagano (for all diagnosed cases of lung cancer) in our program conducted in 1996 through 1998. If prolonged, it may be improved to attain even more than 90%. Consider that the 5-year survival rate for the previous method by chest radiograph and sputum cytology has been nearly 30% and the 5-year survival rate for a low-dose CT screening may be 90% and compare these figures with the common passing grade of 60% in the society, then you can understand a big difference between the standard method of screening by chest radiograph, in which we are hopeless to come up to the passing grade, and a low-dose CT screening, which enables us to attain a much better result. The distinction is sharp and I hope to push our luck without hesitation so that the death rate from lung cancer will decline as the use of the CT scan becomes more widespread.

We should never forget that our participants to lung cancer screening, in general, presume and hope that the screening could detect their cancers at the early, curable stage. However, the traditional standard lung cancer screenings have scarcely met person's expectations. Very important things in conducting any kind of cancer screening program are detection of the disease at a curable stage and application of an effective test for this purpose; however, in the traditional screening for lung cancer in the country, these kinds of things have not been given serious consideration by the responsible person in charge of planning or conducting the screening.

Actually what you should remember in conducting screening for a curable lung cancer is an appropriate target tumor size; it is important to detect a cancer, at probably less than 15 mm,

and to use a test to be able to do this job sufficiently. If the cancer is partly solid or solid, the target size should be 10 mm or 15 mm, and if it is nonsolid, 15 mm to 20 mm may be enough. If you detect lung cancer at a smaller stage than these and treat it, the 5-year survival rate will be 90% or even higher as I believe. This might be the key point to help advance lung cancer screenings in Japan.

Cancer screening has been conducted for a long time in Japan; this seems to represent a good aspect of the Japanese medical care and culture. We have a good example in the screening for gastric carcinoma. We experienced a great leap in the 1960s and there were great achievements in improving survival from the disease. It was done by the introduction of double contrast method, which could demonstrate fine mucosal architectures in the stomach. Until then examination of the stomach had been conducted by checking abnormality of the contour of the stomach filled with Barium meal; meanwhile the newly developed double contrast method at that time could demonstrate internal, mucosal, architectures of the stomach, by a small amount of Barium and ingested air. In other words, the imaging methods for the carcinoma of the stomach has progressed very dramatically to find effectively small, curable cancers by the introduction of the test to check internal, density variation of the stomach. We have already achieved this qualitative change in the 1960s. While with lung cancer screenings we are about 40 years behind that of stomach cancer methodologically as we employ chest x-rays as the screening test. Theoretically speaking, though some of you may have misconceptions about the chest x-rays; though it looks to show all anatomical structures, the chest x-ray is basically providing mainly the silhouette of the complex anatomical structures of the chest and has a serious shortage in demonstrating density variation, which is very important to permit detection of early, curable lung cancers. CT on the other hand has advantages to show both margin and density fluctuation at all around the chest. If the filling radiograph with Barium meal of the stomach is to the conventional chest x-ray, then the double contrast examination is to CT scans. Revolution in imaging modalities with lung cancer is 40 years late, as compared with that of stomach cancer. I hope those of you in the audience today, many of whom are key persons in their respective regions, will begin using the CT scans and will continue to support it so that it can further enrich and make prosperous that part of Japanese culture. These are my hopes. And now I will end with a thank you, having shared my hopes with you. Thank you for giving me the opportunity to speak before you today.

Transcribed and translated by  
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