

# Kikuzo News Letter

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## Lung sound (breathing sound) performs auscultation assuming disease! Stick to the auscultation site!



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### History of auscultation

It has been 200 years since French Laennec invented the stethoscope (1). When I am a medical outpatient, when I have a chest auscultation or palpation of the abdomen, I say, "Oh, even after a long absence

The only reason that auscultation did not go away for 200 years was not only the diagnosis of disease and the evaluation of treatment, but also a tool to connect the patient and the doctor. Is an art that can't be replaced by others, no matter how advanced the equipment is (2).



Laennec called all secondary noises except the pleural fricatives rale, and actually used the Latin rhonchus (plural rhonchi) in front of the patient. The reason for this is that the word rale is called death rattle, meaning the throat of the patient's throat just before he died. After that, there were many twists and turns in the classification of auscultation sounds, but at the 10th International Lung Sound Conference held in Japan in 1984, the classification of lung sounds and a table of terms in each country were compiled. Conferences are the cornerstone of the current international classification (3).

### Improving physical findings from the accumulation of successful experiences

In a medical consultation, no matter how much you know about the famous physical findings of each disease listed in the textbook, it is meaningless if you do not experience it yourself. That is true for both heart sounds and lung sounds. In other words, repeating the small success experience of "recognizing and hearing" the characteristic heart sounds and lung sounds of each disease is considered to be the only way to improve the clinician's skills. However, it was a problem until now that I couldn't improve my skills without Dr. On the other hand, in recent years, several books on auscultation with a CD have been published, and you can also watch videos on medical examination on youtube. The era of doctors stealing their skills by silently looking at their backs, like a traditional craftsman, is over. It has become.

### Auscultation site setting

1. For example, auscultation at the neck is important for lung / breath sounds. Coarse crackles, wheezes and rhonchi from the lung parenchyma (airway) diffuse into the neck. Coarse crackles reflect intratracheal secretions, wheezes and rhonchi each suggest a narrow, thick airway narrowing. Sometimes there are asthma attacks where wheezes are heard only in the neck. In addition, auscultation at the cervix can lead to a diagnosis of airway narrowing due to a tumor or goiter, a foreign body in the airway, or even cardiac asthma.

2. In patients with sinusitis bronchial syndrome or chronic airway lesions, you often hear the sound of bubbles in the airway of the middle lingual tongue, that is, coarse crackles. Therefore, auscultate around the 4th to 6th ribs in the anterior chest and the middle axillary line in the lateral chest.

3. Both lung floors are common sites of interstitial pneumonia with or without underlying disease. Especially on the dorsal side, a slight fin crackles can be detected when listening while increasing the inspiratory effort in a sitting position.

### Evaluate from multiple perspectives

There is no doubt that auscultation skills are important, but the patient's examination should include chief complaint, medical history, medical history, physical findings,

Sometimes a multidisciplinary assessment, including imaging findings, is important. For example, mycoplasma pneumonia, one of the most common forms of community-acquired pneumonia, often has poor auscultation findings despite flashy image findings. A small number of coarse crackles, fine crackles, and rhonchi triggered the diagnosis, and the discrepancy from the imaging findings provided a basis for more suspicion of mycoplasma pneumonia (4).

### Practical training Auscultation speaker "Kikuzo"

For example, in pneumonia, the ra sound changes dramatic every day. The breathing sound of the elephant auscultation site to be heard includes the breathing sound of the actual patient, and the reproduced sound is almost the same as the sound actually heard and is real. It is a practical tool that allows you to train while being aware of the auscultation site and paying attention to the rales and their changes.



1. Ken Saratani. 200 years since the stethoscope was invented. 2016;32(11):19.
2. Sakula A. R T H Laennec 1781--1826 his life and work: a bicentenary appreciation. Thorax. 1981;36(2):81-90.
3. Mikami R, Murao M, Cugell DW, Chretien J, Cole P, Meier-Sydow J, et al. International Symposium on Lung Sounds. Synopsis of proceedings. Chest. 1987;92(2):342-5.
4. Saraya T, Ohkuma K, Tsukahara Y, Watanabe T, Kurai D, Ishii H, et al. Correlation between clinical features, high-resolution computed tomography findings, and a visual scoring system in patients with pneumonia due to Mycoplasma pneumoniae. Respir Investig. 2018 Jul;56(4):320-325