

# Exhaled breath condensate

## Opinion

Many techniques of the study of exhaled air have gone from being very enthusiastic to be in pulmonary function laboratories, systems and inventions that could not be brought into clinical practice. The exhaled air is basically composed of water vapor and substances apparent dissolution in this liquid medium and a number of volatile organic compounds. In theory these chemicals reflect the functional state of lungs and other tissues. These substances (both volatile and nonvolatile) can be analyzed by condensation for example exhaled air passing through a cooling unit. The collection of exhaled breath condensate is a noninvasive, simple in concept but complex in its implementation technique.

It is a technique with some interest in patients, connected to mechanical ventilation invasive type, but in conscious patients, while requiring minimal cooperation, the systems are not able to get significant samples, unless the patient spend a few minutes online team exhaled breath condensate. But some interest, little discussed in the articles, is the great capacity to be a reproducible technique in time, and that does not require special facilities or specially trained staff. The exhaled breath condensate, can be obtained with craft equipment, whose cost does not exceed \$30, they are also portable.<sup>1</sup>

The exhaled breath condensate increased expectations in the study of inflammatory lung disease despite the lack of sufficient evidence on the standardization of sample collection and validation of biomarker analysis on samples either from healthy individuals or patients with pulmonary or systemic diseases. The search for an immediate application for the procedure led to a degree of confusion regarding the methods for collecting, storing and processing samples of exhaled breath condensate. Unfortunately, the fashions of the devices pass and

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give them little opportunity to mature it is likely that such techniques can be merged with methods such as the determination of compounds by methods such as the nose and the electronic tongue. Able that the future lies in the fusion of techniques and not in his vision as isolated techniques.

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## Conflict of interest

The author declares no conflict of interest.

## References

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