

ARE SIMPLE INHALATION TESTS (WITHOUT GRAPHIC RECORDINGS) VALID?

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Inhalation tests imply the use of an apparatus, a drum with wheels, levers, tubes, a mouth piece, the assistance of a technician, the unquestioned cooperation of the patient and plenty of time.

This is not the only drawback involved but, inserting a mechanical contraption between the investigator and the patient severs an important link. Observation of the patient is still the basis of medicine and we must not forget that one of the aims of provocation tests is the observation of the patient under an artificial stress. The influence of this stress is evidenced by an expression of discomfort, a shallow breathing, a feeling of tightness in the chest and, above all, by the appearance of a respiratory wheezing which is easy to detect.

But does wheezing always mean that the test is positive?

We have read our last 248 recordings and have checked them to see if there was or was not a close concordance between the figures recorded on the drum (and/or on the dial of the pneumometer) and the presence or absence of rales.

I shall not go into details but I shall mention that only 2 out of 33 dust positives cases, 2 out of 24 pollen positives and 3 out of 34 fungi positives did not show any signs of wheezing. On the other hand, respectively 2, 1 and 3 cases evidenced a slight wheezing although all written recordings were consistently negative. In short, in 95 per cent of the cases, presence or absence of wheezing was in agreement with the pneumographic readings.

For the last five years, we have been using this simplified technique in all of those routine inhalation tests which do not need precise quantitative research.

Certain useful hints have been reached at, mostly by the hit and miss method.

1. Extracts, strong enough to produce a definite reaction in the sensitized patient should be used because only those patients, whose sensitivity to a given allergen is questionable and in whom the skin tests and the history has not given a sufficiently clear information, should be submitted to the inhalation test.

An aerosol of the extracting fluid is first given during two minutes. If no wheezing occurs after 20 minutes, the allergenic solution is inhaled, also during two minutes. Auscultation of the chest takes place every 10 minutes or so during the next half-hour. As soon as wheezing can be heard distinctly (usually after 10 or 20 minutes) the test is considered to be positive and the experience is ended by an aerosol of alupent.

2. An important point is that, before the test, the patient should be free from all wheezing. If he has even the faintest rale, cortisone should be taken until all signs of bronchial obstruction have disappeared. It has been proven many times that cortisone has no influence on the capacity of the sensitized bronchial tubes to react immediately to a specific allergen.

3. In a few rare cases, the test is obviously positive but no rales can be heard. This happens when dilated emphysematous air-sacs of the lung tend to muffle the sounds produced in the bronchi. For this reason, patients with emphysema should not be tested by this method.

This simplified method of testing by inhalation produce good results but we must keep in mind that it is only one of the proceedings which we must use to analyse the allergic status of a patient.

SUMMARY

The author advocates the use of a simplified routine procedure of the inhalation test. Positivity of the test is evidenced by the presence of bronchial rales.

In 95 per cent of 248 pneumographic curves, presence or absence of auscultatory signs were in agreement with the written recordings.

RESUME

L'auteur préconise d'employer, dans la pratique courante, une technique simplifiée du test d'inhalation où la positivité éventuelle de l'épreuve est signalée par la présence de râles bronchiques.

Dans 95 per cent de cas, la présence ou l'absence de signes d'auscultation correspondait aux données fournies par l'enregistrement pneumographique.

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