Definition of a Cough Swab

A cough swab is a laboratory test done to identify germs in the lungs that may cause infection in the lungs. It is a strong predictor of a sputum culture\(^1\).

How the test is performed.

The ability of the test to detect pathogens in the lungs is enhanced if the cough swab is performed after a Physiotherapy session or the administration of hypertonic saline\(^1\).

The patient should be instructed to tilt their head back and open their mouth wide. A sterile cotton swab is placed at the back of the throat under the Uvula, preferably not touching the posterior pharynx. You should then ask the patient to cough. They need to resist gagging and closing the mouth while the swab is in their mouth.

If the patient is too young to co-operate with a cough, then you may place the swab against the posterior pharynx and stimulate a cough.

The physiotherapist obtained cough swabs by asking the patient to cough onto a cotton tipped swab placed in under the uvula, but not touching the posterior pharynx.

Structures of the throat include the esophagus, trachea, epiglottis and tonsils.

1. Use of cough swabs in a cystic fibrosis clinic
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Abstract
We audited prospectively 322 cough swabs taken from cystic fibrosis children and compared cough swabs with concomitant sputum samples in 30 expectorating patients. A positive cough swab is a strong predictor of sputum culture. However, a negative cough swab does not rule out infection. Persistent symptoms should be further investigated.

2. Clinical value of obtaining sputum and cough swab samples following inhaled hypertonic saline in children with cystic fibrosis.

Abstract
Prompt detection and treatment of lower respiratory tract infection are essential in the management of patients with cystic fibrosis (CF), who often have signs or symptoms of respiratory infection without any pathogens being isolated from sputum or cough swab specimens. The aims of this study were to assess the efficacy and clinical value of obtaining sputum and oropharyngeal cough swab samples following induction with hypertonic saline (HS) in this group of patients. Forty-three outpatients with CF, mean age 7.2 years (range, 1.8-12.9 years), were recruited over a 2-year period. Nebulized salbutamol was administered, followed by 6% HS. Sputum was preferentially obtained before and after HS induction if possible. If the patient was not able to expectorate, oropharyngeal cough swabs were taken instead. Four patients were able to expectorate sputum before and 19 after HS induction. The procedure was tolerated in 41 of 43 patients. Pathogens were isolated from 13 patients' HS-induced samples, but not from their corresponding preinduced specimens, and 4 patients' preinduced specimens cultured organisms which were not identified from their HS-induced samples. Significant changes were made in the management of 13 (30.2%) patients directly resulting from the positive culture of pathogens only from HS-induced samples. Cultures from oropharyngeal cough swab or expectorated sputum specimens following inhalation of HS provide additional microbiological information which is of clinical value and may lead to changes in patient management.

Definition of a Throat swab culture
A throat swab culture is a laboratory test done to identify germs that may cause infection in the throat. It is most often used to diagnose strep throat.

How the Test is Performed
The patient should be instructed to tilt their head back and open their mouth wide. The health care provider rubs a sterile cotton swab along the back of their throat near the tonsils. The patient needs to resist gagging and closing the mouth while the swab touches this area.

The health care provider may need to scrape the back of the throat with the swab several times. This helps improve the chances of detecting bacteria.
A throat swab can be used to determine if Group A Streptococcus bacteria is the cause of pharyngitis in a patient.

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