

## Innovative Test on Sore Throat Patients Leads to Decrease in Antibiotic Use



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According to research published in the British Medical Journal, a new 'clinical score' test devised for patients with a sore throat could lower antibiotics prescription rates and lead to faster patient recovery.

In a bid to determine whether to prescribe patients with an antibiotic immediately or to give them a delayed prescription, and comparing this approach with simply offering a delayed prescription, a team of researchers based at the University of Southampton used the five-item FeverPAIN score in a study funded by the National Institute for Health Research (NIHR) Health Technology Assessment (HTA) Programme.

The FeverPAIN score includes the following indicators: fever in the past 24 hours, a pus infection, rapid attendance (within three days), inflamed tonsils and no cough or cold symptoms.

Study results indicated that through this testing method almost 30% less antibiotics were prescribed, and even though patients in the FeverPAIN score group used less antibiotics, they still showed significantly speedier symptom improvement over the other patient group.

Using an in-practice rapid antigen test which detects the Lancefield Group A Streptococcus (the most common bacterium to cause sore throats) together with the FeverPAIN score did not, however, lead to any additional antibiotic use or symptom improvement.

The Professor of Primary Care Research who led the research, Paul Little, confirms that the trial results demonstrate the effectiveness of the test, stating that the clinical score targets antibiotics more effectively and can help convince patients that an antibiotics treatment is not necessary.

Little goes on to say that the FeverPAIN score allows healthcare providers to exclude likely streptococcal infection in more patients.

Comparing the use of the FeverPAIN clinical score, with or without rapid antigen testing, with a delayed prescription (patients were told to pick up a prescription three to five days later in case their symptoms were unchanged or worsened) included over 630 patients with an acute sore throat.

Patients who showed a minimum of four of the clinical features of the FeverPAIN test were immediately prescribed antibiotics, whereas those with two or three features were offered a delayed antibiotic prescription and patients showing none or one were not prescribed antibiotics at all. Compared with the delayed prescription approach, antibiotics use was reduced by 29% in the frame of the study, with one third of the patients in the FeverPAIN score group declaring a rapid sore throat improvement within two to four days.

Dr Michael Moore, a GP and a reader in primary care research at the University of Southampton and study co-author, recommends that when examining acute sore throat patients, doctors should consider the use of a clinical score to target antibiotic use, adding that the additional use of a rapid antigen test did not show a clear advantage. "If you select those at the highest risk of streptococcal infection then antibiotics can be more targeted at the people who are most likely to get symptom benefit," Dr Moore concluded.

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