

### **PS1.033**

#### **Role of point-of-care tests in adults with acute haryngitis in primary care**

*Olga Calviño Dominguez(1), S Hernandez Anadon(1), C LLor Vila(2), S Crispi Cifuentes(1), A Moragas Moreno(1), F Gomez Bertomeu(3), L Palacios Llamazares(1), M Hernández Anadón(4), JM Cots Yago(5), C Bayona Faro(5)*

*(1) Institut Catal de la Salut, CAP Jaume I, Tarragona, Spain*

*(2) Institut Catal de la Salut, CAP Jaume I, Barcelona, Spain*

*(3) Institut Catal de la Salut, Hospital Joan XXII, Tarragona, Spain*

*(4) Institut Catal de la Salut, CAP La Mina, Barcelona, Spain*

*(5) Institut Catal de la Salut, CAP Salou, Tarragona, Spain*

*Corresponding author: Dr Olga Calviño Dominguez, ICS, Primary Health Center, Tarragona, Spain. E-mail: olgacd@comt.org*

**Background & Aim:** The aim of this study was to evaluate the validity of two immunochromotographic rapid antigen detection tests (RADT) in patients highly suspected of presenting pharyngitis by group A  $\beta$ -haemolytic streptococci (GABHS). In addition, the repetition of the RADT in patients with a previously negative test was also evaluated, and the association of C-reactive protein (CRP) levels with aetiology of pharyngitis was also determined in four prospective observational substudies carried out from 2007 to 2012 carried out in a primary care centre.

**Method:** Patients aged 14 or older with acute pharyngitis and at least two Centor criteria were consecutively recruited. All the patients underwent at least a pharyngotonsillar swab for microbiological culture. Two different RADTs were used and the CRP rapid test used was the QuickRead/Go device.

**Results:** A total of 686 patients were studied. The prevalence of GABHS ranged from 22% to 24.8%. The prevalence of group C streptococcus ranged from 8.8% to 15.8%. The sensitivity of the OSOM Strep A test among patients was 95%, with a specificity of 93%, a positive predictive value of 79.2%, and a negative predictive value of 98.5%. These results were 96.4%, 91.6%, 79.1% and 98.7%, respectively, with the repetition of the RADT in patients with a first negative RADT result. These results were 93.6%, 93%, 88%, and 96.4% with the use of Analyz-Strep A Rapid test. The highest CRP concentrations were observed among patients with group C streptococcal infection with a mean value of 56.3 mg/l.

**Conclusions:** The main result of these studies shows the usefulness of a single RADT determination for the diagnosis of GABHS infection with the repetition of RADT in those with a previous negative result being unnecessary. This study also shows that CRP is not useful for distinguishing patients with GABHS infection.