

P0013 Risk factors associated to nosocomial infection of Influenza virus at Son Espases university hospital (HUSE), Palma de Mallorca, from season 2012-2013 to 2015-2016

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Background: Nosocomial infections are likely to be under-recognized because of rapid turnover of patients and delay in diagnosis. In previous studies were associated with significant morbidity, mortality and higher length of stay.

Objective: To compare the characteristics of patients with nosocomial infection and patients with severe infection according to season.

Materials/methods: A retrospective, observational study of adult patients with influenza virus infection admitted from season 2012-2013 to 2015-2016. Included patients were those declared as severe cases by National Network for the Epidemiological Surveillance and those with positive samples from Microbiology Department of HUSE. Nosocomial infection was considered as presence of symptoms with microbiological confirmation after 2 days patient's admission and after discharge. A medical chart abstraction was performed using a standardized case report. SPSSv17 was used to analyze results.

Results: Nosocomial infection was diagnosed in 77 out of 711 patients (10,8%): 14,6% in 2012/13, 7,4% in 2013/14, 8,6% in 2014/15, 15,1% in 2015/16. There were no differences related to sex, age, tobacco and comorbidities (COPD, asthma, obesity, heart disease, kidney disease and diabetes) between community vs nosocomial infection. 3,4% of patients with nosocomial infection were vaccinated (vs 10,4% in community infection). Most patients were diagnosed in Internal Medicine and Pneumology Departments.

Patients with nosocomial infection had significantly less cough, myalgia and dyspnea. They also had less signs of respiratory insufficiency: Sat O₂ 94% vs 92%, and radiological alterations 25,3% vs 40% p (0,04). Hypoalbuminemia was the most altered parameter in nosocomial infections. We didn't observe differences in the use of antivirals 50% vs 44%.

Bacterial co-infection was frequent in patients with nosocomial infection (17 vs 11%) but 83% were treated with antibiotics vs 94% community acquired. There were no differences between complicated cases (19,5% in nosocomial infections vs 15,5% in community infections) and mortality (9,1% vs 5,37%). There were no differences between community vs nosocomial infection in severity scales (CURB65 and SMRT-CO).

Conclusions: Nosocomial infections due to flu accounts for 10% of the total number cases admitted. They don't present clinical differences or major complications regarding to the community. Less than 5% of patients with nosocomial influenza had been vaccinated.