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VIROLOGIA

IMPACT OF INCORPORATING EARLY RAPID INFLUENZA DIAGNOSIS ON HOSPITAL OCCUPACY AND ANTIVIRAL USE

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INTRODUZIONE

The diagnosis of influenza is often made by clinical criteria, expecially during an epidemic. However, in hospitalized patients, it is important to establish the specific diagnosis quickly using laboratory testing. Antiviral therapy with oseltamivir within 48 hours of symptoms onset may reduce duration of symptoms and viral shedding. The aim of this work is to assess the impact of incorporating early rapid influenza diagnosis on oseltamivir usage and on infection control measures for preventing transmission among patients hospitalized from the Emergency Department with symptoms of severe acute respiratory infections (SARI) or acute respiratory distress syndrome (ARDS).

METODI

We implemented early rapid detection of influenza with immediate communication of results in the 450 bed Maggiore Hospital of Lodi. We compared the 2018-2019 influenza season to the prior two seasons in our hospital. A bundled approach to the initial management of patients with suspected influenza was implemented in the last influenza season following the WHO multimodal improvement strategy. All patients who were admitted from the emergency department and who met the inclusion criteria of SARI or ARDS were sampled and tested using the Alere ID NOW Influenza A and B 2 or Cepheid Xpert Flu/RSV assay. Positive results were immediately reported by phone to the attending physician and through the patient's electronic medical record.

RISULTATI

During the intervention season, 180 patients were tested for influenza, 61 (34%) were positive, 41 within 48 hours from recovery. We observed 20 hospital acquired influenza cases. A total of 40 on 61 patients were treated with oseltamivir. Implementation of contact and droplet precautions was performed by nursing staff within two hours from the notification of positive results. In the previous season, 39 patients were tested and 12 (31%) were positive. A total of 2 on 12 patients were treated with oseltamivir. In the 2016-2017 influenza season, no patient was tested nor treated with oseltamivir. Oseltamivir usage increased from 0 DDD to 20 DDD and to 328.80 DDD during the last 3 influenza seasons, respectively.

CONCLUSIONI

Among hospitalized patients who tested influenza-positive, implementation of rapid influenza testing was associated with an increase of initial prescription rates for oseltamivir. This strategy is useful for optimizing patient treatment and its implementation should be considered for upcoming influenza seasons.