Oseltamivir Prescription Practices during the 2017-2018 Influenza Season

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Background: Influenza is an acute contagious respiratory illness caused by influenza A and B viruses worldwide. Influenza is estimated to cause approximately three to five million severe illnesses and 250,000 – 350,000 deaths annually. It is considered an economic burden costing approximately \$87.1 billion annually. The use of Oseltamivir can act as a chemoprophylactic and therapeutic agent to reduce the duration and severity of the infection.

Objective: To review and analyze influenza cases treated with Oseltamivir during the influenza season of 2017-2018.

Design: A Retrospective Cross-Sectional Study.

Setting: King Hamad University Hospital, Bahrain.

Method: Two hundred and twenty-one prescriptions of antiviral Oseltamivir were reviewed from 1 October 2017 to 31 March 2018. Ten patients were excluded due to incomplete medical records.

Result: Two hundred eleven Oseltamivir were prescribed, 121 (57.35%) prescribed for hospitalized patients, 9 (4.27%) for out-patients and 81 (38.39%) in emergency department. Fourteen (11.57%) patients required ICU/NICU admission. The mean age was 36.37 years \pm 26.05 SD. Ninety-two (43.60%) patients were \geq 41 years old. Peak prescribing rate was between December and January. Lab test was performed for the majority of the patients, 192 (91%). Ninety-three (44.08%) of the patients had their treatment initiated in \leq 48 hours and 117 (55.45%) initiated in \geq 48 hours. Earlier treatment was not significant in reducing the length of stay (P=0.3082). Four (1.9%) patients died due to influenza infection.

Conclusion: All patients received doses adjusted based on their renal function and body weight. Patient and family education need to be emphasized because approximately 40% of the cases acquired the infection due to contact with an influenza-positive patient.

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