

INCREASED INCIDENCE OF ACUTE DISSEMINATED ENCEPHALOMYELITIS AND ENCEPHALITIS DURING THE H1N1 PANDEMIC IN WINNIPEG WAS UNRELATED TO H1N1 VACCINE ADMINISTRATION

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During the H1N1 pandemic an increased incidence of hospitalizations coded as acute disseminated encephalomyelitis (ADEM) was noted in Manitoba, Canada during the period October 2009 to March 2010. This raised the question of whether this was due to heightened awareness of potential neurological complications of influenza or influenza vaccination or an actual increase. We extracted data from 133 hospitalized patient charts with an ICD-10 discharge code of G05.0 over the period January 2006 to December 2012. Clinical and laboratory data were reviewed by a neurologist and diagnoses were determined using the Brighton criteria. Over the entire study period, there were 22 cases of ADEM and 49 cases of encephalitis (no specific etiology identified). During the pandemic period (March - December 2009; there were 7 patients hospitalized with ADEM (annual rate of 6.6/million) and 10 with encephalitis (9/million). Only two patients with ADEM and 2 patients with encephalitis had received H1N1 vaccine (all given 1-6 months before hospitalization), whereas during this same period no patients with ADEM and 4 patients with encephalitis had received seasonal influenza vaccine. We have found an increased incidence of ADEM and encephalitis during this 10 month period that may be related, at least in part, to the increased incidence of influenza during this period. However, there was no definite temporal relationship with the prior administration of H1N1. Hence, we did not find evidence that administration of H1N1 vaccine resulted in an increased incidence of ADEM or encephalitis in our population.