Interim Clinical Guidance for Pregnant and Breastfeeding Women with Influenza-Like Illness in the context of the Pandemic H1N1 2009 Virus

The following guidance should be read in conjunction with relevant provincial and territorial guidance documents. The Public Health Agency of Canada will be posting regular updates and related documents at www.phac-aspc.gc.ca.

Introduction

This guidance has been developed by the Public Health Agency of Canada for clinicians to manage pregnant and breastfeeding patients presenting with cough and fever in the context of the pandemic (H1N1) 2009 virus (H1N1 2009). This guidance is based on the current scientific evidence and expert opinion to date and is subject to review and change as new information becomes available.

These guidelines should be used in conjunction with guidance contained in the interim ambulatory care and public health measures guidelines on H1N1 2009 (H1N1 PHAC Guidelines for health professionals) and in Annex E of the Canadian Pandemic Influenza Plan[1].

Risks for pregnant women and their fetuses

At present, the groups identified at higher risk of influenza-related complications from seasonal influenza and the H1N1 2009 include pregnant women in their second and third trimester and women within four weeks post-partum. Evidence suggests these women are at increased risk for influenza-related complications and morbidity, especially during the 3rd trimester of pregnancy[2,3,4] and experience with past pandemics demonstrates they can be affected disproportionately compared to non-pregnant women[3.]

Currently, little is known about whether influenza viruses are transmitted to the fetus through the placenta, although this class of viruses is not considered to be teratogenic in humans.[2]

Risks for breastfeeding women and their babies

It is unknown if influenza viruses are transmitted to the baby via human milk. It has been shown that women who are breastfeeding and on antiviral treatment transfer less antiviral through the breastmilk than if the infant was receiving antivirals for treatment.

Clinical management of pregnancy and breastfeeding women

Pandemic H1N1 is currently susceptible to oseltamivir (Tamiflu) and zanamivir (Relenza), but resistant to amantadine. Although both oseltamivir and zanamivir may be considered for use during pregnancy[5,6], there are more safety data on oseltamivir than zanamivir in pregnant women[2,6]. Oseltamivir is the treatment of choice; zanamivir may be preferred in pregnant women when nausea and vomitting are present. The national antiviral stockpile contains both oseltamivir and zanamivir.

Clinicians will want to strongly consider Oseltamivir or zanamivir for all pregnant woman who develop influenza-like (ILI) symptoms in their second and third trimesters or within 4 weeks post-partum. ILI is defined as the acute onset of respiratory illness with fever and cough and one or more of the following: sore throat, arthralgia, myalgia, or prostration. For patients in the ambulatory care setting, treatment is most effective if started early and at least within 48 hours of illness onset. Consideration may be given to starting treatment on pregnant woman hospitalized with confirmed, probable, or suspected pandemic H1N1 even after 48 hours of symptom onset.

All pregnant women should be informed of their increased risk of complications if they become ill with

influenza, including the pandemic H1N1 virus, and the need for a prompt assessment by a health care professional. This is especially important information for pregnant mothers of young children with ILI. An information sheet for pregnant women and pandemic H1N1 is available.

Due the anti-infective benefits of human milk for infants and the low dosages of antiviral passed to the baby through breastmilk, it is recommended that women continue to breastfeed their baby when taking antiviral medications. Both oseltamivir and zanamivir are considered to be compatible with breastfeeding[1].

The treatment dosing is the same for pregnant women as other adults: Oseltamivir (Tamiflu): 75 mg capsule twice/day for 5 days or Zanamivir (Relenza): Two 5mg inhalations (10mg total) twice/day for 5 days. More information can be located in the appropriate product monograph.

Due the anti-infective benefits of human milk for infants and the low dosages of antiviral passed to the baby through breastmilk, it is recommended that women continue to breastfeed their baby when taking antiviral medications. Both oseltamivir and zanamivir are considered to be compatible with breastfeeding[1].

The treatment dosing is the same for pregnant women as other adults: Oseltamivir (Tamiflu): 75 mg capsule twice/day for 5 days or Zanamivir (Relenza): Two 5mg inhalations (10mg total) twice/day for 5 days. More information can be located in the appropriate product monograph.

Adverse reaction reporting

Reports of adverse reactions to antiviral medications are an important source of information that will help guide their safest and most effective use. Please report any serious adverse reactions Online or by calling 1-866-234-2345.

References

1. Public Health Agency of Canada (2006). *Canadian Pandemic Influenza Plan for the Health Sector, Annex E.* Located at: CPIP Annex E
2. Tanaka T; Nakajima, K; Murashima, A et al. (early release published June 15, 2009) *Safety of neuraminidase inhibitors against novel influenza A (H1N1) in pregnant and breastfeeding women.* CMAJ July 7, 2009. 181(1-2). Located at: CMAJ Article: Safety of neuraminidase inhibitors against novel influenza A
3. National Advisory Committee on Immunization (NACI) *Statement on Influenza Vaccination for the 2008-2009 Season.* Canada Communicable Disease Report. 2008 Vol 34; ACS-3 pg 6-7. See: NACI Influenza Statement 2008 2009
4. New York City Department of Health and Mental Hygiene (June 3, 2009). *Health Department reports that more than 80% of New Yorkers hospitalized with H1N1 flue have had one or more underlying risk factors.* (Press Release) Located at: NYC Dep't of Health Press Release
5. European Medicines Agency (29 May, 2009) Follow-Up Recommendations from CHMP on Novel Influenza (H1N1) outbreak. EMEA/H/A-5.3/1172 Article 5(3) of Regulation (EC) No 726/2004. Located at: EMEA CHMP Recommendations
6. Centre for Disease Control and Prevention (May 12, 2009) N*ovel influenza A (H1N1) virus infections in three pregnant women – United States, April – May 2009*. MMWR Dispatch 58; 1-3. Located at: MMWR Dispatch

Date Modified: 2009-07-10