

H1N1 in Pregnant Women: A Challenge Overlooked?

Deborah M. Money, MD, FRCSC

Executive Director, Women's Health Research Institute, Women's and Children's Health Centre, Vancouver BC

In the fall of 2009, we are anticipating a season that may hold what is being described as the “second wave” of a novel H1N1 Influenza A pandemic. Our epidemiologist colleagues expect that the fall and winter of 2009 will see significant widespread novel H1N1 influenza infections in North America during our traditional influenza seasons.

This year poses new challenges for prenatal care providers, because the H1N1 influenza virus has so far demonstrated an ability to affect young persons disproportionately and to present particular risk for pregnant women. As we review the information derived from the infections that occurred in Canada from April to August this year, we see that Aboriginal people have been over-represented, accounting for approximately 14% of the cases overall and 17% of hospitalized cases. We also see that pregnant women have accounted for 5% of hospitalized cases, and 6% of the deaths.¹ We are only beginning to understand the nature of the most severe infections. H1N1 infection appears to cause a severe overwhelming respiratory viral pneumonia that progresses to adult respiratory distress syndrome, and this can lead to death caused primarily by difficulty with ventilation and oxygenation. These problems are familiar to our ICU colleagues, but they constitute a very unusual phenomenon in pregnant women, particularly when the infection has been thought of as “just the flu.”

So how should prenatal care providers be preparing themselves, and how can we learn from our experiences with a disease that we first recognized only in April 2009? First, we should turn to prepared documentation on pandemic influenza. Our colleagues in public health have been warning us that such a pandemic is coming, and they have been preparing documents to guide the public health response. Certainly the public health guidelines have been helpful in many respects, but, importantly, the particular concerns for women and children are not mentioned and their risks not addressed in most of these documents and guidelines.

Regrettably, this omission is not uncommon. This leaves those of us providing care for pregnant women having to develop our response quickly without good advance preparation for the pregnant population. I hope that future planning for disasters and pandemics will include specific guidelines for this special population.

As we approach the influenza season, it would be ideal if we had all of the information from cases in pregnant women that have been managed to date, and if we were able to understand how the situation is evolving day by day. It is evident that our usual strategy of observing disease progression, designing and developing studies to understand how it progresses, applying for funding and ethical approval, conducting the studies, and then presenting and publishing the results, after a possibly lengthy peer review process, is going to be too slow and cumbersome to be of any real help in this situation. As was the case in the early era of managing HIV disease, we need new and more rapid models of knowledge generation and knowledge translation. Such tools are coming slowly, and regional, national, and international groups are attempting to share information in a more immediate fashion; but the methods vary, and information will likely be difficult to interpret. The SOGC, through its website and email bulletins to practitioners, can play a significant role as a mediator for rapid sharing of information, in cooperation with the Public Health Agency of Canada.

I see evidence of cooperation in sharing information and strategies at the level of individual institutions and also at regional, provincial, and national levels, but we must work hard to maintain consistency in the information we share and in the message we deliver. In terms of responding appropriately, the worst thing for the public and for our colleagues would be the dissemination of confusing, conflicting advice from different organizations. Some of our recommendations are different from those issued by our counterparts in the United States,² and it is noteworthy that these differences are deliberate. We must adhere to our Canadian recommendations, because not only are they

thoughtful and appropriate for our circumstances, but they also take into consideration the recommendations of international bodies including the World Health Organization.

I hope that the influenza season of this fall and winter will turn out to be a tempest in a teapot, yielding mostly cases of mild influenza in a more typical pattern. Nevertheless, I fear that our pregnant patients may face a significant onslaught of influenza that will require all care providers to be vigilant. Care providers must be prepared to alert pregnant women to the potential value of early treatment with oseltamivir (Tamiflu) as long as the H1N1 virus remains sensitive to this potent antiviral. We may see new and unprecedented

numbers of pregnant women requiring ICU admission and ventilation.

Most importantly, we must all become champions of the use of influenza vaccine in pregnancy. If we achieve high rates of vaccine coverage this season using the H1N1 vaccine as well as our seasonal influenza vaccine, this could play the most valuable role in reducing morbidity and mortality in our pregnant population.

REFERENCES

1. Public Health Agency of Canada. FluWatch (Week 34). Available at: http://www.phac-aspc.gc.ca/fluwatch/08-09/w34_09/index-eng.php. Accessed September 14, 2009.
2. Centers for Disease Control and Prevention. 2009 H1N1 Flu. Available at: <http://www.cdc.gov/H1N1FLU>. Accessed September 14, 2009.

Erratum

Roggensack A, Jefferies AL, Farine D; SOGC Maternal Fetal Medicine Committee. Management of meconium at birth. SOGC Technical Update No. 224, April 2009. J Obstet Gynaecol Can 2009;31(4):353-4.

The name of Melanie Basso was erroneously given as “Melissa Basso” in the list of committee members for this technical update. The Journal of Obstetrics and Gynaecology Canada regrets the error and any inconvenience it may have caused.

Roggensack A, Jefferies AL, Farine D; Comité de médecine fœto-maternelle de la SOGC. « Prise en charge du méconium à la naissance. Mise à jour technique de la SOGC n° 224, avril 2009 », J Obstet Gynaecol Can, vol. 31, n° 4, 2009, p. 355-7.

Le nom de Mme Melanie Basso est apparu, par mégarde, sous la forme de « Melissa Basso » dans la liste des membres du comité de cette mise à jour technique. Le Journal d'obstétrique et gynécologie du Canada regrette cette erreur et tout inconvénient qu'elle a pu causer.