H1N1 in pregnancy

Consensus Statement for H1N1 in pregnancy.
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1. Introduction

Influenza like illness caused by Influenza A [H1N1], was reported from Mexico on 18th March, 2009 and rapidly spread to all the continents. India reported its first case on 13th May, 2009. The highest number of swine flu deaths took place in 2011 (1,763), followed by 2009 (981) and 2012 (405). Pregnant women are at high risk for getting this infection.FOGSI understands the need for recommendations for its members to refer to.

2. Epidemiology

2.1 Incubation period: 1-7 days.
2.2 Transmission: The transmission is by droplet infection and fomites.
2.3 Communicability:From 1 day before to 7 days after onset of symptoms.

2.4 Risk of severe illness is highest in:
Pregnant women especially during third trimester,
Children less than 2 years of age.
People with chronic lung disease including asthma.

3. Clinical features

3.1Fever, cough, running nose and sore throat, tachypnoea.
Headache, body ache, fatigue, diarrhea and vomiting have also been observed.
With severity: Severe Pneumonia with multi-organ failure can occur.
3.2 Respiratory failure and refractory shock are the most common causes of death.

4. Investigations

CBC, LFTs, RFTs, Coagulation profile, X-ray Chest, CT scan when required.
Real-time Reverse Transcriptase (RT-PCR) is done for confirmation of diagnosis. Clinical specimens such as nasopharyngeal swab, throat swab, nasal swab and tracheal aspirate (for intubated patients) are to be obtained preferably before administration of the anti-viral drug.

5. Treatment

5.1 Implementation of infection control measures.
5.1.1Preferably isolation room should be there, if it is not available then patients can be kept in well-ventilated isolation ward with beds kept one metre apart.
5.1.2 Standard Operating Procedures
5.1.3 All those entering the room must use high efficiency masks, gowns, goggles, gloves, cap and shoe cover.
5.1.4 Restrict number of visitors.
5.1.5 Provide antiviral prophylaxis to health care personnel managing the case and ask them to monitor their own health twice a day.
5.1.6 Dispose waste properly by placing it in sealed impermeable bags labeled as biohazard.
5.2 Drug Treatment
5.2.1 Oseltamivir is the recommended and safe drug both for prophylaxis and treatment. Dose is 75 mg BD for 5 days for adults. . This is safe in pregnancy in all trimesters.
5.2.2 Supportive therapy is given as- symptomatic treatment, IV Fluids,parenteral nutrition, Oxygen therapy/ ventilatory support. Paracetamol is prescribed for fever, myalgia and headache.
Salicylate / aspirin is strictly contra-indicated in any influenza patient due to its potential to cause Reye's syndrome.
Antibiotics should be administered, if required.
5.3 Chemoprophylaxis
It is recommended for contacts of suspected, probable and confirmed cases. Contacts include household /social contacts, family members, workplace or school contacts, fellow travelers, and health care personnel. It should be provided till 10 days after last exposure.
Oseltamivir is the drug of choice with dose of 75 mg OD for adults.

6. H1N1 Vaccination

6.1 FDA has approved the H1N1 monovalent vaccine as intramuscular injection (inactivated) and an intranasal spray (Live).

6.2 Inactivated vaccine is administered to individuals above 6 months. It is safe and recommended for pregnant women.

6.3 Inactivated vaccine should not be administered to those having history of anaphylaxis to any constituents of vaccine, moderate to severe illness with fever and children below 6 months,.

6.4 Live intranasal vaccine should not be administered to pregnant women, individuals below 2 years and above 50 years, those having chronic illness with fever.

6.5 To date studies do not show harmful effects from pandemic influenza vaccine with respect to pregnancy, fertility or developing the embryo or fetus.

ANNEXURE: I

Categories depending on clinical features

Category A:

Mild Symptoms: fever, cough, sore throat with or without body ache, headache, diarrhea and vomiting. Not a high risk for severe disease. Non- pregnant patients. No testing recommended. The patients should be monitored for their progress and reassessed at 24 to 48 hours by the doctor. Confine at home. Patient should avoid mixing up with public and high risk members in the family. Anti Viral therapy not indicated.

Category B: All category A symptoms in high risk group:

Pregnancy, Age <5 & >65yrs, Co morbid conditions: lung diseases, heart disease, liver disease, kidney disease, blood disorders, diabetes, neurological disorders, cancer and HIV/AIDS; Immunosuppressed: on long term corticosteroid therapy.

No testing required; should start anti viral therapy.

The patients should confine themselves at home and avoid mixing with public and high risk members in the family.

Category C: Category A & B with any of the following:
Chest pain, breathlessness, drowsiness, cyanosis, blood stained sputum, hypotension.Testing is mandatory; admission to ICU; start anti viral therapy

Pregnancy does not predispose women to an increased risk of acquiring influenza infection, but pregnant women are at increased risk of morbidity and mortality as compared to non-pregnant women due to changes in their immune systems to accommodate the developing fetus and adaptations in body as a result of the hormonal and physical changes e.g. enlarged gravid uterus causing stenting of the diaphragm; delay in seeking health care.

ANNEXURE- II

Special Care

Antepartum:

Hospitalize in a private room.

Current Infection Control guidance throughout the hospital:

A single-patient room whenever possible

Use of face mask by patients when outside the room.

Standard precautions for all patient care.

Diagnostic testing and empirical antiviral therapy immediately.

Do not delay antiviral treatment pending diagnostic results.

Healthy attendants may be allowed inside the room

Intrapartum:

Protect the infant from exposure to respiratory secretions during or immediately after delivery.

Mother should use face mask throughout labor, as tolerated.
Adhere to current infection control guidance.
During delivery all persons should face mask, gloves and gown.
Immediately separate newborn to an open warmer by a distance of >6ft.
Bathe infant as soon as the temperature is stable.

Postpartum:
Temporary separation of the infected mother from the newborn within her room OR in a separate room until the risk of infection transmission is reduced, which is when ALL of the following criteria are met:
The mother has received Antiviral Medications for at least 48hrs.
The mother is without fever for 24hrs without antipyretics.
The mother can control cough and respiratory secretions
Once these criteria are met, the mother and the newborn can initiate close contact throughout the postpartum period with droplet precautions and mother can start breast feeds.