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Management Guideline for Pregnant woman with Seasonal Influenza A/H1N1pdm 2009 Infection in Central Women Hospital

By

Department of Obstetrics and Gynaecology

Institute of Medicine (1)

Version (01)

(As of 9-8-2017)

Guidelines for management of pregnant woman with H1 N1 Infection

Pregnant woman with H1N1 may present with typical acute respiratory illness .Many will have a typical course of uncomplicated influenza. For some pregnant women illness might progress rapidly. This condition is associated with adverse pregnancy outcomes. Fetal distress associated with maternal illness can occur. Intrauterine fetal death is common in patients with severe infection.

Pregnant women with influenza like illness or severe acute respiratory illness (without obstetric complications or not in labour)

History taking- fever, cough , sneezing, respiratory difficulties (symptoms of influenza and SARI)

Physical examination – vital signs, Measure oxygen saturation, examine all system especially respiratory system, Obstetric examination

Initial basic emergency care if it is SARI

Manage pregnancy conservatively if no obstetric complications or not in labour

If fetal death occurs during illness, manage conservatively according to hospital guidelines if no complications of IUFD. Induction of labour when mother completely recovers from illness.

Inform to physician oncall of the day and refer to Medical observation of YGH/ General Hospital

Pregnant women with influenza like illness or severe acute respiratory illness or proved H1 N1 infection (labouring women)

History taking- fever, cough, sneezing, respiratory difficulties (symptoms of influenza and SARI)

Physical examination – vital signs, Measure oxygen saturation with pulse oxymeter

Examine all system especially respiratory system, Obstetric examination

Initial basic emergency care- Airway, breathing, Circulation

Take nasal swab or oropharyngeal swab or nasopharyngeal swab and perform rapid diagnostic test

CXR if there are respiratory symptoms and signs, decreased oxygen saturation or suspicion of pneumonitis

Abdomen should be covered with lead shield during performing CXR.

Admission to CWH (separate isolation room)

Inform physician oncall of the day

Reporting – Reporting – to Professor of unit incharge, Professor and Head of OG Department and SMS

Joint care –Under care of Obstetrician and Physician

Anaesthetist - for management of severe cases who need ICU care.

If patient has true labour pain, keep in **the separate first stage room**. It should be well ventilated.

Patient must put on N95 mask. The health care providers and members of team who take care of the patient and care givers must wear N 95 mask and take precautions to prevent transmission of infection

Monitor patient's condition and progress of labour.

Delivery in the separate room. Separate instruments must be used.

Pediatrician attendance is necessary for both vaginal delivery and LSCS

Fumigate this labour room after delivery

Management of labour–according to hospital guidelines

If patient needs to deliver by LSCS- separate OTH Room, separate instruments

Fumigate OTH Room after operation

After delivery keep the patient in the separate room. It should be well ventilated.

Mother should be encouraged to begin breast feeding frequently and exclusively.

Rooming in is practiced. Mother must wear N95 mask and take precautions to prevent transmission of infection to baby and other patients and other people. Monitor postpartum condition until her obstetric condition is stable.

If patient's obstetric condition is stable and no obstetric complications, discuss with physician oncall of the day and refer to Medical observation of YGH or Waibargi (if CWH Yangon)

Pregnant women with influenza like illness or severe acute respiratory illness (with obstetric complications)

History taking- fever, cough , sneezing, respiratory difficulties (symptoms of influenza and SARI)

Physical examination – vital signs, Measure oxygen saturation with pulse oxymeter, examine all system especially respiratory system, Obstetric examination

Admission to CWH

Initial care - Airway, breathing, Circulation

Take nasal swab or oropharyngeal swab or nasopharyngeal swab and perform rapid diagnostic test

CXR if there are respiratory symptoms and signs, decreased oxygen saturation or suspicion of pneumonitis Abdomen should be covered with lead shield during performing CXR.

Inform to physician oncall of the day

Reporting – to Professor of unit incharge, Professor and Head of OG Department and SMS

Joint care with physician

Anaesthetist may be involved for management of severe cases who need ICU care.

Keep in the separate room and this room should be well ventilated.

Patient must put on N95 mask.

The health care providers and members of team who take care of the patient and care givers must wear N 95 mask and take precautions to prevent transmission of infection to other patients and other people.

If patient's obstetric condition is stable after treatment of obstetric complications, discuss with physician .

According to physician decision- Refer to medical observation / Waibargi hospital (if CWH Yangon) if obstetric condition is stable and no complications

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Puerperal patient with influenza like illness or severe acute respiratory illness OR confirmed H1N1 infection

History taking- fever, cough , sneezing, respiratory difficulties (symptoms of influenza and SARI)

Physical examination – vital signs, all system especially respiratory system

Measure oxygen saturation with pulse oxymeter

Take nasal swab or oropharyngeal swab or nasopharyngeal swab and perform rapid diagnostic test

CXR if there are respiratory symptoms and signs, decreased oxygen saturation or suspicion of pneumonitis

Inform physician

Anaesthetist may be involved for management of severe cases who need ICU care

Reporting – to Professor of unit in charge, Professor and Head of OG Department and SMS

Patient should be kept in the separate isolation ward

Take precautions to prevent transmission of infection to baby and other patients and other people.

Patient must put on N95 mask.

If patient's postpartum condition is stable and no puerperal complications, discuss with physician

Refer to medical observation / Waibargi hospital (if CWH Yangon) if obstetric condition is stable and no complications

Gynaecology patient with influenza like illness or severe acute respiratory illness

History taking- fever, cough, sneezing, respiratory difficulties (symptoms of influenza and SARI)

Physical examination – vital signs, all system especially respiratory system

Measure oxygen saturation with pulse oxymeter

Take nasal swab or oropharyngeal swab or nasopharyngeal swab and perform rapid diagnostic test for B2 and C cases

CXR if there are respiratory symptoms and signs, decreased oxygen saturation or suspicion of pneumonitis.

Admission to CWH if patient has gynaecology emergency or early pregnancy complications or gynecological condition which needs urgent treatment or hospital admission

Initial care, Airway, breathing, Circulation

Inform to Physician on call

Reporting – to Professor of unit incharge, Professor and Head of OG Department and SMS

Joint care –Under care of OG and physician

Anaesthetist - for management of severe cases who need ICU care.

If patient has gynaecology emergency or early pregnancy complications or gynecological condition which needs urgent treatment, manage the gynaecological condition or early pregnancy complications according to hospital guidelines.

Keep the patient in the separate room. The room must be well ventilated. Manage in separate room and separate OTH for operation. Patient must put on the N95 mask. The health care providers and members of team who take care of the patient and care givers must wear N 95 mask and take precautions to prevent transmission of infection.

Discuss with physician when her gynaecological condition is stable

According to physician decision - Refer to medical observation / Waibargi hospital (if CWH Yangon) if her gynaecological condition is stable and no complications

For those with other gynecological diseases which do not need emergency surgical treatment, surgical treatment for gynaecological condition will be provided when patient completely recovers from H1N1 illness

PREVENTION OF H1N1 INFECTION FOR PREGNANT MOTHER

1. Good personal and household hygiene
2. Frequent hand washing with soap and water
3. Cover the mouth and nose when sneezing and coughing
4. Proper disposal of used tissue and masks
5. Avoid unnecessary travels
6. Avoid crowds where possible
7. Pregnant women and new mothers should avoid providing care for those with confirmed or probable or suspected influenza infection.
8. Pregnant women and new mothers should avoid exposure to those with confirmed H1 N1 cases or probable or suspected influenza infection.
9. Pregnant mother should take adequate rest and have adequate sleep.
10. Pregnant mother should drink plenty of fluid and take nutritious food and well - balanced diet.
11. Pregnant mother should be vaccinated during second and third trimester. Inactivated vaccine must be given. Live attenuated vaccine is contraindicated.
12. Pregnant women and new mothers should seek treatment urgently from health care provider if they have influenza like illness.

MANAGEMENT OF PREGNANT MOTHER WITH H1N1 INFECTION

Pregnant mother with **mild** influenza like illness should be managed at home.

They should self isolate.

Consult with physician.

Take adequate rest

Drink plenty of fluid and take nutritious and well-balanced diet.

Take precautions for prevention of transmission of infection.

Antipyretic treatment- paracetamol can be given and NSAID is not recommended during pregnancy

Antiviral treatment

- Antiviral treatment (neuraminidase inhibitor Zanamivir, Tamiflu)
- Early treatment should especially be considered for pregnant women in third trimester
- Antiviral is given for pregnant mothers with moderate or severe illness.
- Early antiviral treatment should be considered for pregnant mother with mild disease who has co-morbid conditions.
- Antiviral should be started within 12 hours of onset of symptoms

Oxygen (92-95%) if indicated

Monitor general condition, temperature, vital signs, oxygen saturation and respiratory symptoms and signs.

ICU care for severe case

Precautions for transmission of infection to other people

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Management Guideline for Pregnant woman with Seasonal Influenza A/H1N1pdm 2009 Infection

in

Department of Obstetrics and Gynaecology

Central level General Hospitals,

State and Regional General Hospitals,

District Hospitals, 100 bed Township Hospitals

Version (01)

(As of 9-8-2017)

Guidelines for management of pregnant woman with H1 N1 Infection

Pregnant woman with H1N1 may present with typical acute respiratory illness .Many will have a typical course of uncomplicated influenza. For some pregnant women illness might progress rapidly. This condition is associated with adverse pregnancy outcomes. Fetal distress associated with maternal illness can occur. Intrauterine fetal death is common in patients with severe infection.

Pregnant women with influenza like illness or severe acute respiratory illness (without obstetric complications or not in labour)

Patient may come to Emergency Department of the hospital

At the emergency department

History taking- fever, cough , sneezing, respiratory difficulties (symptoms of influenza and SARI)

Physical examination – vital signs, Measure oxygen saturation, examine all system especially respiratory system, Obstetric examination

Initial care

Inform to Physician on call

Inform to OG on call for exclusion of obstetric complications, exclusion of in labour condition.

Manage pregnancy conservatively if no obstetric complications or patient is not in labour.

If fetal death occurs during illness, **manage conservatively** according to hospital guidelines for IUFD if no complications of IUFD. Induction of labour when mother completely recovers from illness.

Under physician's care -According to physician's decision-Management according to H1N1 guidelines

Anaesthetist - for management of severe cases who need ICU care.

Pregnant women with influenza like illness or severe acute respiratory illness or proved H1 N1 infection

(Labouring women)

At the emergency department

History taking- fever, cough , sneezing, respiratory difficulties (symptoms of influenza and SARI)

Physical examination – vital signs, Measure oxygen saturation, examine all system especially respiratory system, Obstetric examination

Initial care, Airway, breathing, Circulation

Inform to Physician on call

Inform to OG on call

Hospital Admission to labour ward (separate room must be available) or isolation ward depends on patient's obstetric condition.

Joint care –Under care of Obstetrician and Physician

Anaesthetist - for management of severe cases who need ICU care.

It is important to isolate from other patients.

If patient has true labour pain, keep in **the separate first stage room** . It should be well ventilated.

Patient must put on N95 mask.

The health care providers and members of team who take care of the patient and care givers must wear N 95 mask and take precautions to prevent transmission of infection

Monitor patient's condition and progress of labour.

Delivery in the separate room. Use separate instruments

Pediatrician attendance is necessary for both vaginal delivery and LSCS

Fumigate this labour room after delivery

Management of labour–according to hospital guidelines

If patient needs to deliver by LSCS- separate OTH Room, separate instruments

Fumigate OTH Room after operation

After delivery keep the patient in the separate room. It should be well ventilated.

Mother should be encouraged to begin breast feeding frequently and exclusively.

Rooming in is practiced. Mother must wear N95 mask and take precautions to prevent transmission of infection to baby and other patients and other people.

Monitor postpartum condition.

Reporting – to SMS or MS or DMO or TMO depends on level of hospital

If patient's condition is stable and no obstetric complications, discuss with physician.

Under physician's care- Manage according to H1N1 management guidelines

Pregnant women with influenza like illness or severe acute respiratory illness (with obstetric complications)

At the emergency department

History taking- fever, cough , sneezing, respiratory difficulties (symptoms of influenza and SARI)

Physical examination – vital signs, Measure oxygen saturation, examine all system especially respiratory system, Obstetric examination

Initial care, Airway, breathing, Circulation

Inform to Physician on call

Inform to OG on call

Hospital Admission to OG ward (separate room must be available) or isolation ward depends on patient's obstetric condition.

Joint care –Under care of Obstetrician and physician

Anaesthetist - for management of severe cases who need ICU care.

Keep in the separate room and this room should be well ventilated.

Patient must put on N95 mask.

The health care providers and members of team who take care of the patient and care givers must wear N 95 mask and take precautions to prevent transmission of infection to other patients and other people.

Manage the obstetric complications according to the hospital guidelines

Reporting – to SMS or MS or DMO or TMO depends on level of hospital

If patient's condition is stable after treatment of obstetric complications, discuss with physician.

Under Physician care - Manage according to H1N1 management guidelines

Puerperal patient with influenza like illness or severe acute respiratory illness OR confirmed H1N1 infection

History taking- fever, cough , sneezing, respiratory difficulties (symptoms of influenza and SARI)
Physical examination – vital signs, all system especially respiratory system
Measure oxygen saturation with pulse oxymeter

Discuss with physician
Joint care with physician and OG
Anaesthetist - for management of severe cases who need ICU care
Patient should be kept in the separate isolation ward
Take precautions to prevent transmission of infection to baby and other patients and other people.
Patient must put on N95 mask.

If patient's postpartum condition is stable and no puerperal complications, discuss with physician and managed under physician's care –according to H1N1 management guidelines

Reporting – to SMS or MS or DMO or TMO depends on level of hospital

Gynaecology patient with influenza like illness or severe acute respiratory illness

At the Emergency department / OPD / OG ward

History taking- fever, cough , sneezing, respiratory difficulties (symptoms of influenza and SARI)
Physical examination – vital signs, Measure oxygen saturation, examine all system especially respiratory system, Obstetric examination
Initial care, Airway, breathing, Circulation
Inform to Physician on call
Inform to OG on call

Joint care –Under care of OG and physician
Anaesthetist - for management of severe cases who need ICU care.

If patient has gynaecological emergency condition which needs urgent treatment or early pregnancy complications, manage the gynaecological condition or early pregnancy complications according to hospital guidelines.

Take precautions to prevent spread of infection.

Keep the patient in the separate isolation room of OG ward or separate isolation ward . Manage in separate room and separate OTH for operation. Patient must put on the N95 mask. The health care providers and members of team who take care of the patient and care givers must wear N 95 mask and take precautions to prevent transmission of infection.

Reporting – to SMS or MS or DMO or TMO depends on level of hospital

Discuss with physician when her gynaecological condition is stable
Physician's care - Manage according to H1N1 management guidelines.

For those with other gynecological diseases which do not need emergency surgical treatment, surgical treatment for gynaecological condition will be provided when patient completely recovers from H1N1 illness

PREVENTION OF H1N1 INFECTION FOR PREGNANT MOTHER

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4. Proper disposal of used tissue and masks
5. Avoid unnecessary travels
6. Avoid crowds where possible
7. Pregnant women and new mothers should avoid providing care for those with confirmed or probable or suspected influenza infection.
8. Pregnant women and new mothers should avoid exposure to those with confirmed H1 N1 cases or probable or suspected influenza infection.
9. Pregnant mother should take adequate rest
10. Pregnant mother should drink plenty of fluid and take nutritious food and well - balanced diet.
11. Pregnant mother should be vaccinated during second and third trimester. Inactivated vaccine must be given. Live attenuated vaccine is contraindicated.
12. Pregnant women and new mothers should seek treatment urgently from health care provider if they have influenza like illness.

MANAGEMENT OF PREGNANT MOTHER WITH H1N1 INFECTION

Pregnant mother with **mild** influenza like illness should be managed at home.

They should self isolate.

Consult with physician.

Take adequate rest

Drink plenty of fluid and take nutritious and well-balanced diet.

Take precautions for prevention of transmission of infection.

Antipyretic treatment- paracetamol can be given and NSAID is not recommended during pregnancy

Antiviral treatment

> Antiviral treatment (neuraminidase inhibitor Zanamivir,Tamiflu)
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> Early treatment should especially be considered for pregnant women in third trimester
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