

**SWINE FLU
EMERGING THREAT****VIEW POINT**

Swine Influenza A (H1N1 Virus) Flu or Common Cold

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Clinical presentation and symptoms of swine flu (H1N1) mimics regular human seasonal influenza flu. This can pose diagnosis difficulty unless high level of suspicion is adopted by the treating doctor, at the same time if high level of suspicion is adopted, it is going to create panic and increase work load at laboratories and in hospitals and indirectly going to affect economy of the nation/state. Media-manufactured mass hysteria has created such a panic and overreaction that one frequently wonders whether the symptoms are of swine flu or of common cold. Thus, it is important to create awareness among doctors and community about the differences between swine H1N1 Flu symptoms and common flu for an early diagnosis and early and affective treatment.

Seasonal Flu (common cold) follows a fairly predictable pattern starting in the fall and ending of the spring. When started, leads to the sudden increase in the number of school-aged children sick with flu-like illness. This initial flu outbreak is soon followed by similar infection in other age groups- especially adults. Seasonal Flu is not normally associated with GI symptoms like diarrhoea & vomiting. It rarely causes fever above 101⁰ F.

Swine Flu (H1N1) symptoms usually come on suddenly and the come with much greater intensity. With the flu one may feel very weak and fatigued for upto 2 or 3 weeks. One will have muscle aches & periods of chills and sweats as fever comes and goes. One may have also stuffy or runny nose, headache & sore throat. The

2009 outbreak has shown increased percentage of patients reporting diarrhea and vomiting (1). Emergency warning signs in adults that need urgent medical attention include, difficulty breathing or shortness of breath, pain or pressure in the chest or abdomen, sudden dizziness, confusion, severe or persistent vomiting and dehydration (2).

Typical signs of seasonal or swine flu in children include high grade fever upto 104⁰ F, chills, muscle aches, headache, sore throat, dry cough. Swine flu may also cause vomiting & diarrhea. These flu symptoms usually last 3-4 days but cough and tiredness may linger for upto 2 weeks after the fever has gone away. In children emergency warning signs that need urgent medical attention include fast breathing or trouble breathing, bluish skin color, not drinking enough fluids/eating food, not waking up or not interacting, being so irritable that the child does not want to be held, flu-like symptoms improve but then return with fever and worse cough and fever with a rash (2).

The diagnosis is confirmed by laboratory testing of a respiratory sample (a simple nose & throat swab) (3). The diagnosis is confirmed by Rapid Antigen Tests, RT-PCR, Virus isolation, Virus Genome Sequencing and Four-fold rise in swine influenza A (H1N1) virus specific neutralizing antibodies. The most common cause of death is respiratory failure. Other causes of death are pneumonia (leading to sepsis), high fever (leading to neurological problems), dehydration (from

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**Table 1. Comparison of Common Cold and Swine Flu**

S.No	Symptoms	Common Cold	Swine Flu
1	Fever	Rare	Characteristic high (100-102 ⁰ F). lasts 3-4 days
2	Headache	Rare	Prominent
3	General aches, pains	Slight	Usual, often severe
4	Fatigue, weakness	Quite mild	Can last upto 2-3 weeks
5	Extreme exhaustion	Never	Early & prominent
6	Stuffy nose	Common	Sometimes
7	Sneezing	Usual	Sometimes
8	Sore throat	Common	Sometimes
9	Chest discomfort cough	Mild to moderate, hacking cough	Common can become severe
10	Complications	Sinus congestion or earache	Bronchitis, pneumonia can be life threatening
11	Prevention	Good hygiene	Annual flu shot or flumist
12	Treatment	Only temporary relief of symptoms	Antiviral drugs (oseltamivir, or Zanamavir within 24-48 hrs of onset

excessive vomiting and diarrhea) and electrolyte imbalance. Fatalities are more likely in young children & the elderly (3). (Table-1)

Because the symptoms are not specific to swine flu, a differential diagnosis of probable swine flu requires not only symptoms but also a high likelihood of swine flu due to the person's recent history like person's contact with the persons of confirmed swine flu; or the persons who were in those areas where there are reported swine flu cases. A suspected case of swine influenza A (H1N1) virus infection is defined as a person with acute febrile respiratory illness (fever 38⁰ C) with onset within 7 days of close contact with a person who is a confirmed case of swine influenza A (H1N1) virus infection, or within 7 days of travel to areas where there are one or more confirmed swine influenza A (H1N1) cases (3). A probable case of swine influenza A (H1N1) virus infection is defined as a person with an acute febrile respiratory illness who is positive for influenza A, but unsubtypable for H1 and H3 by influenza RT-PCR or reagents used to

detect seasonal influenza virus infection, or is positive for influenza A by an influenza rapid test or an influenza immunofluorescence assay (IFA) plus meets criteria for a suspected case, or individual with a clinically compatible illness who died of an unexplained acute respiratory illness who is considered to be epidemiologically linked to a probable or confirmed case (3).

Thus, both suspected/probable cases must be kept under quarantine and observation, screened and managed as per the development in their natural history.

References

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