SWINE FLU AND IT’S HERBAL TREATMENT

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ABSTRACT: Ayurveda, Siddha, Unani and Folk (Tribal) drugs are the major systems of indigenous drugs. Unlike numerous conditions, this can be attributed to the life style of ultramodern man. Swine flu is a complaint of the respiratory system. It’s caused by the H1N1 contagion. It has been declared as an epidemic by the World Health Organization. People who used to have direct contact with Pigs were observed to get swine flu in the history. But, H1N1 contagion is a new swine flu contagion and it contains the inheritable material of swine, raspberry and mortal influenza contagion. Swine flu can produce a number of symptoms in both grown-ups and children. Swine flu natural remedies and swine flu herbal remedies are better treatment options, and there’re free of side goods. Ayurvedic drugs and factory grounded drugs are using for swine flu; it has lower side effect, it is veritably safe for mortal beings. Further than 700 shops like Ginger( Zingiber officinale) and Holy Basil( Ocimum sanctum) etc are using for numerous types of complaint including swine flu. These shops have lot of antibiotic property.

KEY WORDS: - Ayurveda, herbal remedies, H1N1, swine flu

INTRODUCTION:
Swine flu (swine influenza) is a respiratory complaint caused by virus ( influenza contagions) that infect the respiratory tract of pigs and affect in nasal concealment, a barking- such like cough, decreased appetite and lackadaisical geeste. Swine flu produces utmost of the same symptoms in pigs as mortal flu produces in people. Swine flu can last about one to two weeks in pigs that survive. Swine influenza contagion was first insulated from pigs in 1930 in the U.S. and has been honored by pork directors and veterinarians to beget infections in pigs worldwide. In a number of cases, people have developed the swine flu infection when they’re nearly associated with pigs (for example, growers, pork processors) and likewise, pig populations have sometimes been infected with the mortal flu infection. In utmost cases, the cross- species infections( swine contagion to man; human flu virus to pigs) have remained in original areas and haven’t caused public or worldwide infections in either pigs or humans. Unfortunately, this cross-species situation with influenza contagions has had the eventuality to change. Influenza- A( H, N)( before know as swine flu) is a new influenza contagion causing illness in people. First detected in Mexico in April, 2009, it has spread to numerous countries in the World. Swine flu is principally a mismener. This was firstly appertained to as “ swine flu ” because laboratory testing showed that numerous of the genes in this new contagion were veritably analogous to those set up in pigs in North America. Further on, it has been set up that this new virus has gene parts from the swine, avian and human flu contagion genes. The scientists call this a “ quadruple reassortant ” contagion and hence this novel ( new) contagion is nominated “ influenza- A( H1N1) virus. On June 11, 2009, the World Health Organization( WHO) gestured that a global epidemic of new influenza A( H1N1) was underway by raising the worldwide epidemic alert position to Phase 6. This action was a reflection of the spread of the new HIN1 virus, not the inflexibility of illness caused by the virus. At the time, further than 70 countries had reported cases of new influenza A( H1N1) infection and there were ongoing community position outbreaks of new H1N1 in multiple corridor of the world H1N1 Swine flu is a subtype of influenza A virus ( a transmissible viral disease), which causes upper, and potentially, lower respiratory tract infections in the host it infects, performing in symptoms similar as nasal concealment, chills, fever, dropped appetite, and conceivably lower respiratory tract disease.

Herbal drugs, also known as Phytomedicines or Botanical drugs, involves the use of factory corridor( leaves, roots, stem, flowers, and seeds) for medicinal/ remedial purpose. Swine Flu, also called ping influenza, swine influenza, overeater flu, pigs flu. Swine flu is an infection caused by any one of the several types of Swine influenza contagions. The given strains include Influenza C and the subtypes of influenza A known as H1N1, H1N2, H3N1 and H3N2. The spread among humans is through driblets expelled during cough and sneezing by an infected existent; any particular connections increases the threat of transmission.
Fig 1:- The gene structure and replication of influenza virus

**HISTORY:**

In 1998, swine flu was set up in pigs in four U.S. countries. Within a year, it had spread through pig populations across the United States. Scientists set up this virus had originated in pig as recombinant form of flu strains from bird’s and humans. Swine Flu also called as pigs influenza. A human respiratory infection caused by an influenza strain that started in pigs. Swine flu was first recognised in the 1919 pandemic and still circulates as a seasonal flu virus. Swine flu is caused by the H1N1 human strain, which started in pigs. In 1918, the cause of human influenza and its links to avian and swine influenza wasn’t understood. The answers didn’t begin to crop until the 1930s, when related influenza virus (now known as H1N1 virus) were insulated from pigs and also humans. In humans, the inflexibility of swine influenza can vary from mild to severe. From 2005 until January 2009, 12 human cases of swine flu were reported in the United States. Around the mid-20th century, identification of influenza subtypes came possible, allowing accurate opinion of transmission to humans. Since also, only 50 similar transmissions have been verified. These strains of swine flu infrequently pass from mortal to mortal. Symptoms of zoonotic swine flu in humans are analogous to those of influenza and of influenza- suchlike illness in general, namely chills, fever, sore throat, muscle pains, severe headache, coughing, weakness, briefness of breath, and general discomfort. The Independent says that “the swine flu epidemic might not have happened had it not been for the accidental release of the same strain of influenza contagion from a exploration laboratory in the late 1970s.” The news comes from a medical composition which analysed the history of the influenza A H1N1 contagion, including the recent development of swine flu seen around the world. The reports say that the H1N1 influenza strain was responsible for a flu epidemic in 1977, but before this it hadn’t been set up in humans for further than 20 times. By looking at the inheritable makeup of the 1977 virus, experimenters have set up that it was analogous to a strain that was circulating in 1950. This 1950s strain would have been stored in labs and experimenters have suggested that there-emergence of the contagion in 1977 “was presumably an accidental release from a laboratory source”, conceivably through laboratory workers getting infected. Professor John Oxford of the Royal London Sanitarium is reported as saying that the proposition is “presumptive”, but that “it may have been a good thing as it would have given numerous aged people alive moment some measure of immunity to the current epidemic.” The journals have concentrated on the possibility of an accidental reintroduction of the H1N1 contagion during the 1970s. Still, this is only one aspect of the complex history of the current epidemic swine flu contagion bandied in the composition. The current swine flu contagion has developed over time by natural exchange of inheritable material between human, bird’s and pigs strains of the influenza virus. This review doesn’t suggest that the current form was created in or blurted from a laboratory.

**CLASSIFICATION:**

1. **INFLUENZA A:-**

Influenza- A Swine influenza is known to be caused by influenza- A subtypes H1N1, H1N2, H2N3, H3N1 and H3N2. In pigs, three influenza- A contagion subtypes (H1N1, H1N2 and H3N2) are the most common strains worldwide. In the United States, the H1N1 subtype was simply current among swine populations before 1998; still, since late August 1998, H3N2 subtypes have been insulated from pigs. As of 2004, H3N2 contagion isolates in US swine and lemon stocks were triadic reassortants, containing genes from mortal( HA, NA and PB1), swine( NS, NP and M) and avian( PB2 and PA) lineages.

2) **INFLUENZA B:-**
Influenza B contagions are only known to infect humans and seals, giving them influenza. This limited host range is supposed responsible for the lack of Influenza contagion B caused influenza afflictions in discrepancy with those caused by the morphologically analogous Influenza virus A as both mutate by both inheritable drift and reassortment.

3) INFLUENZA - C:
Influenza- C contagions infect both humans and pigs, but don’t infect cats. Transmissions between pigs and humans have passed in the history. For illustration, influenza- C caused small outbreaks of a mild form of influenza amongst children in Japan and California. Due to its limited host range and the lack of inheritable diversity in influenza- C, this form of influenza does not beget afflictions in humans.

△ TRANSMISSION:

1) Transmission between pig:-
Influenza is relatively common in pigs, with about half of parentage pigs having been exposed to the contagion in the US. Antibodies to the contagion are also common in pigs in other countries. The main route of transmission is through direct contact between infected and uninfected creatures. These close connections are particularly common during beast transport. Ferocious husbandry may also increase the threat of transmission, as the pigs are raised in veritably close propinquity to each other. The direct transfer of the contagion presumably occurs either by pigs touching tips, or through dried mucus. Airborne transmission through the aerosols produced by pigs coughing or sneezing are also an important means of infection. The contagion generally spreads snappily through a herd, infecting all the pigs within just a many days. Transmission may also do through wild creatures, similar as wild boar, which can spread the complaint between granges.

2) Transmission to humans:
People who work with flesh and swine, especially people with violent exposures, are at increased threat of zoonotic infection with influenza contagion aboriginal in these creatures, and constitute a population of human hosts in which zoonosis and reassortment can co- do. Vaccination of these workers against influenza and surveillance for new influenza strains among this population may thus be an important public health measure. Transmission of influenza from swine to humans who work with swine was proved in a small surveillance study performed in 2004 at the University of Iowa. This study among others forms the base of a recommendation that people whose jobs involve handling flesh and swine be the focus of increased public health surveillance. Other professions at particular threat of infection are veterinarians and meat processing workers, although the threat of infection for both of these groups is lower than that of ranch workers.

Fig 2:- transmission of swine flu

△ SYMPTOMS:-
The symptoms of flu caused by H1N1, generally called the swine flu, are analogous to those of other flu contagions. Symptoms generally start snappily and can include:

- Fever, but not always.
- Paining muscles.
- Chills and sweats.
- Cough.
- Sore throat.
- Runny or stuffy nose. Watery, red eyes.
- Eye pain.
- Body pangs.
- Headache.
- Frazille and weakness. Diarrhea.
- Feeling sick to the stomach, puking, but this is more common in children than grown-ups.

![Diagram of Symptoms of Swine Flu](image)

**Fig 3:** symptoms of swine flu

**CAUSES:**
Swine flu is caused by a strain of influenza contagion that generally only infects pigs. Unlike typhus, which can be transmitted by lice or ticks, transmission generally occurs from person to person, not beast to person. You can not catch swine flu from eating duly cooked pork products. Swine flu is veritably contagious. The complaint is spread through slaver and mucus patches. People may spread it by:

a) Sneezing
b) Coughing
c) Touching a origin-covered face and also touching their eyes or nose.
Croakers now consider H1N1 to be a flu strain that can do in people and spread alongside seasonal flu contagions. A person can catch it if they’re in close contact with someone who has H1N1. People who work with swine may have a threat of contracting new types of flu or other conditions from creatures. These are known as zoonotic diseases.

**PREVENTION**

- Wash your hands regularly with cleaner and water, especially after coughing or sneezing. Drop for at least 20 seconds and wash fully.
- If cleaner and water are not available, wash your hands with an alcohol-predicated hand gel. Rub your hands together until the alcohol dries completely.
- Avoid close contact that is, being within 6 feet with people who have flu like symptoms.
- Avoid touching your mouth, nose, or eyes. That’s not easy to do, so keep those hands clean.
- If you have flu like symptoms fever plus at least cough or sore throat or other flu symptoms stay home for seven days after symptoms begin or until you’ve been symptom free for 24 hours whichever is longer.
- Wear a face mask (consider using an N95 respirator) if you must come into close contact with a sick person. “near contact” means within 6 feet. Note There is no definitive substantiation that a face mask prevents flu transmission. Do not calculate solely on a face mask to help infection.
- Wear an N95 respirator if helping a sick person with a nebulizer, inhaler, or other respiratory treatment.

![FLU PREVENTION TIPS](image)

**DIAGNOSIS:**

Opinion Your croaker will conduct a physical test, look for signs and symptoms of influenza, and conceivably order a test that detects influenza contagions. There are several tests used to diagnose flu, but not everyone who has the flu needs to be tested. In utmost cases, knowing that someone has the flu does not change the treatment plan. Croakers are more likely to use a test to diagnose flu if:

- You are formerly in the sanitarium
- You are at high threat of complications from the flu
- You live with someone who’s at greater risk of flu complications
Your doctor may also use a test to determine whether a flu contagion is the cause of your symptoms, or if you have or are showing signs of another problem besides the flu,

- Heart problems, similar as heart failure or an infection of heart muscle
- Lung and breathing problems, similar as asthma or pneumonia
- Brain and nervous system problems, similar as encephalopathy or encephalitis
- Septic shock or organ failure

The most generally used test is called a rapid-fire influenza individual test, which looks for substances( antigens) on a tar sample from the nose or reverse of the throat. These tests can give results in about 15 Minutes. Still, results vary greatly and aren’t always accurate. Your croaker may diagnose you with influenza grounded on symptoms, despite a negative test result. More-sensitive flu tests are available in some technical hospitals and labs.

**TREATMENT: -**

**Herbal Prospects of Treatment**

Ayurveda emphasizes on the impunity of people living in regions affected by contagions. This branch of drug promotes the input of special sauces or decoctions to increase the impunity position of the people. Ayurvedic remedies comprise pure natural sauces which are effective in precluding swine flu. Also, the sauces are used to relieve swine flu symptoms, and boost the vulnerable system against the H1N1 contagion. Ayurvedic treatment for swine flu involves the use of following sources

1) **Tulsi:-**

Tulsi is cultivated for religious and medicinal purposes, and for its essential oil painting. It’s extensively known across the Indian key as a medicinal factory and a herbal tea, generally used in Ayurveda, and has an important part within the Vaishnava tradition of Hinduism, in which addicts perform deification involving holy basil shops or leaves The variety of Ocimum tenuiflorum used in Thai cookery is appertained to as Thai holy basil. It isn’t to be confused with Thai basil, which is a variety of Ocimum basilicum. Osmium is a rubric of sweet periodic and imperishable sauces and shrubs in the family Lamiaceae. Its stylish known species are the cuisine condiment cuisine basil, Basilicum and this medicinal condiment Tulsi (holy basil), O. Tenuiflorum. Utmost culinary and cosmetic basils are cultivars of Ocimum basilicum.

Tulsi or holy basil is deified and worshipped throughout India for its amazing medicinal properties. It’s know to:

i. To Relieve stress
ii. Strengthen the immune system
iii. Enhance stamina
iv. Relieve congestion and colds
v. Promote healthy metabolism
vi. Relieve inflammation
vii. Lower cholesterol
viii. Provide rich force of antioxidants

Many drugs exploit its restorative powers, especially treatments for common cold and flu. Have five properly washed leaves of Tulsi( known as Basil in English; medicinal name Ocimum sanctum) every day in the morning. Tulsi has a large number of remedial parcels. It keeps throat and lungs clear and helps in infections by way of strengthening your impunity.

![Fig 5](Tulsi_Ocimum_sanctum)

2) **GINGER:-**

Pert officinalis is one of the natural remedies for swine flu prevention. It boosts the body’s impunity position and helps cover the body. The characteristic odor and flavor of Ginger root is caused by a mixture of zingerone, shogaols, and gingerols, volatile oil that comprise of about one to three percent of the weight of fresh gusto. It boosts the body’s impunity position and helps cover the body. Ginger has been known to fight cold, fever and flu conditions, and is also good to reduce inflammation. Ginger root, which has anti-nausea and anti-inflammatory goods and also aids digestion.
Fig 6 :-
GINGER ( ZINGIBER OFFICINALIS)

3) GARLIC:-

Allium sativum, also known as Lahsan (Hindi) and Garlic (English), belongs to family Alliaceae. A Sativum has been used throughout recorded chronicles for both culinary and medicinal purposes. It has a Characteristic pungent, spicy flavor. Allium sativum on the other hand is an important natural antibiotic. Garlic has Natural antiviral, antibacterial, and vulnerable - boosting properties. A Sativum has been used for hundreds of times to Treat fungal, parasitic, and viral infections, and has anti-inflammatory properties that show pledge for Prevention of cardiovascular complaint. It’s known to kill influenza contagion in vitro. An extract of A. Sativum Called ajoene, which appears to cover CD cells from attack by HIV beforehand in the viral life cycle. At low attention, the drug appears to have little poison, and it’s anti-HIV exertion is 45 times more important than The drug dextran sulfate. Ajoene is set up only in fresh A. Sativum and is not readily attainable. Recent examinations reveal that A. Sativum impairs the exertion of the liver enzymes that process protease impediments And raises the protease asset situations. The in vitro antiviral exertion of A. Sativum extract( GE) on mortal Cytomegalovirus (HCMV) was also estimated in kerchief societies, sanctum reduction, and early antigen assay. A Cure-dependent inhibitory effect of GE was apparent when GE was applied simultaneously with HCMV. The in vitro antiviral exertion of garlic against para influenza contagion type 3 and mortal Rhinovirus type 2 has also been estimated. Garlic. A study assessing a garlic supplement on cold frequence and duration set up that lower snap were reported by those taking the supplements, than those that did have cold symptoms reported a Shorter duration. 64 Raw garlic has been set up to be more remedial than cooked garlic.

Fig 7 :-GARLIC ( Allium sativum)
Table 1: List of medicinal plant, which are useful in the treatment of swine flu.

<table>
<thead>
<tr>
<th>Sr.No</th>
<th>Plant name</th>
<th>Family</th>
<th>Chemical compound</th>
<th>Antiinfluenza action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tulsi</td>
<td>Lamiaceae</td>
<td>Oleanolic acid, ursolic acid, rosmarinic acid, eugenol, carvacol, linalool, and bata-caryophyllene</td>
<td>Antimicrobial properties</td>
</tr>
<tr>
<td>2</td>
<td>Ginger</td>
<td>Zingiberaceae</td>
<td>Allicin, alliin</td>
<td>Anti-nausea and anti-inflammatory properties</td>
</tr>
<tr>
<td>3</td>
<td>Garlic</td>
<td>Alliaceae</td>
<td>Ajoene</td>
<td>anti-inflammatory, anti-viral, anti-bacterial, and immune-boosting properties</td>
</tr>
</tbody>
</table>

CONCLUSION: -
Influenza H1N1 contagion is spreading fleetly through sustained mortal- to mortal transmission in multiple countries. Infected person may be suitable to infect others beginning one day before symptoms develop and over to seven or further days after getting sick. Many of the antiviral medicines are available in the request for treating this wide spr

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