OSTEOPATHIC TREATMENT OF AVIAN FLU

By: Jacob Brainis BSc (Med), DOMP, R.TCMP
# Table of Contents

- Abstract
- Purpose
- Background
- What is Avian Influenza?
- Treatment
- Conclusions
- Osteopathetic Manual Therapy (OMT)
- Techniques
ABSTRACT

Avian influenza - H5N1 virus
Highly contagious among birds
- A few known cases of human avian influenza have been documented.

Global concern:
- Mutation/genetic exchange with more commonly transmitted human influenza viruses could result in a pandemic of avian influenza.
- Concern remains despite approval of H5N1 vaccine (United States)

Fear - a pandemic of avian influenza could result in the kind of mortality that was seen with the Spanish influenza pandemic of 1918–1919, 40 million deaths
The purpose of this presentation is to:

- Discuss the characteristics of avian influenza
- Describe the success of DOs during the 1918–1919 Spanish influenza pandemic
- Describe the evidence base for the inclusion of OMT as part of the treatment of avian influenza
- Describe specific OMT procedures that could be utilized as part of the treatment protocol for avian influenza patients
Avian influenza - "bird flu"

Avian influenza virus H5N1 - occurs naturally among birds

- Very contagious among birds
- Does not usually infect humans
- Cases of human infection since 1997

Virus transmission:

- Bird to bird
- Bird to humans (who have high level of contact with birds, bird droppings)
  - illness develops 1-5 days of exposure
  - Symptoms: conjunctivitis, cough, fever, sore throat, myalgias

Virus could mutate (change DNA sequence)

Virus could exchange genes with a more easily transmitted human influenza virus

**Concern:** this may lead to larger scale avian influenza infection in humans. This can spread globally.
Avian Influenza – mode of action

- **Virus enters person** (ears, throat, nose)
- **Enters epithelial cells** (EC’s) lining ears, throat, nose
- **Virus kills EC’s**
- **Dead EC’s accumulate** – immune system response to clear dead cells
Avian Influenza – mode of action

- **White blood cells activated** in lymph glands
  - Lymph glands swell – formation of more active white blood cells
  - “**Inflammatory Response**”

- **Symptoms:**
  - Sweating, shivering, stiffness, headache
  - Most severe cases – acute respiratory distress, pneumonia
  - Toxicity – accumulation and circulation of dead EC’s AND body’s response to eliminate them
  - Body in state of shock and stress – adrenaline overproduction

- **Influenza – body’s response to the accumulation of dead EC’s caused by virus**
Osteopath’s role in treatment

- Maximize the blood circulation and lymphatic fluid drainage to eliminate dead EC’s

- Clearing EC’s will eliminate symptoms of influenza

- Feel movement and obstructions in the functioning of sympathetic nervous system
Rational behind treatment

Based on results of the use of OMT during the 1918 Spanish influenza pandemic, we propose that OMT be included as a part of the overall treatment plan for patients with influenza.

Benefits in the treatment of avian influenza could be classified in the following categories:

- Enhance the patient's immune response, providing the patient with a means to further avoid complications and promote recovery
- Improve body mechanics by way of reducing tissue hypertonicity and joint hypomobility.
CONCLUSIONS

OMT proved to be a critical factor in the success of osteopathic physicians treating influenza patients during the pandemic of 1918.

OMT procedures can:
- Stimulate the immune system
- Improve arterial, venous and lymphatic circulation by way of improving such things as rib cage biomechanics and thoracoabdominal diaphragm motion.

Accomplishment of these treatment goals may provide the mechanism for avoidance of complications and an increased rate of recovery from such illnesses as influenza.
OMT PROCEDURE USEFUL IN THE TREATMENT OF INFLUENZA

Thoracic, hepatic, splenic, abdominal and pedal lymphatic pump procedures, and rib raising procedures

Soft tissue procedures, pectoral traction, mandibular drainage, frontal and maxillary lifts, and diaphragm doming

Specific Chapman reflexes, observed to be useful in treatment of respiratory ailments such as influenza are shown

Muscle energy techniques that can help to improve rib cage biomechanics

These OMT procedures are not presented as a specific treatment protocol, but rather as a listing of OMT procedures as a resource for use in an overall treatment plan for a given patient.
FIGURE 1
Classical thoracic pump technique
FIGURE 2
Abrupt hand release for thoracic lymphatic pump technique with activation
FIGURE 3
Hand position for hepatic pump technique in the supine position
FIGURE 4
Hand position for hepatic pump technique in the lateral recumbent position
FIGURE 5
Hand motion for lateral recumbent hepatic pump technique.
FIGURE 6
Hand position for supine splenic pump technique
FIGURE 7
Hand movement for supine splenic pump technique
FIGURE 8
Hand position for lateral recumbent splenic pump technique.
FIGURE 9
Hand movement for lateral recumbent splenic pump technique.
FIGURE 10
Abdominal pump technique.
FIGURE 11
Starting position for pedal pump technique
FIGURE 12
Rib raising technique
FIGURE 13
Pectoral traction technique
FIGURE 14
Frontal sinus drainage technique
FIGURE 15
Maxillary sinus drainage technique
FIGURE 16
Frontal lift technique
FIGURE 17
Supine doming of the diaphragm
When MIND is weak, situation is a PROBLEM. When MIND is balanced, situation is CHALLENGE, when MIND is strong, situation become OPPORTUNITY.
THANK YOU

IF YOU HAVE ANY QUESTIONS PLEASE DO NOT HESITATE TO ASK.......