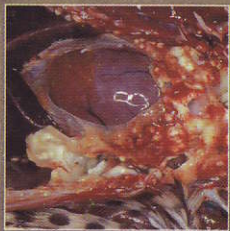
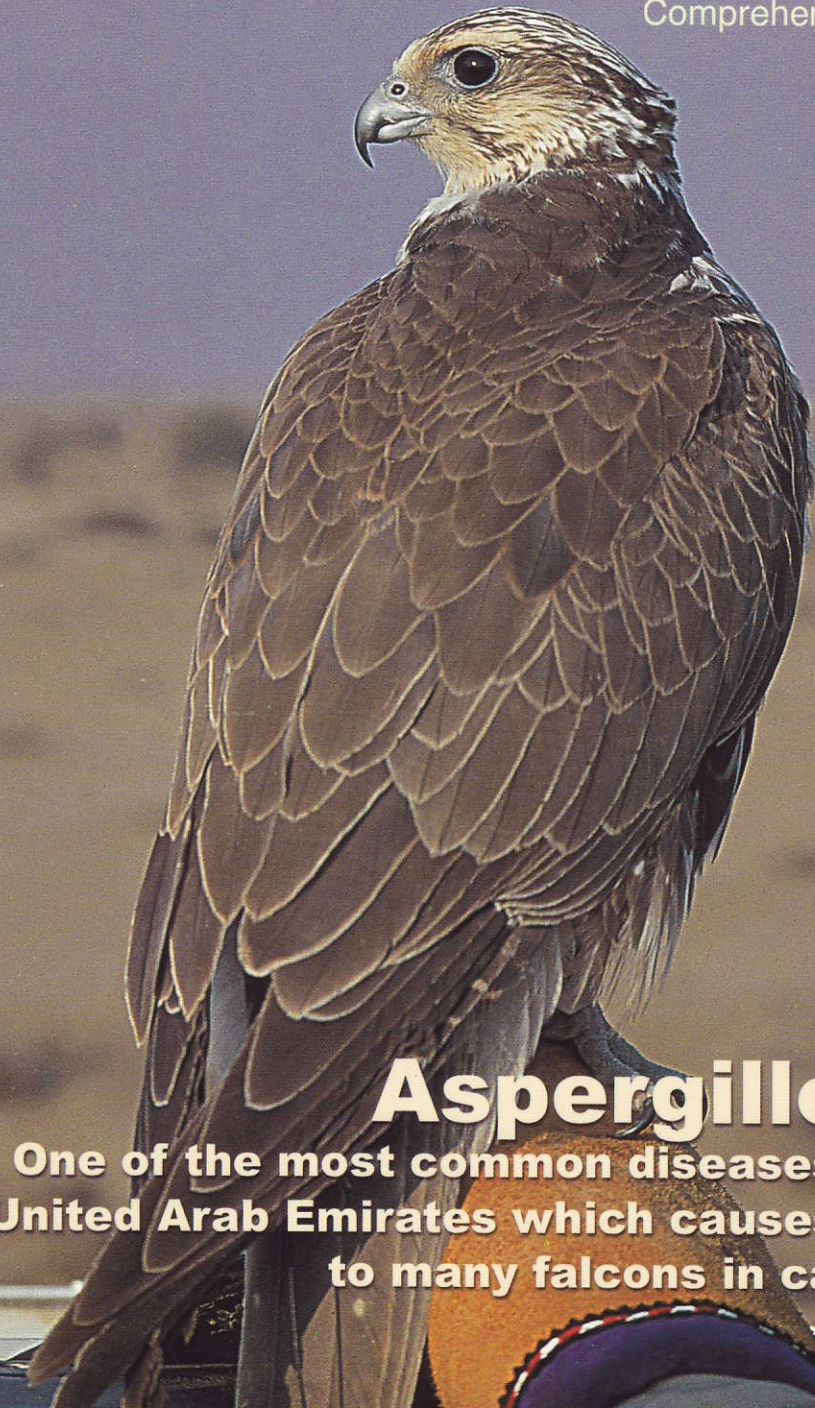


# Abu Dhabi Falcon Hospital

Comprehensive Care



## Aspergillosis

**One of the most common diseases in the United Arab Emirates which causes death to many falcons in captivity**

## Why do falcons get infected by aspergillosis?

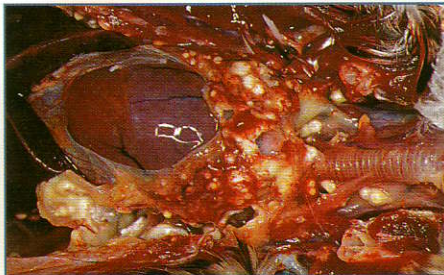
Falcons catch aspergillosis easily when they are:

- ◆ sick
- ◆ weak
- ◆ under stress

**Stress** in falcons is caused by a variety of factors such as:

- ◆ being kept in dark, humid or hot rooms with dust due to insufficient air ventilation.
- ◆ increased training without enough food for the falcon.
- ◆ captivity either of newly-caught wild falcons or of removing young captive-bred falcons from their hatching pen.
- ◆ long travelling hours and distances;  
This is often the case in captive-bred falcons coming from Europe or the United States to the Middle East to be sold to new owners. The journey is in many cases an exhausting one and therefore causes the stress level of the falcons to rise extremely high
- ◆ changes in climate and/or environment;  
Falcons develop a certain immune system towards germs and bacteria of the region they are living in. This means that their resistance against bacteria and germs in a different environment is not highly developed. Gyr falcons for example have a very low immune system as they originate in very cold and arctic places like Siberia. In these geographic regions only a very limited flora of germs and bacteria does exist due to the low temperature level often reaching below 0°C. When these birds are transferred to the completely different warm and germ promoting climate of the Middle East their immune system is an ideal victim to the invasion of fungi like aspergillus.

## How does aspergillosis look like in falcons?



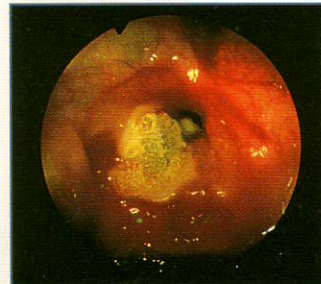
Picture 1:  
The white areas show the fungal granulomas in the air sacs.

## What causes Aspergillosis in your falcon?

Aspergillosis is usually caused by a fungus called '*Aspergillus sp.*' and mainly the '*Aspergillus fumigatus*'. The falcons inhale the fungus spores which can be found in the air and in the soil. The fungus spores then reach the air sacs and cause an infection. Several spores get attached and grow inside the opening of the lung, the so-called ostium, and inside the airsac thus causing heavy breathing disorders. If there are many spores inside the airsacs already, the disease may kill the falcons within a few days. Aspergillosis may also take several weeks and months without visible manifestation before the falcon gets really sick. Aspergillosis causes unspecific symptoms like lack of appetite, vomiting, weight loss and weakness. Falcons suffering from aspergillosis are very susceptible to other diseases because their immune system is very low.



Picture 2;  
Green fecal in falcons, a possible sign of aspergillosis



Picture 3:  
Endoscopic picture shows white aspergillosis lesion at the lung ostium in a newly imported gyrfalcon

## How do you know that your falcon has aspergillosis?

Falcons can catch aspergillosis at any time during the year. Therefore it is important that you check your falcons at regular intervals.

Symptoms of aspergillosis which require a checkup at the veterinarian:

### 1. Abnormal breathing

Hard abdominal breathing shows an already advanced stage of the disease.

### 2. Stress test

When performing the stress test yourself, you should proceed as follows:

- ◆ Put your falcon in a cold place and observe the breathing frequency like 15-30 per minute.
- ◆ Put your falcon on a mangalah and let her fly for 15-20 sec.
- ◆ Watch her breathing for 2-4 minutes. After a max of 5 minutes the breathing frequency should have normalized and if not, the falcon is likely suffering from aspergillosis.

### 3. Flight behaviour

Falcons with aspergillosis are in a very bad flight condition. The first sign of the disease is an increased flapping of the wings as well as reduced stamina.

### 4. Reduced muscle mass

You have to check the chest muscle regularly in order to recognize if the falcon is in good condition and not losing muscle weight.

**5. Continued vomiting, inappetence, weight loss despite feeding your falcon well.**

**6. Green urate part of the fecal**

## How can you prevent your falcon from getting aspergillosis?

Stress is one of the main factors for a low immune system. This means that your falcon's body cannot or has great difficulties in fighting the Aspergillosis fungus.

Therefore:

Stress prevention is the most important tool any falconer has to consider to prevent his falcon from getting Aspergillosis.

The following points will show you how to keep your falcon healthy:

### 1. Keep your falcon in a clean place

If you keep your falcon during the hot summer months, you should keep her in a cold room or aviary. Clean the air condition filters weekly and provide sufficient air ventilation in the rooms. Reduce the humidity and dust inside the room.

### 2. Buy the right falcon

- a. Choose the right falcon that can survive in the local region. The falcons originating from cold areas like gyr falcons easily get affected by aspergillosis because of their reduced immune system.
- b. The young falcons which have been newly imported into the country can get aspergillosis more easily than those falcons living here for a longer time.
- c. Before you buy your falcon, go to the veterinarian for a complete check up to ensure that the falcon is free from aspergillosis.

### 3. Nutrition

Maintain a good weight for your falcon so that it won't catch aspergillosis easily. Feed it a balanced diet of bones, feathers and fur for proper digestion.

### 4. Do not put healthy falcons and sick falcons in the same room.

Be careful not to keep your healthy falcons with sick ones in one room although aspergillosis might not be transmitted to other falcons directly.



Picture 4:  
The picture shows nebulisation against fungus which is used as aspergillo-sis treatment in the falcon hospital.

## Is it easy to cure aspergillosis?

Curing aspergillosis is not an easy task. In most cases veterinarians are successful in treating aspergillosis in a very early stage, whereas the chances of survival are poor in a more advanced stage of this disease. Moreover, there is no guarantee that aspergillosis will not return. Falcons surviving the disease may contract it at a later time and then die of aspergillosis. The flight performance may decrease due to permanent damage inside the lungs, bronchi and airsacs.



Veterinarians use the latest techniques like endoscopy to detect aspergillosis in falcons

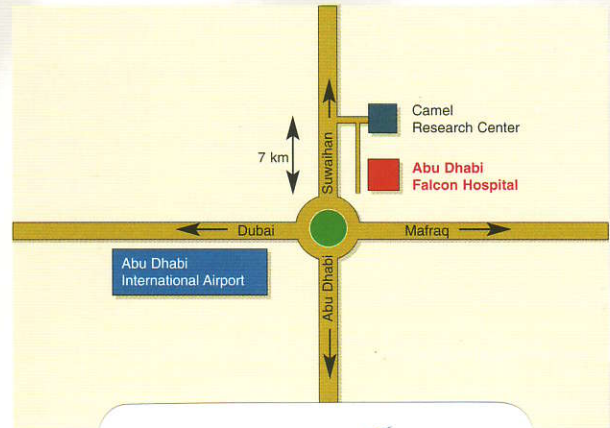
## Remember

- ✦ Aspergillosis may kill your falcon.
- ✦ Curing aspergillosis is not an easy task.
- ✦ Stressed falcons are most susceptible to aspergillosis.
- ✦ Taking good care of falcons and their facilities reduces the chance of getting aspergillosis.
- ✦ Discovering aspergillosis at an early stage gives a better chance to treat the falcons successfully.
- ✦ Prevention is better than treatment.
- ✦ If you suspect your falcon is suffering from aspergillosis, immediately visit your veterinarian to receive appropriate treatment.

## Hospital Location

Abu Dhabi Falcon Hospital is located near the Abu Dhabi International Airport. It lies 3 kms along the Abu Dhabi-Sweihan road after the Shawamikh -Airport roundabout.

The hospital opening hours are from 8:30 a.m. to 2:30 p.m., Saturday through Wednesday.



**For more information please contact:**

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