EUROPEAN
ADVISORY BOARD ON CAT DISEASES
ABCD

Influenza virus infection in cats

FACT SHEET

What is influenza in cats?

- In cats, influenza may be caused by avian H5N1 or human (pandemic) H1N1 influenzaviruses. Additionally, early observations reported subclinical infection of cats after experimental exposure to the human influenza H3N2 virus responsible for seasonal flu.
- The subtype H5N1 avian influenza virus occurs primarily in birds and infection varies from mild disease with little or no mortality to a highly fatal, rapidly spreading epidemic (highly pathogenic avian influenza, HPAI) depending on the virus strain, host factors and environmental stressors.
- Waterfowl are more resistant to avian influenza than domestic poultry, in which it is usually fatal.
- Transmission to mammals, including humans, happens sporadically, and the infection then may cause disease with high morbidity and mortality rates.
- It is extremely rare for cats to be infected and there are only very few confirmed reports of the disease in Europe.
- Cats are also susceptible for the pandemic H1N1 virus. Therefore possible future susceptibility to human influenza viruses cannot be excluded.

Infection

- Cats can be infected via the respiratory and oral routes (e.g. contact with an infected owner or by eating infected birds).
- The key precondition for infection with avian influenza viruses is that the cat lives in an area where H5N1 virus infection has been confirmed in birds.

  Additionally, the cat should have had either:

  - outdoor access to an environment where waterfowl is present,

  - contact with poultry or uncooked poultry meat,

  - close contact to an H5N1 infected, sick cat during the first week of infection.
- In case of human influenza a cat living in a household with infected humans, is at risk.
- However, there is no evidence that cats play a zoonotic role. So far, influenza virus transmission from cats to people has not been reported.

Clinical suspicion

- Potential risk should be assessed, e.g. local presence of confirmed cases in wild birds or poultry and outdoor access is a high risk situation.
- Clinical signs in cats may include fever, lethargy, dyspnoea, conjunctivitis and rapid death. Neurological signs (circling, ataxia) have also been recorded.

Diagnosis

- The veterinary authorities should be notified, and the diagnostic laboratory should be contacted for instructions.
- Oropharyngeal, nasal and/or (for avian influenza viruses) rectal swabs or faecal samples of suspect cases should be submitted for PCR and/or virus isolation. Cats should be sedated prior to swabbing to minimise the risk of infection.
- Post mortem samples of lung and mediastinal lymph nodes should be kept and shipped in 10% formol saline.
- Particular care should be taken when handling the cat and/or samples (plastic sample tubes to be labelled with alcohol-proof markers and swabbed with alcohol before wrapping in plastic bags).

Disease management

- Keep cats with suspected influenza virus infection in strict isolation with barrier nursing.
- Minimise all physical contact and wear gloves, a mask and protective eyewear whenever handling the cat.
- The virus is sensitive to standard medical disinfectants.
- Before bringing it to the clinic, the cat should be confined by the owner to a separate room. Owners should minimize all physical contact, while litter trays, bowls, baskets and other potentially contaminated objects should be disinfected.

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Vaccination & disease prevention

- No vaccines are available for cats.
- To minimize the risk of H5N1 infection in cats, owners should refrain from feeding their cats uncooked poultry meat and closely follow the epidemic in the national media.
- In case of a suspect or confirmed case of H5N1 avian influenza in the area, owners should keep their cats indoors until further information is available and follow official regulations.
- IInfluenzavirus-infected persons should avoid close contact to their cats.

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