



Enzootic bronchopneumonia, Bovine respiratory Disease (BRD) Virus pneumonisi – SIĞIR GRİBİ

3 - 12 months of age, autumn-winter seasons are frequent.

Factor is multifactorial

Predisposing factors are generated by viral agents (PI-3, adeno-, re-viruses; respiratory syncytial virus, IBR, MD et al.).

Interstitiel peneumoni, as a result of secondary infection (Corynebacterium pyogenes, Pasteurella spp. Chlamidia sp., Hemophilis sp, Streptococcus sp., Staphylococcus spp., Pseudomonas aeruginosa et al.) Results in the return to purulent, abscess, fibrinous pneumonia.

In the case described as lung bowel syndrome, diarrhea d is increased as a result of changes in the small bowel.



MYXOVIRUS INFECTIONS

They usually cause catarrhal infection of the upper respiratory tract

Pneumonia is secondary

PIG INFLUENZA

Influenza virus is generated by type 3

It can start spontaneously and influence the entire flock.

Watches with Verminous pneumonia

it is seasonal

Secondary infection is seen (hemofilus, pasteurella ..)

With the spread of the fire in the upper respiratory tract, interstitial pneumonia (anterior parts) may be secondary pneumonia with secondary infection.

EQUINE INFLUENZA

Ortomyxovirus, influenza A (equi virus type I)

In the upper respiratory tract, hyperemia is characterized by bronchitis and broncho-interstitial pneumonia characterized by edema, desquamation and focal erosion.

This picture alone is ener Hoppegartener's Disease Bu; bacteria (Streptococcus, Staphylococcus, E. coli, etc.) and abscesses. If it returns to the pneumonia, it is called "Brussels Disease pneum.

In chronicity, the peribronchitis nodosa is formed and is involved in the pathogenesis of "fading of horses K.

BOVINE PARAINFLUENZA - 3 INFECTIONS

It causes inflammation of the upper respiratory tract characterized by mucous membrane discharge.

LUNG

forms the interstitial pneumonia in the form of pure (primary) infection. It participates in Shipping fever and enzootic pneumonia in the form of secondary or mixed infections. In this case, the lesions are usually localized in the cranioventral regions; The composition consists of broncho-interstitial pneumonia and atelectatic sites.

Microscopic examination of the pneumonia in the table next to the table; especially the infection 2-4. In the days of bronchial epithelium hyperplasia is encountered.

Intracytoplasmic inclusion bodies characteristic findings .



SYNSITIAL VIRUS INFECTIONS



Bovine respiratory Syncytial Virus Infection

The causative agent is the pneumovirus genus from the paramyxovirida family.

In most herds, the antibody against the virus is detected.

Together with other viruses, it makes bovine flu

In the form of pure infection, interstitial pneumonia is characterized by syncytial virus infection.

Pathological Findings

Macroscopical Findings

Lesions are not severe.

Degenerative rhinitis

Catarrhal bronchitis, bronchiolitis

Lymph nodules swollen



DISTEMPER



CANINE DISTEMPER DISEASE

Paramyxoviridae is from the Morbilli virus genus - Medipest group.

(Me = masern, Di 0 distemper, Pest0 plague, rinderpest)

Virus pantroptur (shows affinity to various organ and cells).

It enters the regional lymphoid tissue (regional lymph nodes, tonsils etc.) according to the mode of transmission. If neutralized antibodies develop within 8-9 days, the virus cannot spread

Age is an important factor in the development of the disease. It develops in people under 1 year old (except for old dog encephalitis!)

The effect on lymphoid tissues (mild disorders in lymphocytes) facilitates the development of secondary infection.

For this reason, especially the respiratory form is almost always complicated by secondary infection!

Forms of the effect of various changes in the system as a result of changes occur.

This forms :

1. **Respiration** (interstitial pneumonia, catarrhal and other pneumonias as a result of secondary infection) It is especially complicated with *Bordetella bronchiseptica*!
2. **Digestive** (catarrhal gastroenteritis or enteritis; sometimes hemorrhagic)



3. Nerve (nonpurulent encephalitis, or more precisely, nonpurulent encephalomyelitis) Only in older dogs (6,7,10 years old) only encephalitis form develops!

4. Eye

5. Skin (eczema-like change in skin, hyperkeratosis, end of hyperkeratosis in the soles of the form of ide hard pat z).

The first three forms are preliminary. A number of forms can be seen together.

In the diagnosis, the morphological changes in the lungs and other organs as well as the presence of **intracytoplasmic and intranuclear inclusion bodies** are considered to be **pathognomonic**. Demonstration of demyelination in the related inflammation table in the form of **non-eruptive encephalitis is characteristic**. In addition, intracytoplasmic and nuclear inclusion in neuron and glia cells confirmed the diagnosis. They are particularly



PESTE DES PETITS RUMINANTS VIRUS INFECTION

Distemper is from the Morbilli virus genus of the Paramyxoviridae family such as rinderpest, measles, and marine mammals. It carries the characteristics of the genus.

Occurs in sheep and goats. When the virus is given to cattle, the antibody does not form.

The disease occurs in goats, especially in Central African countries, in India. It has been observed in Middle Eastern countries like Israel and has been identified as serological in most of them.

ADENOVIRUS

ADENOVIRUS INFECTION

DOG

Type I Canine hepatitis

Type II forms the disease of the respiratory system.

Necrotic bronchitis, intranuclear inclusion body (Cawdry A)

Interalveolar interstitial pneumonia forms.

There is also serofibrinous exudate in the alveoli.

HORSE

Congenital immune deficiency is common in horses (arabian colts).



Mucopurulent exudate in the respiratory tract,

Atelectasis in the cranioventral regions of the lung

Microscopic examination

Necrotic proliferative (hyperplastic) bronchitis

Interalveolar interstitial pneumonia

Alveolar lumens include macrophage, and partly neutrophil leukocytes

Intranuclear inclusion bodies in bronch and alveolar epithelial cells are the main findings.

Inclusion bodies:

Upper respiratory tract, renal pelvis and ureter epithelium, conjunctiva, pancreas are also observed in salivary glands.

HERPES VIRUS INFECTIONS

Herpes viruses are located in other systems and cause diseases in the respiratory system.

Inclusion body rhinitis of pigs

IBR in cattle, CGB

Feline viral rhinotracheitis in cats

Rhinopneumonitis equi in horses
more common herpes virus infections



EQUINE RHINOPNEUMONITIS

Equine Rhinopneumonitis (Kısrak Viral Abortusu)

Inflammation of the respiratory tract

Pregnancy (7-10 months) is characteristic with abortus

The main findings are the discarded fetus

Nervous system lesions (especially in foals)

pathogenesis

Aerogen enters the body from the upper respiratory tract that is taken by infection

Pregnant animals pass from the placenta to the offspring.

Adults

It does not cause serious illness.

Occurs with minor upper respiratory tract infection

Mild fever, catarrhal rhinitis, conjunctivitis, sometimes edema of the extremities are formed.

Pregnant mares have obesity without symptoms.

Secondary infection

Mukopurulent rhinitis,
pharyngitis, laryngitis,

The bronchopneumonia is shaped.

Fetus

The main findings are in the fetus. This way you can reach the diagnosis!

The mummification,

Icterus

Petechial hemorrhages in mucous membranes

Subcutaneous edema

Focal necrosis of organs, especially liver and spleen

Pneumonia

Liver and spleen. intranuclear inclusion bodies in the lung cells

It is rare to see these bodies outside the fetus!

Foal

Especially at this age, ataxia is seen in the clinic due to neural changes.

The cause of neural findings

Malignant hypoxia and ischemia associated with necrotic vasculitis in the brain; disseminated meningoencephalitis; changes in the spinal cord!

also

Necrotic bronchitis,

Bronchopneumonia also frequently formed

Intranuclear inclusion bodies are observed in the epithelium of this region.

REOVIRUS INFECTION

Horse, cattle, dog, cat etc. In animals, it causes mostly symptomless upper respiratory tract infection.

It creates pneumonia with the help of predisposing factors. In such cases, atypical is involved in enzootic **pneumonia**.

PARVOVIRUS INFECTIONS

Congestion and edema in the lungs in dogs and cats develop due to myocarditis (myocarditis).

The main findings are in other systems, mild interalveolar interstitial pneumonia may also be shaped

Parvoviruses of other species are not important for the respiratory system.