

## 3-Tuberculosis (T.B)

\***Definition:** It is chronic bacterial disease characterized by **unthriftiness**, drop in egg production and long incubation period.

\***Etiology:** **Mycobacterium avium**, acid fast organism, it can be stain with ziehlneelsen.

\***Susceptibility:-**

- 1-Chicken, poultry, pigeon, canary are susceptible to disease.
- 2-Man, swine can get infection.

\***Transmission:-**

The disease is transmitted by **direct or indirect method by:-**

- 1-Contamination of **food and water** as result of shedding of bacteria from **intestine** and presence of organism in the **feces**.
- 2-By **air droplets** are result of sneezing, coughing, and the neighbor birds can get infection.
- 3-Cannibalism might play in transmission.
- 4-Wild birds such as **sparrows, starlings and pigeons** spread the disease to healthy flocks.

\***Clinical Signs:**

- 1-There is **emaciation, loss of weight** while **appetite remain good** commonly occurs.
- 2-**Atrophy of breast muscles** with **prominent keel or even knife edge**.
- 3-Comb and wattle is **pale** and sometime shrinkage.
- 4-**Persistence diarrhea**, unilateral lameness.
- 5-**Sudden death**, because of **rupture of affected liver** or spleen, lead to **internal hemorrhage**.

**\*Gross lesion:-**

1-The lesions of avian tuberculosis in chickens are characterized by pinpoint to several centimeters, **irregular grayish yellow or grayish white nodule in spleen, liver, intestine.**

2-Nodules are **firm and caseous**, granuloma in bone marrow.

3-Involvement of livers and spleen results in enlargement, which can result in **fatal hemorrhage** from rupture.

**\*Diagnosis:-**

1-Clinical signs and gross lesion.

2-Demonstration of **acid fast bacilli is smears or histologic sections of liver and spleen.**

3-**Tuberculine test.**

4-ELISA test.

5-Rapid Agglutination test.

**\*Prevention and Control:-**

1-**Tuberculine test and culling of infected birds.**

2-**Good ventilation, nutrition and management.**

3-**Condamnation of bird.**