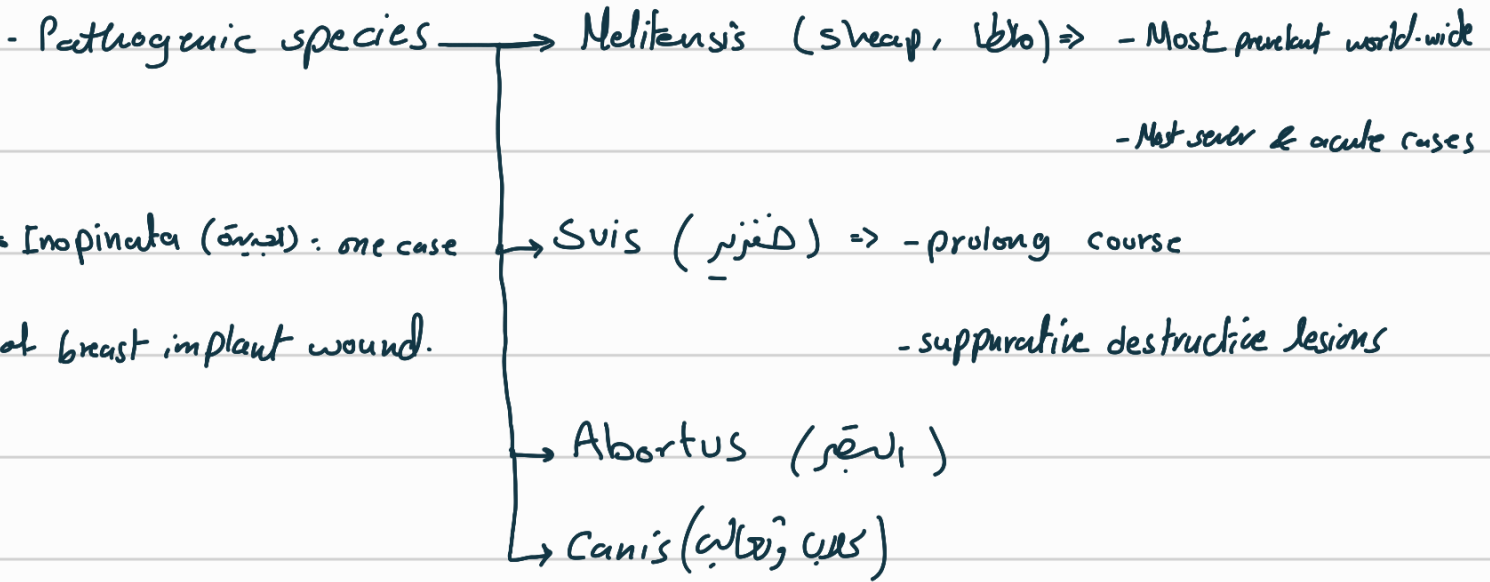


- Gram (-ve) bacilli or coccobacilli

- Intracellular



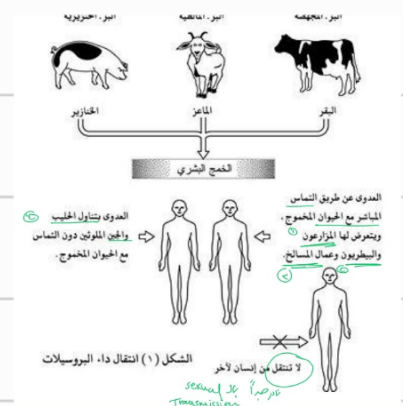
► Brucellosis in Animals :-

- Asymptomatic, can cause abortions in animals.
- Shed in large numbers in animal's (urine / milk / Placental fluid).

► Mode of transmission :-

- ① Ingestion of unpasteurized dairy products
- ② Slaughterhouse workers
- ③ veterinarians [abortus, melitensis]
- ④ Microbiologists by aerosols.

Main route of melitensis transmission to human



► Pathophysiology :- Invading macrophages, then macrophages transport brucella to (lymph nodes / spleen / liver / Bone marrow / mammary glands / sex organs)

- low mortality rate (<5%), due to endocarditis.

- ♂ > ♀ (5:2)

► Signs & symptoms

1 Fever (80-100% of cases), can be associated with relative bradycardia

2 Anorexia, fatigue, weakness (>90%)

3 Dry cough (20%) & SOB, rarely associated with pulmonary involvement

► Presentation

* Subclinical \Rightarrow Asymptomatic

* Acute or subacute \Rightarrow Mild & self-limiting, symptoms develop 2-12 months prior to diagnosis

* Chronic \Rightarrow persisted 1 year or more, hard to diagnosis

* localized complications \Rightarrow ① osteoarthicular (most common) \rightarrow sacroiliitis

② Genitourinary ③ Hepatosplenic ④ CNS

⑤ endocarditis (2% very rare: cause of death)

► Diagnosis

- \downarrow WBC (lymphocytosis / Pancytopenia) - culture - serology [standard Tube agglutination]

► Treatment: Multidrug + prolonged used

* Doxycycline & rifampin 6 weeks \rightarrow more used, less toxic

* Doxycycline (6 weeks) & streptomycin (2-3 weeks) \rightarrow Better, more toxic

* Children < 8 years, rifampin & TMP-SMX (6 weeks).

⊕ Pregnant

\Rightarrow Doxycycline

discoloration of teeth