

12. Summary

The tuberculosis of the cattle – a contribution to the history of diseases

Tuberculosis of the cattle is illustrated beginning with the first written documentations until present time.

It was found rather late in history that a connection between tuberculous illness on humans and on animal exists. Evidence from ancient greek and roman sources allows to assume that already in this era immense economic damage was caused by tuberculous phenomena afflicting cows. Although no scientific understanding of this disease was yet developed, useful prophylactic measures have been described. Symptoms which can be presumed to be of a tuberculous nature similary appear in old jewish texts.

The following chapter focusses on medieval practices in dealing with the epidemic; while it was often prohibited by law to consume cows and pigs infected with „Perlsucht“, the interpretation of the disease's symptoms however was guided by superstition rather than by science. Religious dogmatism seriously restricted any scientific studies. Various scholars however conducted anatomical examinations of infected humans and animals, always finding the tubercle to be the most distinctive mark. At the end of the medieval period research into the nature of the „Franzosenkrankheit“ was intensified. During the course of the century many scientists then discarded the thesis of a veneral genesis of the disease.

Influenced by the new knowledge that tuberculosis of the cow was to be considered a disease not effecting human beings, it lost importance for veterinary and medical authorities until the 18th century. By the end of the 19th century most German veterinary surgeons still believed that there was no need to restrict the consumption of meat and milk from tuberculous animals. Research was further intensified at the turn of the 20th century and finally brought on the discovery of the causative, pathogene agents of tuberculosis by Robert Koch in 1882. This meant the breakthrough for assignment of various courses of illness to tuberculosis which then formed the basis of the successful extermination of tuberculosis of the cow.

The scientist's debate over *M. bovis* threatening human health came to end.

Manifold ideas about causative agents and symptoms are to be found in Germany until the 1930ies. During the first half of the 20th century the country witnessed an immense spreading of tuberculosis of the cow, naturally combined with heavy influences on human health.

The thesis on hand then explains different procedures to contain and cure the epidemic. Due to modern research methods the pathogen and its characteristics are described in detail until the 1950s. Tuberculosis of cow and humans further disseminated during World War II, after which the fight against tuberculosis in Germany followed Bang's method („Bangsches Verfahren“).

Since the separation of the two German states both tried to eradicate tuberculosis of the cow on a governmental level, thus both administrations developed and implemented plans according to Bang.

The connection between tuberculosis of cows and humans is always visible in this process as the reduction of tuberculosis of cows positively reflected in the number of humans infected with tuberculosis caused by *M. bovis*.

A new focus of tuberculosis of the cow has developed in Russia and some former Soviet Republics, as well as in underdeveloped regions of Asia and Africa. Presently an increased rate of new infections of humans and cows with tuberculosis has been registered there. This increase of the epidemic also heightens the danger of bringing tuberculosis of the cow back into the Central Europe.