Rinderpest had been the most devastating disease of farm animals. It has had more influence on the world's food supply than any other animal disease and as late as 1949 rinderpest killed over 2 million cattle per year. It is still a major problem to the owners of cattle and buffalo in Africa, the Middle East and Asia. The disease, with a morbidity approaching 100% remains an unrelenting threat to all rinderpest-free areas of the world (6).

Animal plagues have had a long history in the past. Ancient historians made frequent reference to plagues which left whole countries without a work animal, oxen was the chief draft animals for centuries (9). Columella who was an agricultural writer and lived in the first century A.D. had recognised rinderpest (2).

We don’t have reliable figures for the fatality due to rinderpest in Asia or Africa, however, Smithcors (9) reports that in Europe du-
ring the first part of the 18th century, over 200 million animals succumbed to the infection.

On the superstitious belief during the Middle Ages the occurrence of this infection was regarded as a Divine wrath and no measure was sought to eliminate it. Although at the beginning of the 18th century the proper method of eradication was developed by Ramazzini, Lancisi and Bates in Europe, its application was delayed.

During the middle of the 18th century the new epizootics spreaded and promoted the establishment of the first veterinary school in France in 1762. As a result of severe losses caused by this disease throughout Europe the first international veterinary congress was held in 1863 through the efforts of a British veterinarian, J. Gamgee (3).

Turkey like Russia was a very important bridge in transmission of rinderpest from Asia to Europe. The disease had been frequently reported in Turkey (7). Âli, a historian who lived in the sixteenth century gives detailed descriptions of an epidemic in cattle with a heavy losses, and names it as “Malkıran: cattle destructing” which is still in use among the farmers instead of rinderpest (1). According to Âli the epizootic was introduced from Iran in Hegira 1001 (A.D. 1592) and spreaded to western Turkey in four years. During his journey in Anatolia he notices high mortality in the animals. In some villages, from the large herds of 500 cattle only 10 or 20 remained alive. As a result, food supplies such as yoğurt, cheese and milk were very scarce for several years. Âli, being loyal to the ancient belief, attributes the disease to divine punishment for the dishonesty, deceit and trickery which he believes were common in his time.

In the 19th and early 20th century there were reliable records of rinderpest, in the years of 1847, 1877, 1881, 1888, 1889, 1893, 1894, 1898, 1899, 1905, 1906. It is noticeable that loss was greater during the Crimean War. In a short time 600,000 cattle were destroyed (3).

In 1894 the first Bacteriology Institute was founded for human and animal diseases in Istanbul. There Adil Mustafa and his French collaborator Morice Nicolle started research work on rinderpest. In 1902 they discovered a filtrable virus as a causative agent of rinderpest (5, 8). In the same year a separate bacteriology institute for animal disease “Bakteriyolojihanei Baytari” was established in Istanbul. Its major product was rinderpest serum. Within fifteen years two other institutions in Turkey have started producing more rinderpest serum(3).
According to Tieme (9) who was in Turkey for research work on animal diseases during the First World War there were some difficulties for eradication. Native cattle were more resistant to rinderpest than European cultured race, and the owners were reluctant to inform authorities. Although the first civil veterinary school* was established (1889) in Turkey due to epidemics of farm animals, especially of rinderpest, Ottoman Governments were not successful for eradication.

In 1920, the first Turkish Government paid serious attention to prevent such a pecuniary loss. The Independence War however helped epizootics to spread quickly. Vast borders with other countries particularly with Iran made the eradication very difficult. The animal movements in such a mountainous country were almost impossible to control in the nineteen twenties. Herds were near the shore during the winter, they moved to higher places for better pasture and cooler weather in the summer.

The shortage of veterinarians created also a considerable problem. In 1923, about 200 veterinarians were on duty. The Animal Disease Prevention Bill first appeared in 1893. Later in 1913 it became a code of law, but it was far from satisfactory. Regulations were revised after the Revolution. In 1928 all the measures and necessary rules were included in the released law and since then the epidemic slowed down. In 1929 disease was limited near the border of Iran. Sporadic cases in eastern Turkey delayed the eradication, but in 1932 there was no rinderpest case in Turkey and the country was entirely free from rinderpest for 37 years. However in 1969 a new epidemic was introduced again from Iran. A stock owner with a small herd of cattle passed the border of Iran to sell his animals and a few days later he came back to Turkey with some of the cows which were not sold. On 13 October 1969 a case was found in a small town mill and a veterinary surgeon met the disease on the 15th of October. He diagnosed it without difficulty because he was prepared and received required information about the other countries like Iran, Syria and Iraq and his recognition was confirmed by the isolation and identification of the virus. But as the neighbour villages used same mill, the disease spreaded quickly throughout the area (4).

Immediately "Kabate O" vaccine were produced in Foot and Mouth Disease Laboratories in Ankara and successfully applied both to cattle and water buffaloes. A total of 2059 animals died of the infection and 10750 animals were killed after paying indemnity. In three years, all the cattle and water buffalo population (about 14 million)...

* The first veterinary school in Turkey was founded in 1842 for the military purposes.
were vaccinated yearly against rinderpest, and infection was completely eradicated in 1972. This was quite an expensive operation. Since then every care has been taken for prevention the disease.

References


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