Tuberculosis - King of all the Men of Death

* Dr. Sajikumar. J

Tuberculosis, only a few decades ago, believed to be under control and decreasing in incidence is still rampant. A number of scientists and physicians have contributed to the understanding of tuberculosis and have been honoured on postage stamps.

Tuberculosis Bacilli & Luna Tuberculosis

It is certain that TB was present before the beginning of recorded history; it also is certain that we have not yet seen the end of the white plague.

EARLY KNOWLEDGE

The first definite finding of *Mycobacterium tuberculosis* is in the remnants of a bison dated 18,000 years ago. Whether TB originated in cattle and then transferred to humans, or moved over from a common precursor is now unclear.

Tubercular decay has been found in the spines of mummies from 3000–2400 BC. Around 460 BC, Hippocrates identified TB as the most widespread disease of the times involving coughing up blood and fever, which was almost always fatal. The study of tuberculosis dates back to *The Canon of Medicine* written by Avicenna in the 1020s. He was the first physician to identify pulmonary tuberculosis as a contagious disease, the first to recognise the association with diabetes, and the first to suggest that it could spread through contact with soil and water.

In the past, tuberculosis has been called consumption, because it seemed to consume people from within, with a bloody cough, fever, pallor, and long relentless wasting.

FAMOUS VICTIMS

Many celebrities of the past died of TB. Fyodor Dostoevsky (1821–1881) the Russian writer, essayist and philosopher, Anton Chekhov (1860-1904) the Russian short-story writer, playwright and
physician & Voltaire (1694 –1778) the French enlightenment writer, essayist, and philosopher died of TB.

Maxim Gorky (1868 –1936) the Russian author and political activist, Stephen Foster (1826-1864) known as the “father of American music,” & Frédéric Chopin (1810-1849) the Polish composer and one of the great masters of Romantic music were also victims of TB.

The Brontë Sisters, the Great British writers died at an early age due to tuberculosis. The great romantic poet John Keats (1795 –1821) died at an early age with tuberculosis. One February evening in 1820 he coughed up a little blood and calmly declared ‘It is arterial blood … my death warrant.’ The tubercle bacilli in his lungs had weakened the lining of a blood vessel. Later that night he had a severe haemorrhage. His medical training meant that he knew exactly what this signified.

**DISCOVERY OF MYCOBACTERIUM**

Mycobacterium tuberculosis was identified and described on 24 March 1882 by Robert Koch (1843-1910). He received the Nobel Prize in physiology or medicine in 1905 for this discovery. Robert Koch’s discovery of the tubercle bacillus was a major event in the history of medicine, a turning point in our understanding and conquest of this deadly disease which had plagued mankind for millennia. He also sought to arrest the disease by means of a preparation, which he called tuberculin, made from cultures of tubercle bacilli. His work was facilitated by many of the techniques he and his associates developed to isolate bacteria and grow them on culture media in the laboratory. Koch published many papers and books and fostered the development of a whole generation of bacteriologists and medical scientists in other fields.

In 1982 many countries issued stamps to commemorate the centenary of the discovery of the tubercle bacilli.

**X-RAYS IN THE DIAGNOSIS**

The advent of X rays has revolutionized the diagnosis of TB. Antoine Béclère (1856 –1939) virologist, immunologist, was a pioneer in tuberculosis radiology. In 1897 he created the first laboratory of radiology in Paris.

Frigyes Korányi
(1827-1913) popularized the use of X rays in the diagnosis of TB.

Screening for tuberculosis by mass X-ray was introduced in 1923.

**TREATMENT**

Selman Waksman (1888 –1973) the American biochemist and microbiologist discovered Streptomycin, the first antibiotic active against tuberculosis. The first injection was given at the Mayo Clinic. Carlo Forlanini (1847 –1918) was an Italian physician. In the 1880s he devised an artificial pneumothorax for the therapeutic treatment of pulmonary tuberculosis. Sir Robert. W. Philip (1857-1939)-Pioneer of Tuberculosis Control. In 1887, he founded the world’s first Dispensary for Consumption. Philip also instituted the Edinburgh Scheme, which involved the tracing of all known contacts of a patient diagnosed with the disease.

Ferdinand Sauerbruch (1875-1951) was a German surgeon who developed many surgical techniques and diets for treating tuberculosis. He developed the Sauerbruch chamber, a pressure chamber for operating on the open thorax, which he demonstrated in 1904.

**THE BCG VACCINE**

The first genuine success in immunizing against tuberculosis was developed from attenuated bovine-strain tuberculosis by Albert Calmette and Camille Guérin in 1906. It was called “BCG” (Bacillus of Calmette and Guérin). The BCG vaccine was first used on humans in 1921 in France, but it was not until after World War II that BCG received widespread acceptance in the USA, Great Britain, and Germany.

Armand Frappier, (1904-1991) was an expert on tuberculosis from Canada. He was instrumental in the fight against tuberculosis in Canada and was one of the first researchers to confirm the safety and usefulness of the BCG Vaccine

**SANATORIUMS**

A sanatorium is a medical facility for a long-term illness, typically tuberculosis. Sanatoriums were put up in the early days so that the tuberculosis patients could be isolated and cared for.
THE LORRAINE CROSS

In 1902, The International Tuberculosis Congress decided that because TB was so rampant they should declare war on this devastating disease. The Lorraine cross with two horizontal beams was suggested by Gilbert Sersiron as a symbol for the “crusade” against TB.”

THE CHRISTMAS SEALS

Emily Bissell (1861 – 1948) was an American anti TB activist, who introduced Christmas Seals. In 1907, the first Christmas Seals were sold. The sale made over 3000 dollars and the money was used to help in the fight against tuberculosis. Since that time, the sales of Christmas Seals has become the official source of fundraising revenue for the battle against tuberculosis.

SEMI POSTALS

A TB semi-postal stamp is issued to raise money for the fight against tuberculosis and thus sold over and above the cost of postage. Typically the stamp shows two denominations first is the actual postage and the other for the tuberculosis fund.