Niels Stensen (1638-1686)

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Postal Stamps issued on Stensen - Denmark -1969

Niels Stensen, Stensen or Nicolau Stenius (latinised), was a versatile anatomist, a pious theologian, and an astute natural philosopher. Born in Copenhagen, he studied medicine in his native city and later in Leyden in the Netherlands.

At the age of 22 years (1661), he discovered the duct of the parotid gland, during dissection of the sheep’s head. Soon afterwards, he examined other glands, and was able to prove that all secreting glands have ducts. Stensen’s contributions to anatomy are amazing and unbelievable. He demonstrated Payer’s patches before Payer; he maintained that human ovaries produced ova; he was the first to show that mucus was secreted by small glands in the deeper layers of the mucous membranes of nose, palate and throat. Niels was possibly the first, to identify sweat glands by the name-sudoris.

Perhaps, one of his greatest discoveries was the mechanism of lacrimation. He blasted the then existing theory that the tears were formed in the brain, and were led through the nerves to the eyes. Stensen gave a perfect description of the whole lachrymal apparatus. He published the first case of congenital heart disease consisting of four defects, later re-described by Louise Fallot as congenital cardiac tetralogy (1888). In physiology, he proved that muscle fibre is a contractile element. It was previously considered, that the tendon was the “primary instrument of movement”.

Stensen was an accomplished linguist, being proficient in German, French, Italian, English, Greek and Latin, in addition to his native Danish. His restless disposition, would not allow him to settle in his homeland, or any of the countries he visited. In 1667, his moving from Lutheran Denmark to Catholic Italy resulted in a personal conversion to Roman Catholicism. Being a Convert of such fame, he was warmly received by the church and soon rose to the position of Bishop.

Stensen made a promising beginning, in a completely different field of Geology. The fundamental principles of strata formation of the earth, were explored in his great work Prodromus. His logical deduction explained the presence of fossils (a name invented by Agricola earlier to represent anything dug out of earth).

Stensen’s life of self-denial, undermined his health and he died at an early age of 48. His body was taken to Florence and buried with public honours.

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