The role of laboratory investigation in the diagnosis and management of patients with suspected herpes encephalitis: a consensus report

NEUROLOGICAL STAMP

Claude Bernard (1813–78)

The great French physiologist Claude Bernard was born in the same year as Livingstone. Bernard was the son of a poor wine grower who began writing plays to earn money but turned to medicine on the advice of a literary critic. He began his brilliant career by assisting Magendie and becoming involved in his research on spinal nerves. His works in neurophysiology included the description, origin, and function of the chorda tympani and studies of the function of the cervical sympathetic system. While investigating the function of the submandibular gland, he showed that the sympathetic nerve was the constrictor of the blood vessels and the chorda tympani the dilator. So the fundamental facts of vasomotor physiology became known. He demonstrated that simple reflex movements were due to the influence sensory roots exerted on the motor roots and that a puncture of the floor of the fourth ventricle caused diabetes. The piqûre diabétique has been interpreted by many as being the result of excessive stimulation of secretory nerves to the liver.

Claude Bernard was the first to demonstrate that curare blocked the nerve stimulation of muscle while the muscle itself remained directly excitable and he carried out important work on the action of other drugs, including the opium alkaloids.

Bernard’s wife and daughters deserted him when he refused to give up experimental medicine for a more lucrative practice of his profession. Towards the end of his life he published his famous Introduction à la médecine expérimentale (1927). The book discusses the importance of the constancy of the internal environment, refutes the notion of the “vital force” to explain life, and emphasises the need in planning experiments for a clear initial hypothesis which has then to be proved. Because of this work he was elected to the French Academy in 1869. In 1878 Charles Edouard Sequard was appointed to the Chair of Medicine at the College de France, in succession to Claude Bernard.

He has been philatelically honoured as a great physician and founder of modern physiology. His was a national funeral, the first ever granted to a scientist in France. France issued this stamp (Stanley Gibbons 648, Scott B89) in 1939. The surtax was used for supporting unemployed intellectuals.

L F HAAS