

Men and Medicine

Anton de Haen

Anton (or Antoni, or Antonius) de Haen was born in 1704 in The Hague, gained an outstanding reputation as a teacher at Leyden, and achieved high academic rank at Vienna. He first became well known as one of the best pupils of Herrmann Boerhaave, the famous advocate of bedside teaching (see MEDICAL SCIENCE, April 1964, page 67). He took an intensely practical view of medicine and firmly maintained his ideas in some violent controversies with his colleagues whose leanings were more to theory.

He was so dedicated to therapeutic detail that he was barely able to compress all his directions on the treatment of patients in hospitals into the fifteen volumes which came out between 1758-1769. Almost all of this vast amount of material has since been supplanted. However, his pursuit of the practical led him to use the thermometer for clinical purposes. He was stimulated to do this by Boerhaave's interest in thermometry. This interest grew out of Boerhaave's friendship for Fahrenheit of Danzig, who had been sent to the Netherlands by his father to be trained in the methods of international commerce. Fahrenheit preferred the company of physicians and scientists to that of businessmen and soon became Boerhaave's close friend.

He manufactured thermometers for the latter's experiments in physics and chemistry. De Haen, a pupil and associate of Boerhaave, by that time had appointed himself commentator on his chief's views and developer of some of his ideas. He used the thermometer in the study of febrile illnesses.

In 1749 another of Boerhaave's pupils, Van Swieten, was called to Vienna to reorganize and revitalize the by then stultified medical school. Maria Theresa initiated this move, and her efforts made Vienna the rival of Leyden. In 1754 Van Swieten invited his former associate at Leyden, de Haen, to join him in Vienna as professor of medicine.

Much more important than de Haen's stupendous system of therapeutics were his writings on the medical aspects of demonology. He discussed these in two books, the first *De Magia liber*, published in 1774, and the second *De Miraculis liber* published in the year of his death, 1776. De Haen denied in his usual emphatic manner that there were such things as demons and that they had anything to do with medicine. In this respect his name should be linked with that of Weir, Scot, Bekker, and Westphal (see MEDICAL SCIENCE, July 1965, page 73) in the struggle to eliminate superstition from medicine.

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and wave complexes occurred bilaterally, suggesting a seizure focus in the so-called centrencephalic system. A combination of ethosuzimide and phenobarbital therapy produced a marked improvement in the clinical and EEG manifestations of this disorder.

Data on cerebral metabolism during epileptic seizures in man, was presented by Drs. J. S. Meyer, F. Gotoh of Detroit, Michigan. In order to estimate cerebral metabolic changes during epileptic seizures in man, arterial and cerebral venous oxygen tension and saturation, CO₂ tension, pH, sodium and potassium, blood pressure, expiratory carbon dioxide, EEG and cerebral venous flow were recorded during 21 seizures, occurring in 9 volunteer epileptic subjects. The authors noted no cerebral metabolic or circulatory changes immediately preceding any type of epileptic seizure. During all seizures, there occurred an increase of cerebral oxygen consumption and carbon dioxide production, which was maximal during generalized seizures and minimal during petit mal attacks. The brain tissue seemed to be hypoxic during all seizures. Following generalized seizures, severe cerebral and systemic acidosis and marked hyperoxia of cerebral venous blood was observed, associated with isoelectric EEG's and post ictal paralysis. Some evidence suggesting a sodium influx and a potassium efflux during generalized seizures was found. Post epileptic paralysis with a flat electroencephalographic tracing appeared to be initiated by cerebral anoxia and maintained by cerebral acidosis. The data in man seemed to support previous work done on animals, showing an increased cerebral metabolism with sodium influx and potassium efflux of brain cells during seizure activity.

Dr. F. M. Forster and his associates of Madison, Wisconsin, presented an interesting case of so-called muscogenic epilepsy. The patient seemed sensitive to the ballad type of music of the mid 30's, when played with full orchestration or partial orchestration in a combination with male and female voices. The authors studied this case in much detail and were able to modify the seizures by a technic of extinction. The music was so modified, as to eventually become totally innocuous. This experiment is further proof that certain types of epileptic discharges in man can be conditioned.

Two papers on thermography and its diagnostic value in extracranial carotid occlusive disease were presented by

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