I consider it as a great honour to have been invited to give this lecture at the occasion of the fact that Von Basedow described the disease named after him, 150 years ago (Fig. 1). Three main characteristic symptoms emerged from this disease as he described it. These consist of exophthalmos, palpitation of the heart and goiter. This triad, as we are all aware of, is now known as the Merseburger Triad, because Von Basedow was practising in Merseburg.

As the time allotted for this lecture is too short to discuss in some depth both the etiology and the treatment of Basedow's disease, I decided to limit myself to the etiology and devote, at the end of my lecture, only a few words to the treatment of the disease. When I started going back into the literature, I was afraid that especially for the period between 1840 - 1900, because of limited communication within the medical profession, relatively few reports would have been published on this subject. To my astonishment it appeared that in that period at least two thousand registered reports were published on this disease. This number is more than I could handle but unfortunately I could not get hold of every publication that I asked for. However, from the historical point of view it was interesting to note that before the turn of the century even journals from outside Europe like Canada and the United States were apparently available in Europe. What do you think of the Indiana Journal of Medicine giving a report on exophthalmic goiter in 1871 and cited in the previous century in European journals. Other now exotic journals were the Transactions of the Indiana Medical Society, the Canadian Medical and Surgical Journal of Montreal, the New York Medical Record and the Australian Medical Gazette, naming only a few. Obviously it was not always easy, if not impossible, to have an opportunity to consult these rare and historically very interesting reports on Basedow's disease.

I have done my search in the past literature with great pleasure and I have understood now why so many colleagues have become interested in the history of medicine.

With regard to the etiology of Basedow's disease many hypotheses have been forwarded. It is my intention to discuss these etiologies on the basis of the ideas and experimental findings of our respected colleagues in the past.

Von Basedow (Fig. 2) himself recognized already that the exophthalmos was not due to any change in the eyeball but rather to an increase of the tissue behind the eye (1,2). He hypothesized that dyscrasia of the blood caused this tissue swelling and also caused the goiter. At the time of Von Basedow, many diseases were thought to be caused by inadequate mixture of the so-called "life-juices". The word dyscrasia stems from the Greek word crasis which means mixture. Although of course we know now that the etiology is much more complex, Von Basedow was certainly right if he was thinking of a cause mediated via the circulation. Other authors like Cooper in 1849 (3) and Gilde-meester in 1863 (4) were of the opinion that the blood vessels and/or the heart were involved in the sense that vessel distension was the cause of the goiter and the exophthalmos. A very curious publication appeared in 1859 from the hand of Röser who was of the opinion that Basedow's disease was caused by iodine given to decrease goiter (5). He thought that the decrease of goiter caused the disease. He even recognized the so-called "goiter cachexia" due to chronic iodine administration. This is really "Jodbasedow" "avant la lettre". The sympathetic nervous system has been suggested to play a role already from 1870 on. Very interesting

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Correspondence: Prof. G. Hennemann, Department of Internal Medicine III, University Hospital Dijkzigt, Dr. Molewaterplein 40, 3015 GD Rotterdam, The Netherlands.
experiments, often cited in the recent past, were published by Cannon et al. in 1915 (6) and 1916 (7). By connecting the phrenic nerve to the cervical sympathetic trunk in experimental cats, these animals showed increased heart beat, falling hair, increased excitability and metabolism reaching 60% above average. Removal of half of the thyroid at the ipsilateral side abolished the symptoms and reversed the situation to normal. Sometimes also exophthalmos on the same side was encountered. These experiments unfortunately have never been followed up in the literature.

Infections played an important part in the etiology of morbus Basedow. Especially tuberculosis and also syphilis were kept responsible for the disease. (For review on these and other causes, see reference no. 8). It was in 1893 that Joffroy and Achard strongly opposed to this latter vision, and stated that morbus Basedow and tabes were two different entities (9). The central nervous system has also been implicated as a prime cause for many years. In 1877 Yeo suggested a lesion in the central nervous system as the cause of the disease (10). He may have been wrong here, but he certainly was the first to note one sided exophthalmos as also belonging to the characteristics of the disease (Fig. 3). More questionable is the fact that he also considered unilateral thyroid enlargement as part of the entity. Filehne in 1879 was also of the opinion that an abnormality in the central nervous system played a role (11). Crile in 1913, however, considered morbus Basedow as a dysregulation of the mechanism that regulates the "motor mechanism of man" leading to a physical and mental hyperkinesis (12). The thyroid being the prime cause of the disease was also considered many times. Most authors agreed that in Basedow's disease the thyroid was producing a substance that was poi-