

Lauren P. The two histological main types of gastric carcinoma: diffuse and so-called intestinal-type carcinoma. *Acta Pathol. Microbiol. Scand.* 64:31-49, 1965.
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The classification of gastric carcinoma into the intestinal-type (IT) and the diffuse-type has been shown to be important for evaluation of prognoses of patients as well as for epidemiologic and pathogenetic studies. The declining incidence of gastric cancer seen in many countries is connected with decreasing frequency of IT. [The SC® indicates that this paper has been cited in more than 715 publications.]

The Lauren Classification of Gastric Cancer

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In the 1960s, under the leadership of Osmo Jarvi, the Department of Pathology at the University of Turku was investigating the histology of gastric cancer, which was by that time the most common malignancy in Finland. The traditional classifications of gastric cancer were not satisfactory, as different histologic structures could be found in a single tumor. After thorough examination of the 1,344 cases of gastric cancer seen in the laboratory I noticed that a majority of them could be classified into two main types. One of them, the intestinal type (IT), was structurally similar to colonic cancer, but the other, the diffuse type (DT), was seen only in the stomach. There were even biologic differences between the main types: DT started in younger people than IT, and it was more common in females. IT was always preceded by chronic gastritis with intestinal metaplasia, DT started often from a mucosa of normal appearance. These differences indicated different etiology and pathogenesis and probably also different histogenesis of IT and DT.¹

Studies concerning the practical importance of this classification for the evaluation

of the clinical course of the disease showed that DT is a more malignant tumor than IT. In spite of the more radical operations necessary for DT, the five-year survival of patients with this cancer type remains lower than for IT. Therefore preoperative typing of the tumor is important for correct planning of the cure. Sauli Viikari with Markku Inberg and their team from the Department of Surgery at Turku University first made these findings widely known among surgeons.²

The value of my classification in epidemiologic studies was first shown far from Finland, in Colombia, by Nubia Munoz and Pelayo Correa with their team.³ They demonstrated in a series of studies that IT is more common in regions with high incidence of gastric cancer, and with declining incidence of cancer only this type decreases. Even in Finland, with declining incidence of gastric cancer, IT has almost disappeared from younger age groups.⁴

The value of this classification has also been tested in numerous studies concerning histology, etiology, pathogenesis, and hereditary factors of gastric cancer. All these different fields of research have led to the frequent citation of my article.

In spite of international approval, my classification was not immediately accepted in Finland. To develop a better classification for gastric cancer our laboratory had concentrated on attempts to make the classification more precise by adding new subtypes to the old ones.⁵ Therefore my attempt to reduce the types to only two was considered unorthodox. This caused difficulties in my further research and even hindered my career prospects. However, the classification later proved useful in even as remote a place as Tanzania, where I worked as a consultant pathologist. I found that this country was very interesting from the point of view of epidemiologic cancer studies: The Chagga tribe living on the slopes of the volcanic Mt. Kilimanjaro had even more gastric cancer than the Finns!⁶

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