With the January–February 1961 issue of Acta Cytologica, the editorial board initiated a symposium by correspondence under the leadership of the editor, George L. Wied, on probable or possible premalignant cervical lesions. In the January–February issue the topics covered were cervicitis, endocervicitis, ectopy, ectropion and epidermization. The March–April issue covered presentations and discussions on the cytology, histology and clinical management of leukoplakia. The discussions continued, in the July–August issue, on reserve cell hyperplasia, basal cell hyperplasia, dysplasia and histomorphology of carcinoma in situ. The last topic continued, due to its importance, in the September–October issue, with a discussion of what is not carcinoma in situ.

In this historical review the histomorphology of carcinoma in situ is considered.

Friedrich Bajardi, Graz, Austria:

The general view is that if an invasive carcinoma remains without treatment, it will ultimately lead to death of the patient due to destructive growth and metastases. A carcinoma in situ may develop after differing periods of time into an invasive cancer, while on the other hand it may remain stationary for decades. Pathologists still differ in diagnosing carcinoma in situ in practice by reason of frequently including premalignant lesions in a group with carcinoma in situ. The trend generally is to classify similar changes as “atypical epithelium” and not as carcinoma in situ. Very often the examination of a single section does not permit a final decision; only by investigating a sequence of further sections can the diagnosis of a car-
Carcinoma *in situ* be given with certainty. Likewise, it is often possible only by this procedure to determine the early invasion of a carcinoma.

Jean A. deBrux and Jacqueline Dupré-Fromont, Paris, France:

Carcinoma *in situ* seems to be composed solely of nuclei packed together, all of them oblong, nearly all regular, and all turned perpendicularly to the surface. The nuclei, very irregular and have angular or festooned contours. Around the nuclei, a pale halo forms in the cytoplasm. At the surface, as abrupt cellular maturation nearly always occurs, leading to the formation of two or three layers of cells whose stretched cytoplasm is ranged parallel to the surface of the epithelium. The principle diagnostic character of carcinoma *in situ* is the presence of cellular immaturity in nearly the entire epithelium.

Claud W. Taylor, Birmingham, England, U.K.:

The term carcinoma *in situ* indicates cellular changes characteristic of carcinoma, though remaining intraepithelial. The characteristic feature of cervical carcinoma *in situ* is an area of glycogen-deficient squamous epithelium several cells thick with no stratification and comprising crowded, immature, irregular cells. A common feature is for carcinoma *in situ* to extend into mucous glands and replace the columnar epithelium.

Hans F. Bettinger, Melbourne, Australia:

Carcinoma *in situ* is a lesion which is composed predominantly of quite immature cells.

Marcel Gaudefroy, Lille, France:

In my opinion, the most important features of carcinoma *in situ* are the abnormal mitoses and the replacement by abnormal cells throughout the entire thickness of the epithelium.

Wolfgang Korte, Bonn, Germany:

In carcinoma *in situ*, the atypias of the cellular patterns and tissue patterns are closely related to the generally accepted criteria for true carcinoma.

Rodolfo Sammartino, Buenos Aires, Argentina:

We must consider carcinoma *in situ* as an evolutionary process—hence we often encounter intermediary or transitional changes from a beginning basal hyperplasia to an early invasive carcinoma. The essential thing is the appearance of a cancer-like growth. Whether or not this real mutation extends to the entire thickness of the epithelium is a secondary question.

John J. Sullivan, Auckland, New Zealand:

Carcinoma *in situ* is of itself an irreversible neoplastic growth, characterized by the presence of a full thickness intraepithelial neoplastic change which may or may not involve gland crypts.

Jaroslav Svejda, Brno, Czechoslovakia:

In carcinoma *in situ*: (1) Proliferation of cells is evident in all layers of the epithelium, (2) there is cellular atypia, (3) there is a clear hyperchromasia of the nuclei and (4) mitosis is seen in many of the cells.

Edward E. Sigler, Garfield Heights, Ohio, U.S.A.:

The term carcinoma *in situ* is a poor term and should be abandoned, although, because of common usage, it probably never will be. Until the time arrives in the future when we know which of the patterns we now interpret as carcinoma *in situ* are really preinvasive carcinomas, then I believe that total hysterectomy is the treatment of choice.

Edited by Steven I. Hajdu, M.D., F.I.A.C.

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