

Waldeyer. The pathology of carcinoma has been materially advanced by the most pains-taking and accurate microscopic work concerning the origin, growth, multiplication and life history of the carcinoma cell and its manner of local and general dissemination. The atypical, irregular mitotic figures which are seen in the segmenting carcinoma cell are in strong contrast with the regular, symmetric, karyokinetic processes observed in direct division in normal tissue cells. The metastatic processes have been traced, step by step, through the lymphatic channels and the systemic circulation, and it has been demonstrated beyond all doubt that the secondary tumors are the direct offspring of migrating carcinoma cells from the primary tumor, and that the pre-existing mature tissues take no active part in the tumor formation, primary or metastatic.

This tends to prove that the histology and histogenesis of carcinoma speak against the parasitic origin of this disease and in favor of a disease of the epithelial cells independent of infection. The mass of tumor tissue, the parenchyma of carcinoma, is invariably made up of epithelial cells in the primary, as well as in all metastatic tumors, regardless of their anatomic location. Inflammatory products, on the other hand present the same histologic structure independent of their anatomic location or character of the tissue involved. Infective processes are caused by the pathogenic action of micro-organisms on pre-existing tissue, and the inflammatory swelling is made up of the products of effusion and cell migration through the damaged capillary walls plus new tissue cells generated by the pre-existing tissues acted on by the microbic cause of the inflammation.

Carcinoma is a tumor that invariably starts from a matrix of embryonic epithelial cells of prenatal or postnatal origin, and in its growth only epithelial cells take an active part; hence, if its microbic nature should ever be demonstrated, it will be a microbe which has a special predilection for epithelial cells, a very unlikely, exceptional phase in the vast field of bacteriology. The failure to discover the microbic origin of carcinoma, together with the histology and histogenesis of the tumor, speaks strongly against the parasitic origin of the disease. Inoculation experiments have so far only proved the negative side of the question. As an additional proof of the truth of this statement I will mention an experiment which has confirmed me in the belief of the non-parasitic nature of carcinoma.