

it that the tissues then are vulnerable so that any proliferative activity of epithelium would tend to become invasive owing to this predisposition? Waldeyer and Thiersch are the chief upholders of the view of a special vulnerability of the (connective) tissues, produced particularly by age or injury, so that any active epithelial growth tends to break into the tissues. But cancer occurs in comparative youth as in old age, and no weakening of the basement membrane can be positively demonstrated. Further, as opposing this we almost always, in fact always, note proliferative activity of the fixed tissues themselves. So that whether the tissues are or are not especially vulnerable, more is needed than this factor to explain epithelial invasion. We must have special growing and invasive powers on the part of the epithelial cells. As to the exact means by which this is conferred we cannot yet say, but it is certain that it is so conferred in many cases of long continued irritation or by causes tending to lead to a proliferative or productive inflammation.

Cohnheim's theory is the next theory of importance. He taught that tumors were generated from "rests" or "remnants" of the embryonic tissues enclosed and lying latent in the body tissues until excited into proliferative activity by some excitant, whether irritant or otherwise. He thought when once such cells had been excited to growth, that having the proliferative energy characteristic of the embryonic tissues, they would continue to proliferate indefinitely, passing rapidly out of bounds in the case of epithelial and young connective tissue elements. It is hardly necessary to go back to the embryo for types of cells of strong proliferative energy. Let me instance the lowermost layer of the rete malpighii in which growth continues throughout life; the lining cells of most mucous membranes and functionally active glands are also actively proliferative during life. It is from such cells that Carcinoma usually originates. Further anatomically practically nothing is known of these inclusion rests, and while this theory does explain the origin of such tumors as chondroma in the testis and parotid, true dermoids and some tumors in unusual situations, it cannot account for many.

Again, Carcinoma is not most common where developmental processes are complicated and where "rests" might reasonably