deciding this issue either way. While the objectors pointed to the absence of an increase in the incidence of brain tumors during the years which have passed since the end of this event (Parker and Kernohan; and Wilson), Scheid stated that 4 cerebral neoplasms were found per 10,000 soldiers with war injuries to the brain, whereas 5.3 neoplasms were observed per 1,000,000 gun shot wounds involving other organs.

Statistical analyses scarcely represent a suitable and propitious approach to a final solution of this problem. A detailed investigation of the relative merits of the evidence presented in support of the various theories of cerebral cancerigenesis is indicated, as such a procedure may help in elucidating the role a cranio-cerebral trauma possibly may play in the causation of such neoplasms.

The dysontogenetic theory, which assigns to a trauma at most a purely secondary and minor role of a realization factor, is based chiefly upon two observations. There exists a causal relationship between congenital malformations of the nervous system and the occurrence of gliomas of the brain. This is demonstrated most strikingly by two diseases of the nervous system, both being observed in young individuals and both characterized by the presence of congenital developmental disturbances in the central or peripheral nervous system as well as in other organs. In tuberous sclerosis the brain contains heterotopic and histiotopic glial foci (gliosis), exhibiting a cellular pattern similar to that existing in the infant's brain (Globus) and showing an irregular arrangement of the fibrils, an excessive size of the individual cells and focal conglomerations, and band-like arrangements of glial cells. The multiple heterotopic glial foci and nodules occurring in the medulla of the hemispheres and in the wall of the ventricles along the arteria terminalis are dysplasias with blastomatous components (Neubürger), and some of them develop into spongioneuroblastomas. In addition to these tissue abnormalities in the central nervous system there occur solitary or multiple malformations of blastomatoid or blastomatous character in other organs [rhabdomyoma of the heart (Steinbiss; Vogt; and Hueper), adenomas of the kidney, liposarcomas, and adenomas of the sebaceous glands]. The second disease is represented by neurofibromatosis, which mainly affects the peripheral nervous system and is characterized by the formation of multiple neurinomas of the peripheral nerves, but which not infrequently is associated with the development of heterotopic glial foci and gliomatosis of the brain. This disease is often accompanied by disturbances in the pigmentary metabolism, and occasionally by abnormalities in the formation of bones. As tuberous sclerosis may be observed during the first few months of life, exogenous influences have apparently no essential part in the etiology of these diseases, but disturbances in the normal development of the fetal ectoderm are the causal factors underlying the production of the cerebral tumors. The familial, hereditary character of neurofibromatosis, its frequent combination with dysontogenetic formations in other organs (multiple meningiomas and adenoma sebaceum), and the multicentric character of the lesions