

## LYMPHSPARATION

## THE HISTOGENESIS OF KAPOSÍ'S SARCOMA

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Some twenty-three years ago I had the privilege of attending an international symposium on Kaposi's sarcoma in Kampala, Uganda under the auspices of the International Union Against Cancer (1,2). In addition to learning the correct pronunciation of the Hungarian name "Kaposi" (kaa-pau-she) from the late Dr. Stephen Rothman (3) and the fact that Kaposi was born Moricz Kohn in Kaposvar, a small Hungarian town, and that he changed his name in accordance with the widespread practice of "magyarization" of family names, I was exposed to scholarly presentations by many of the world's recognized authorities. In the words of the chairman, Dr. Lauren V. Ackerman, "their combined experience exceeded all the cases reported outside the African continent!"

A number of histogenic concepts were discussed and several new theories were proposed by participants at this symposium. Based on enzyme histochemical studies (4), I postulated that multicentric neof ormation of lymphatics represented the primary process in the histogenesis of Kaposi's sarcoma; that the predominant localization of lesions corresponded to the normal distribution of lymphatics and that the pathological formation of lymphatico-venous anastomoses (beautifully demonstrated by the elegant angiographic studies of a radiologist, Dr. Phillip Palmer, performed on patients in Kampala during the symposium (5)) may account for many of the clinical manifesta-

tions of this disease. My hypothesis was not met with any degree of enthusiasm at the symposium nor has it been cited in many subsequent publications! I am now gratified to learn that Beckstead, Wood, and Van Fletcher at the University of California, San Francisco, using a battery of more sophisticated histochemical methods, have reached conclusions similar to my own (personal communication). We have questioned the proposal that the spindle cells of Kaposi's sarcoma are derived from vascular endothelium (6,7) since we have not been able to confirm the presence of factor VIII antigen by immunoperoxidase methods (8), mirroring observations made by Beckstead and those recently reported by Akhtar, et al (9).

Lending additional support to my concept are the clinical manifestations of Kaposi's sarcoma including the frequent occurrence of lymphedema; of lesions in skin, gastrointestinal tract, tonsil, and lymph nodes, all rich in lymphatics; and the predominant localization of Kaposi's sarcoma in lymph nodes of African children and (more recently described) in homosexual men with the acquired immune deficiency syndrome. Of additional significance is the exceptional rarity of Kaposi's sarcoma in the brain and the eye, organs which possess limited lymphatic drainage.

The remarkable symmetry of lesions in the upper and lower extremities and the concept of multicentric origin of Kaposi's

sarcoma would fit well with this hypothesis.

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