not measuring over six to twenty millimeters in diameter. They, in this respect, resemble rather the nodules caused by Onchocerca gibsoni in cattle. The tendency to the production of keloid growths among many Africans subject to Onchocerca tumors is very common, and such growths may follow almost any form of injury or irritant applied to the skin. The writer thought that perhaps this tendency to abnormal reproduction of connective tissue following mechanical irritation might sometimes be an additional factor in the production of the larger Onchocerca fibromata, which occasionally reached considerable dimensions. However, in Guatemala, the classes of individuals among whom infection occurs with Onchocerca caecations do not show any tendency to keloid formation as is so commonly the case in Africa. Moreover, in some instances, Onchocerca tumors were observed in Guatemala measuring at least five centimeters in their greatest diameter or length. The Guatemalan tumors are also enclosed in a fibrous capsule and contain in the central portions, the adult male and female filarial parasites and numerous microfilariae. In some cases the tumors are lentil-shaped and lie in shallow depressions on the surface of the skull, the periosteum either being adherent to or fused with the inferior surface of the cyst wall. In other instances, the periosteum has apparently become absorbed. In one instance, a small tumor about 3 mm. in diameter was found in a shallow cavity in the cranium, about 3 to 4 mm. in diameter, was found in a shallow cavity in the cranium, about 3 to 4 mm. and 2 to 3 mm. in depth, the bone being exposed. The Guatemalan tumors, like the African ones, are fibromatous and none of them show any malignancy.

Among adults who gave a history of the existence of tumors (due to Onchocerca caecations) for five years or longer, poorness of