SPONTANEOUS REGRESSION OF RETINOBLASTOMA*

BY

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Case Report

A healthy full-term male child was observed to have defective vision at the age of 6 months. Later, the observation of a white glow in the pupillary area of both eyes led to the diagnosis of retinoblastoma by an ophthalmic specialist. Deep X-ray therapy was advised, but no treatment was given.

The patient was next seen in the out-patient department at the age of 2½ years. By this time the right eye had started to shrink, the cornea was small, the iris atrophic, and there was a greyish membrane in the pupillary area. The globe was soft. On the left side the white glow had increased and the globe had become proptosed. The palpebral fissure had widened and a hard mass adherent to both lids was occupying the orbital cavity. A sloughing ulcer was present in the centre of the tumour which had invaded the globe extensively, so that the individual structures could not be distinguished. The child was restless because of the pain, but the other systems of the body were normal. The parents and four (?) other sibs were healthy. The Wassermann reaction and Kahn test were negative. Skull X-ray showed a calcified mass in the left orbit; the optic foramina were normal.

Enucleation of the right eye and exenteration of the left orbit were performed.

Pathological Findings.—

Right eye: The whole of the eyeball, except the cornea and sclera, was found to consist of necrotic tissue, but there was no evidence of inflammatory or neoplastic changes.

Left eye: The tumour was firmly adherent to the orbital wall and section showed sheets and groups of round and oval cells with very scanty cytoplasm (Fig. 1). A moderate degree of mitosis was noted. There was no definite arrangement of the cells and the stroma was quite scanty. There were foci of calcification in many places (Fig. 2). Retrobulbar tissue showed an extension of the tumour process. The histopathological appearances were those of a retinoblastoma with calcifying retrogressive changes.

FIG. 1.—Photomicrograph of the left eye, showing sheets and columns of round and oval cells with scanty or absent cytoplasm, deep staining nuclei, and very little stroma; no rosettes were seen. ($\times 87$.)

FIG. 2.—Photomicrograph of the left eye. Another area showing extensive calcification and necrosis of the tumour cells surrounded by fibrous tissue. ($\times 137$.)

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Discussion

De Kleijn (1911) was the first to report a case of retinoblastoma in which a spontaneous cure had occurred. In the literature so far 15 cases of spontaneous cure have been reported: Fuchs (1908), Knieper (1911), Purtscher (1915), Siegrist (1920), Salzmann (1921), von Hippel (1928), Seuss and Stutz (1951), and Steward, Smith, and Arnold (1956). All these enucleated phthisical eyes showed the presence of calcium. Reese (1951) is of the opinion that in a young child who has phthisis bulbi without any history of injury or of any metastatic retinitis, the most probable diagnosis is that of a spontaneous regressed retinoblastoma.

Summary

A case of bilateral retinoblastoma with spontaneous regression in one eye is reported.

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