CASE NOTES

OCULAR METASTASIS FROM SEMINOMA*

BY

MICHAEL GARRETT

Radium Institute, Liverpool

Case Report

A man aged 78 had noticed a swelling of the left testicle in August, 1958. Within 6 weeks an orchidectomy was performed. The testicle showed a necrotic growth and there were malignant nodules in the spermatic cord. A histological section was reported as being composed of large spheroidal cells intermingled with lymphocytes typical of a seminoma (Fig. 1). In September, 1958, a swelling was found in the left groin. This was treated by a single application of high-voltage x rays and in one month the swelling had disappeared.

FIG. 1.—Section from testicular tumour, composed of large spheroidal cells intermingled with lymphocytes, a typical seminoma. $\times 190$.

In November, a swelling appeared on the lateral aspect of the right eye (Fig. 2, overleaf), a fullness below the left ear, a red nodule on the outer aspect of the lower third of the right leg, and enlarged glands in the right upper deep cervical group. These were diagnosed as metastatic deposits from a seminoma.

* Received for publication February 14, 1959.

FIG. 2.—Secondary deposit in lateral aspect of right eye.

A biopsy from the nodule on the right leg again showed the structure of a seminoma (Fig. 3).

FIG. 3.—Section from skin deposit showing similar picture to Fig. 1. $\times 190$.

A single exposure of high voltage *x* rays was given to the eye lesion and to the swelling below the left ear. Within 2 weeks both these lesions had disappeared, but the patient died 6 weeks later from multiple metastases.

Discussion

In a review of the literature Willis (1952) discovered references covering 140 cases of metastatic growths in the eye. Breast carcinoma was the greatest offender, 78 out of the 140 cases resulting from this disease. Most of the other cases resulted from primaries which are often responsible for metastases at unusual sites, *e.g.* lungs, kidneys, stomach, thyroid, and melanoma.

Duke-Elder (1940) gives a very full description of the literature of metastatic tumours of the eye. He found that the literature had been reviewed and collated by several authors, two of whom had recorded more than 200 cases. Ask (1934) reported 211 cases, in 59 of which the diagnosis was not histologically proved; and Lemoine and McLeod (1936) 229 cases, of which 156 were histologically proved. Most of the cases reported (50 to 60 per cent.) were due to metastases from breast, then came the lungs, alimentary tract, and thyroid. One case is reported of an intra-ocular metastasis from a testicular adenocarcinoma in a boy aged 4 (Goldstein and Wexler, 1935).

One of the most recent reviews on the subject is that of Boulanger (1954-55), who stated that

"In so far as ocular aetiology is concerned, cancer of the breast occupies the first place according to Genet, but Godtfredson gives cancer of the lung the first place. These cancers are then followed by kidneys, uterus, testicle, prostate, thyroid, and pancreas."

This high incidence accorded to metastases from the testicle and uterus is surprising.

Boulanger described four new cases, among them being one in which there was a subconjunctival tumour, which was found histologically to be uniformly made up of round cells with large nuclei, with plenty of chromatin, and was in fact a lymphosarcoma of the lymphoblastoma type. This patient also had a huge testicular tumour.

I wish to thank Dr. J. S. Fulton for permission to publish this case report and Dr. McConnell for the pathological interpretations.

REFERENCES

- ASK, O. (1934). *Acta ophthal. (Kbh.)*, **12**, 308.
BOULANGER, J. (1954-55). *Trans. Canad. ophthal. Soc.*, **7**, 114.
DUKE-ELDER, S. (1940). "Text-book of Ophthalmology", vol. 3, p. 2522. Kimpton, London.
GOLDSTEIN, I., and WEXLER, D. (1935). *Arch. Ophthal. (Chicago)*, **13**, 207.
LEMOINE, A. N., and MCLEOD, J. (1936). *Ibid.*, **16**, 804.
WILLIS, R. A. (1952). "The Spread of Tumours in the Human Body", 2nd ed. Butterworth, London.