HISTORICAL

The earliest clear reference to intra-ocular sarcoma is the discussion on the subject of pigmentation in 1819, Laennec calling the pigmented growths occurring within the globe "melanoses." At this time it was uncertain whether they were malignant or benign in nature.

Lawrence in 1845 in his clinical lectures at St. Bartholomew's Hospital considered them malignant, describing in detail the clinical history of several cases with accurate post-mortem notes.

Virchow in 1863 classified the growths by their cellular contents, and emphasised that no true relationship existed between pigmentation and the malignancy of the growth, this latter point depending more upon the type of cell composing the tumour, this has now been shown to be true.

In 1868 Von Graefe and Knapp published simultaneously clear clinical pictures of these neoplasms, which are true to this day apart from some unimportant details.

Fuchs in 1882 collected a large number of cases from the literature as well as twenty-two of his own (two hundred and fifty nine in all) and critically examined them from many aspects in his great work "Sarcoma of the Uveal Tract."

A valuable paper was published in 1891 by Lawford and Collins on one hundred and three cases collected from Moorfields Eye Hospital.

In 1899 reports of one hundred cases from the clinic at Halle were published by Pawel, and a year later a monograph on sixty seven cases by Madame Kerschbaumer appeared from the Leipzig clinic.

Wood and Pusey in 1902 published a paper on sarcoma of the iris, having collected all the cases in the literature to that date and included several new ones of their own—(one hundred and eight cases in all). The authors emphasised the treatment of these neoplasms.

Parsons in 1905 in his "Pathology of the Eye" devotes much space to an excellent account of the pathology of these tumours, and accompanies it with an extremely comprehensive bibliography.

In 1916 Colley and Hoguet reported eighty cases of melanotic cancer of the eyeball, and in the succeeding years many isolated contributions were made to the subject by Roll, Nettleship, Fuchs, Harman, Shumway and others.

In 1925 Nitsch investigated a series of cases when attempting to correlate a previous injury with subsequent development of choroidal sarcoma, and in the same year an interesting paper...
was published by Neame and Ali Khan on secondary glaucoma occurring in choroidal neoplasms, showing that sarcoma of the choroid occurred in about 10 per cent. of a large series of blind painful eyes.

In 1926 a discussion on the melanomata was undertaken by the Ophthalmological Society of the United Kingdom, and varying views as to the origin of these neoplasms were expressed.

Callender in 1931 published a paper on choroidal sarcoma with special reference to the histological types in a series of one hundred and eleven cases, emphasising the prognostic value of correct cellular classification.

In 1935 Terry and Johns published a valuable statistical study of ninety four cases of choroidal sarcoma, and in the same year Callender and Wilder published an account of the prognostic value and significance of argyrophil fibres in these neoplasms, finding that there was an apparent connection between the fibre content and the prognosis, two hundred and five cases being studied for this purpose.

Theobald in 1887 published a long article on the neurogenic origin of the choroidal sarcomata and supported his theory with seven illustrative cases.

In 1938 two papers of interest appeared, one by Dunnington on the intra-ocular tension in cases of choroidal sarcoma (stating that in the early stages, diminished tension is not uncommon), and another by Kronenberg on the topography within the globe of the neoplasm.

Besides these papers, very many isolated communications have been published and many are referred to in the following paper.

BIBLIOGRAPHY

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AETIOLOGY

Intra-ocular sarcoma is a rare disease. Fuchs collected ninety-one cases in one hundred and thirty seven thousand five hundred and forty-five eye patients (0.07 per cent.), Pawel two hundred and forty-eight cases in three hundred and fifty-one thousand seven hundred and seventy nine (0.07 per cent.) and Stallard found, during 1925-1931 at Moorfields, one case in every four thousand patients attending the Out-Patient Department.

On investigation of the present series there was no evidence to show that the disease is hereditary, but in the literature on the subject certain cases are recorded which certainly warrant further description.

Two in the series described by Lawford and Collins in 1893 were mother and daughter. The mother, aged thirty-eight years, had been blind in the left eye for four years, and on removal of the eye, one year after the birth of her daughter, a large pigmented sarcoma of the choroid was discovered. Her father and her twin sister each had an eye removed for something other than injury, but there is no evidence to show why the eyes were removed.

Two daughters of the original case had their left eyes removed for sarcoma of the choroid, the growth being in each case very similar in size and position to that found in the parent’s eye. This particular family history has now become even more striking, for Davenport in 1927 reported further members of the family affected with sarcoma of the uveal tract. Two daughters of one of the previous cases had eyes removed for sarcoma of the choroid, and in each case it was the right eye.

The diagram taken from Davenport’s article shows the sequence of the growths through the generations.

I can find in the literature only one other reference to the possibility of hereditary transmission of the disease.

In 1921 Pfingst described melano-sarcoma of the choroid occurring in brothers, one aged forty-four years, the other forty-seven, the growth being in each case a deeply pigmented spindle celled sarcoma.