PLASTIC DERMOID CYST*†

BY

B. SHUKLA‡ AND S. P. SRIVASTAVA§

Gajra Raja Medical College, Gwalior, India

DERMOID cysts are most commonly found at the upper and outer angle of the orbit (Wolff, 1951). They are smooth, round or hour-glass shaped, and vary in size from a pea to a large orange. They may be differentiated from a cephalocele by their tenseness and incompressibility and the absence of cerebral symptoms (Duke-Elder, 1964).

They contain secretions of the sweat and sebaceous glands and cast-off hairs and corneal epithelium. The latter usually predominate and the cyst becomes atheromatous, but when the sebaceous constituent predominates an oily cyst results (Chavasse, 1901).

Various secondary changes have been described. Sebaceous material escaping into the cyst wall may give rise to foreign body reaction (Friedenwald, Wilder, Maumenee, Sanders, Keyes, Hogan, Owens, and Owens, 1952). The epithelial lining may be partly converted into granulation tissue and subepithelial cells may undergo fatty degeneration (Wolff, 1951). Inflammatory and ulcerative changes in the wall of an old orbital dermoid cyst may lead to the formation of granulation tissue and fibrous cicatrix (Parsons, 1904). Pressure on the wall may lead to atrophy and thinning. The ulcerative process may destroy the whole epithelium and the cyst may become disorganized into a soft pulpy mass (Duke-Elder, 1964). The present case is reported because of its extreme plasticity.

Case Report

A 26-year-old female was admitted to the J. A. Hospital, Gwalior, with a swelling over the left eye which had been present for 20 years and had gradually increased in size although there had been no change for the last 5 years. There was no pain or visual disturbance.

Examination.—The right eye was normal, with visual acuity 6/6.

In the left eye the visual acuity was 6/9. A globular swelling 1.5 in. diameter was situated at the upper and outer angle of the orbit (Fig. 1). The skin above the swelling was freely movable and

FIG. 1.—Cyst on upper eye lid.

FIG. 2.—Response of cyst to digital pressure.

* Received for publication October 5, 1966.

† Address for reprints: Institute of Ophthalmology, Judd Street, London, W.C.1.

‡ Now working in the Department of Experimental Ophthalmology, Institute of Ophthalmology.

§ Present address: Medical College, Rewa, India.

the swelling could be moved over the underlying bone where a slight depression was noticed. The lump could be moulded into any shape (Fig. 2); there was no tenderness, but the upper lid was drooping because of the weight of the swelling.

The fundus showed no abnormality, and a radiograph of the orbit was within normal limits. A biopsy was taken but the tissue was too friable to be examined.

Pathology.—The whole mass was excised and sent to Prof. Norman Ashton for histo-pathological examination, and although the tissue was much disorganized and not well preserved a definite diagnosis of dermoid cyst could be made from the appearance of the fibrous wall and the epithelial lining showing keratinization.

Comment

Dermoid cysts are very common in this position but the extreme plasticity in this case made the exact nature of the growth uncertain. The history of slow growth for 20 years suggested the possibility of a benign tumour. The plasticity must have been due to secondary degenerative change, as described by Wolff (1951) and Friedenwald and others (1952).

Summary

A dermoid cyst which showed an unusual degree of plasticity is described.

REFERENCES

- CHAVASSE, A. (1901). *Arch. Ophtal.*, **21**, 645.
 DUKE-ELDER, S. (1964). "System of Ophthalmology", vol. 3, pt 2, pp. 960 and 962. Kimpton, London.
 FRIEDENWALD, J. S., WILDER, H. C., MAUMENEE, A. E., SANDERS, T. E., KEYES, J. E. L., HOGAN, M. J., OWENS, W. C., and OWENS, E. U. (1952). "Ophthalmic Pathology", p. 408. Saunders, Philadelphia.
 PARSONS, J. H. (1904). "The Pathology of the Eye", 1st ed., vol. 1, p. 190. Hodder and Stoughton, London.
 WOLFF, E. (1951). "A Pathology of the Eye", 3rd ed., p. 229. Lewis, London.