CLINICAL NOTES

INTRA-OCULAR GLIOMA OF OPTIC NERVE OF
EACH EYE*

BY

J. LOCKHART GIBSON, M.D.Edin., M.R.C.S.Eng.

BRISBANE.

I FIND that, according to Adami's classification, gliomata belong to the hylomata or pulp tumours, and to the sub-division of pulp tumours he calls epihylomata. Epihylomata are defined "as tumours whose characteristic constituents are overgrowths of tissues derived from the embryonic pulp of epiblastic origin."

Gliomata are the most typical tumours of this sub-division.

All previous intra-ocular gliomata I have myself seen have grown from the retina. When I discovered that each glioma in this case appeared to grow from the optic nerve and not from the retina, I had to call to mind that the optic nerve and retina are both parts of the brain and that a glioma could have its origin from the neuroglia of the optic nerve as well as from that of the retina or of the brain.

The child, aged 7 months, was brought to me with the following history:

Influenza lately, and child kept eyes closed during the attack. Noticed a week ago that child did not see; said to have noticed things until three weeks ago. Six other children all well. The next youngest two years old.

I found slightly shallow anterior chambers, some posterior synechiae: increased intraocular tension (+ 1) and unmistakable glioma reflexes from behind each pupil.

I removed both eyes next day, after explaining to the parents what was the alternative. The child nearly "went out" after he was removed from the operating table. According to reports he improved remarkably in health from the time of operation. There has been no return.

Each eye was put into 2 per cent. formalin at once. In each case the tumour, you will note, is attached by a stalk to the optic nerve. There was no real vitreous, only fluid. The tumour in each case is a large pear-shaped growth stretching from the optic nerve to the lens. In the one eye the retina is still in position everywhere. In the other it has collapsed around the tumour. The section of the tumour confirmed the diagnosis of glioma and proved it to be of highly cellular nature—branching cells with comparatively large nuclei. The nuclei appear to me to be relatively less large than those seen in gliomata of the retina itself.

* Read at the 11th Australasian Medical Congress, Brisbane, August, 1920.