INTRAVENTRICULAR TORULA GRANULOMA

LOUIS O. J. MANGANIELLO, M.D., AND POMEROY NICHOLS, JR., M.D.

Department of Neurosurgery, Medical College of Georgia, Augusta, Georgia

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Torula granuloma of the brain seems to be an infrequent occurrence. Carton and Mount\(^3\) reported 8 cases. Liu\(^3\) in reviewing the literature added 5 more, and reported 1 of his own. Balakrishna and Lilauwala\(^1\) reported 1 more, thus making a total of 15 cases in the literature so far.

However, in none of these 15 cases was the granuloma found within the ventricular cavities. The involvement of the central nervous system by Torula histolytica (Cryptococcus neoformans) may be classified as (1) the meningitic type, (2) the meningoencephalitic and (3) the embolic type. The last is responsible for the majority of granulomas found. There is another type, apparently not mentioned before in the literature, which involves the choroid plexus and produces granulomas. This can be called a choroid plexitis. The following case illustrates this.

CASE REPORT

A 61-year-old white male was first seen in the office on Jan. 16, 1954 having been referred by Dr. Wallace McNair of Aiken, S. C. His chief complaint was headache, which had become progressively worse, of 2 weeks' duration. He had had one black-out spell and two episodes of blurring of vision. He had noticed general progressive weakness and malaise for several months.

Past history was not contributory except for the fact that he had had a transurethral resection for prostatic difficulty 3 years before. Family history was not contributory. He was a carpenter by trade.

He was a listless, apathetic white male who complained bitterly of headache. He had a minimal left facial weakness of central type. There was a questionable Babinski sign on the left and some weakness of the left arm. Fundi were normal except for some arteriosclerotic changes.

He was advised to enter the hospital for further study and was admitted on Jan. 17, 1954.

Examination and Course. Complete blood count was within normal limits. Urine was normal. Serological tests for syphilis was negative. Roentgenograms of the skull revealed multiple defects in the parietal and occipital bones. Roentgenograms of the chest showed considerable pulmonary congestion bilaterally with evidence of infiltration of the right base. Lumbar puncture done shortly after admission revealed a CSF pressure of 140 mm. of water. The fluid contained 14 white cells, 100 per cent of which were polymorphonuclear. Pandy was slightly positive; total protein was 115.

In view of the suspicious lesions in his skull and the possibility of metastatic malignancy, a medical consultation was obtained. In the meantime a right cerebral arteriogram was done which showed no abnormalities (Figs. 1 and 2).

Nonprotein nitrogen was 34, total protein 6.9, albumin 5.04, globulin 1.86, calcium 9.9, phosphorus 4.1, acid and alkaline phosphatase 2.2 and 2.9 respectively. Bence-Jones protein test was negative. Sternal bone marrow was normal.

At lumbar puncture on Jan. 21, 1954 pressure was 160 mm. of water. Cell count was 147 with 33 per cent polymorphonuclear cells and 67 per cent lymphocytes. Pandy was positive. This fluid was submitted for routine culture and for examination for tubercle bacilli and fungus.
Another lumbar puncture was done on Jan. 26, 1954. Pressure was 120 mm. of water. Cell count was 104, with 27 per cent polymorphonuclear cells and 73 per cent lymphocytes. Total protein was 75; sugar was 32.

Gastro-intestinal series showed no abnormalities. Febrile agglutination tests, including heterophile, were negative. Temperature during this time ranged from 90° to 101°

At lumbar puncture on Feb. 1, 1954 pressure was 180 mm. of water. Cell count was 125, with 12 per cent polymorphonuclear cells and 88 per cent lymphocytes. Smears of spinal fluid and cultures were repeatedly negative. Spinal fluid serology was negative.

1st Operation. On Feb. 4, 1954 exploratory trephinations were done to rule out a subdural hematoma and also to see if one of the skull lesions could be biopsied. There was no evidence of hematoma and nothing was seen grossly at the areas of defects in the skull that were indicated by the roentgenograms.

Course. Cultures for fungus and tubercle bacilli up to this date were reported as negative. That night the patient's condition was much worse; he became stuporous, and a left-sided paralysis developed. An emergency ventriculogram was done (Figs. 3 and 4). This showed an intraventricular mass in the posterior horn on the right side.

2nd Operation. A right parieto-occipital cranioplastic flap was turned. The dura mater was opened; it appeared slightly milky. A tunnel was made in the posterior part of the parietal

Figs. 3 and 4. Ventriculograms showing mass in posterior horn of lateral ventricle.