

FORMULAS.

The three formulas below have been used for their respective conditions and good results have been noted.

For catarrhal conditions:

R. Olei cassia.....m. v	}	3
Olei eucalypti		
Olei gaultheriæ, ãã.....m. vii	}	4
Camphoræ		
Menthol, ãã.....gr. iv	}	2
Thymol.....gr. iii		
Olei theobromæ q. s.	}	19

M. Ft. suppositories No. xii. Sig.: Insert one in each nostril at bedtime.

For hay fever:

R. Ext. suprarenal	}	06
Hydrastini, ãã.....gr. i		
Camphoræ monobromatis.....gr. xxiv	}	5
Menthol cryst.....gr. x		
Antipyrini.....gr. xv	}	1
Resorcini.....gr. v		
Olei theobromæ q. s.	}	3

M. Ft. suppositories No. xii. Sig.: Insert one in each nostril any time of day or at bedtime.

For acute coryza:

R. Olei cassiæ.....m. ii	}	12
Olei anise.....m. iii		
Olei thyme.....m. iv	}	24
Olei eucalypti.....m. iii		
Phenol	}	18
Camphoræ		
Menthol, ãã.....gr. iii	}	19
Olei theobromæ q. s.		

M. Ft. suppositories No. vi. Sig.: One suppository to be inserted in each nostril during the day or at bedtime.

1421 McCulloh Street.

A CASE OF HYPERTROPHY OF THE BRAIN.

JAMES. H. HABERLIN, M.D.

PAWTUCKET, R. I.

Patient.—Matthew B., aged 2, born in U. S.

Family History.—The father, an alcoholic, emotional and excitable, died just after patient's birth, aged 52. Two years before the patient's birth, the father had a painless, non-itching eruption on his legs, thorax and abdomen, and at the same time lost most of his hair and complained of lancinating pains in his head and extremities. The mother was 35 years old when the patient was born. She has always worked hard, always drunk alcoholic stimulants and, of late years, to excess. She married at 18 years of age and has seven living children and one abortion. The second child was born at eight months, lived five hours, and died in convulsions. The fourth born, now eleven years old, is a high-grade imbecile. The abortion was probably due to syphilis.

Previous History.—The patient, the last born child, was delivered with forceps. The head was somewhat larger than the heads of the previous children were at the time of their birth. The child cried as lustily as any of the previous children, and, excepting the comparatively large size of the head, was apparently normal. At three months his mother noticed a disproportionate increase in the size of his head, which continued until his death.

Present Illness.—I saw the baby Feb. 10, 1906, at eight o'clock in the evening. The first symptom that appealed to me was the large size of his head. Noticing a papulo-squamous rash on the forearms and face of his mother, I thought the case very probably one of chronic hydrocephalus of syphilitic origin. The patient had been seized with an epileptiform paroxysm previous to my coming, the mother said, and had just become profoundly prostrated, with twitchings of his face and hands. When I saw him he was comatose, but tossed his head from side to side, grasping in a purposeless way from time to time at things within his reach, and occasionally emitting the hydrocephalic cry. Later the coma deepened, the vacillations of the head gave way to convulsive twitchings of the facial muscles, the movements of the arms and hands became atetoid, and the breathing approached a Cheyne-Stokes character.

The pupils were asymmetrically dilated and did not respond to light. The tongue was coated with a grayish-brown fur and the teeth were covered with sordes. The pulse was too rapid and feeble to be counted. There was no rash on the body, but over the right, external femoral condyle was a ham-colored, circinate spot as large as a 25-cent piece. The lungs were normal, the abdomen was tympanitic, there were no symptoms of rachitis. The body and extremities were emaciated. Kernig's sign and Babinski's reflex were absent. The knee-jerk and the ankle-clonus were exaggerated.

The head resembled hydrocephalus of the average type. It was pyramidal in shape on the frontal aspect, symmetrical in its enlargement and presented that prominence at the root of the nose which Holt says is seen in no other form of enlargement of the head than hydrocephalus. There was no bulging of the eyes, nor did the interocular distance seem to be increased. The anterior fontanelle was patent and about two and one-half inches in diameter, but there was no separation at the sutures.

The patient died during a recurrence of the epileptiform paroxysm about three hours after the first seizure.

Autopsy.—With the assistance of Drs. W. G. Dwinell and O. G. Ingham, the autopsy was made the following day. The calvarium was removed in a wedge-shaped piece by sawing clear through. The dura was densely adherent to the bone and its removal required great force. The sutures were firmly ossified and the anterior fontanelle was covered with a dense membrane. The meninges were enormously thickened and adhered as one membrane. The superior longitudinal sinus was obliterated. The meninges did not adhere to the brain. The convolutions were not flattened. In removing the brain the cranial nerves were found markedly degenerated. The third, fourth, seventh and eighth nerves were torn easily by pressure of the back of the scalpel. The right occipital lobe was injured by the saw in cutting through the bone. The area of the brain substance thus exposed was pultaceous. The brain, as a whole, was apparently symmetrically enlarged. Very little fluid escaped as it was lifted from its bed. There was nothing especially significant in the thorax or abdomen.

Measurements.	Patient.	Normal Child, 2 Years.
Circumference of head.....	55 cm.	47.2 cm.
Circumference of thorax.....	38 cm.	48.4 cm.
Length of body.....	78 cm.	82.8 cm.
Weight of brain.....	1712 gm.	1000 gm.

The brain was placed in 80 per cent. alcohol for 9 hours, and later in successive changes of 95 per cent. alcohol. We attempted to examine the brain by Virchow's method, 43 hours after the child's death. Immediately below the surface we found the matter so pultaceous that a satisfactory demonstration was impossible. The following facts, however, were observed: The membranes were not adherent to the brain substance at any part; there was no flattening of the convolutions, no neoplasm, no disproportionate increase in the size of the ventricles. The various foramina were patent. The gray and white matter were developed proportionately.

I have not attempted an exhaustive research of the literature of this subject, but have simply reported this case to add to the literature of an apparently very rare condition, for in the works at my immediate service, among them those of such men as Dana, W. G. Thompson, Potts, Osler and Tyson, I find no mention at all of hypertrophy of the brain.

The case presented no signs by which hydrocephalus could be excluded. If it were not that we were fortunate in obtaining consent for an autopsy, we should yet believe the case to be one of hydrocephalus. The question naturally arises, how many cases like this with the cardinal symptoms of hydrocephalus have been incorrectly diagnosed.

Incentives to Greater Effort.—M. A. Austin, in *Central States Medical Magazine*, states that losing a case, having complications arise, or having unexpected difficulties to overcome, are reasons for constant study, greater care and more vigilance.