

are activated. However, we should not neglect the fact that the increase of proteolysis results from tissular necrotic processes. We ascribe a role to the increase of the enzymatic activity in the development of the pathological process.

Zusammenfassung. Gehirnhomogenate von Kaninchen mit experimenteller allergischer Encephalomyelitis weisen eine deutlich erhöhte katheptische Aktivität auf, wahr-

scheinlich als Folge des allergischen Entzündungsprozesses.

M. F. KERÉKES, T. FESZT,
and A. KOVÁCS

Research Station of the Academy of Sciences of the Roumanian People's Republic, Tîrgu-Mureş (Roumania), July 29, 1964.

Extravasation of Blood Cells In and around the Pituitary of *Anabas scandens* (Cuvier)

PICKFORD and ATZ¹ in their extensive review on the physiology of the pituitary gland of fishes have cited very few cases of abnormality of fish pituitary. Recently, SATHYANESAN² has reported an instance of abnormality in the pituitary of *Chela bacaila*.

The pituitary of *Anabas* is compact and essentially of a platybasal type devoid of any definite stalk from the brain. Neurohypophysis is well developed and its extensive ramifications divide the gland into conventional

parts, namely pro-, meso-, and meta-adenohypophysis. Pituitary collected from a specimen in April 1963 was fixed in Bouin's fluid and sections of 8 μ thickness were stained in Gabe's paraldehyde fuchsin as modified by DAWSON³. The majority of gland cells, especially the basophils, exhibited a marked affinity with paraldehyde fuchsin and very little reaction to other dyes in the counter stain. Pools of blood cells were observed within as well as outside the gland (Figure A). From a pool of free blood cells close to the posterior region of the pituitary, finger-like capillaries were found extending into the gland. The distribution of blood cells was not restricted to any region of the pituitary but a greater concentration of blood cells was noticed in mesoadenohypophysis (Figure B).

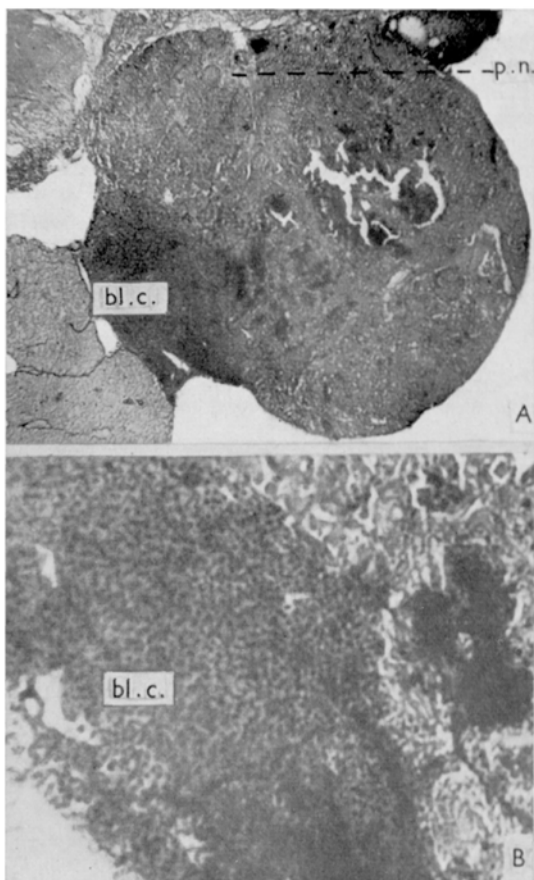
Since pools of blood cells were observed inside the substance of the pituitary, in addition to their distribution outside, the probability of their origin being due to the rupture of meningeal vessels is ruled out. Extensive vascularization of this kind was quite unusual and never observed in any pituitary under normal conditions.

OLIVEREAU⁴ reports that the poverty of blood vessels in the mesoadenohypophysis of *Salmo salar* is correlated with the fact that the secretions from this region are discharged in part into the metaadenohypophysis. A greater concentration of blood cells within the mesoadenohypophysis observed in the present case suggests that the secretion from this region enters directly into the blood stream and the occurrence of free blood cells is perhaps due to some unknown pathological condition⁵.

Zusammenfassung. Es wurden Gruppen von Blutzellen innerhalb und in der Umgebung der Hypophyse von *Anabas scandens* und besonders in der Mesoadenohypophyse gefunden. Dies fällt auf, da die Mesoadenohypophyse im allgemeinen nicht reich mit Gefäßen versorgt ist. Die Gefäßversorgung dieser Stelle zeigt, dass das Sekret direkt von der Mesoadenohypophyse ins Blut übergeht, während die Anhäufung von Blutzellen in der Hypophyse pathologisch sein dürfte.

N. H. GOPAL DUTT

Department of Zoology, Annamalai University, Annamalai Nagar (South India), July 14, 1964.



Photomicrographs of the pituitary of *A. scandens* showing (A) the distribution of blood cells. A portion of the same (B) enlarged to show clearly the free blood cells. bl.c. - Blood cells; p.n. - Pars nervosa. Bouin/Fuchsin paraldehyde. $\times 125$.

¹ G. E. PICKFORD and J. W. ATZ, *The Physiology of Pituitary Gland of Fishes* (Zoological Society, New York 1957).

² A. G. SATHYANESAN, *Naturwissenschaften* 4, 176 (1959).

³ A. B. DAWSON, *Anat. Rec.* 155, 63 (1953).

⁴ M. OLIVEREAU, *Ann. Inst. Oceanogr. Monaco* 20, 95 (1954).

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