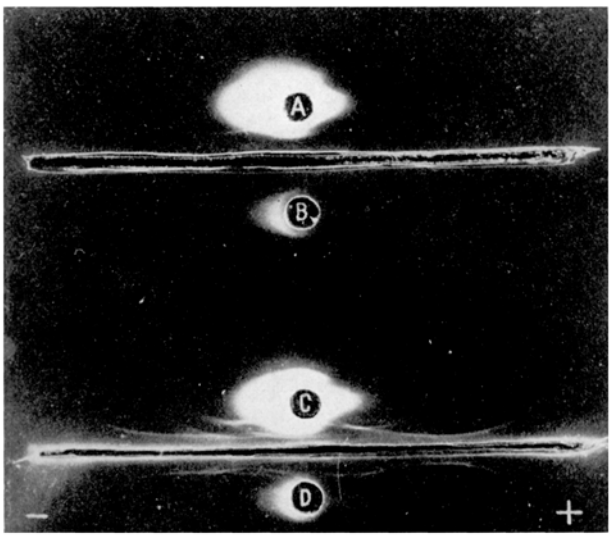

Fig. 2. Démonstration immunoélectrophorétique du comportement globulinique de l'antigène qui apparait dans la rate du rat nourri au DAB. A et C: extrait de rate du rat nourri au DAB. B et D: extrait de rate normale. *Cuves longitudinales:* Supérieure: antisérum de lapin anti-hépatome après absorption par l'extrait de rate normale. Inférieure: Immunsérum anti-hépatome.

Que la rate soit le site de l'apparition d'un antigène peut signifier ou bien que cette protéine anormale est biosynthétisée dans le foie ou ailleurs sans que nous ayions réussi, dans nos conditions expérimentales, à l'y détecter et que la rate ait pu l'adsorber, comme elle le fait pour l'antigène de la tumeur de Walker[2,3], ou bien que la rate soit le centre de fabrication de cet antigène; la nature globulinique de cet antigène peut militer en faveur de cette dernière interprétation.

Conclusion. Nous avons pu détecter une globuline anormale apparaissant dans la rate de rats nourris au DAB depuis six semaines[13].

Summary. An abnormal globulin has been detected in the spleen of Fisher inbred rats fed with a DAB containing basic diet. This abnormal globulin appears in the spleen on the sixth week after the initiation of the diet.

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Urinary Excretion of C^{14}-Histamine and Metabolites in Cats after C^{14}-Histamine Given Intravenously, and into the Cerebral Ventricles

When histamine is perfused through the cerebral ventricles in anaesthetized cats, part of it escapes into the blood stream[1,2]. However, when small quantities of radioactive histamine (C^{14}-histamine) were perfused in the same way, it could not be demonstrated in the blood[3]. Yet, the possibility exists that C^{14}-histamine was present in the blood, but in concentrations too low to be measured. The present experiments were designed to test this possibility, using the urinary excretion of C^{14}-histamine and its metabolites as an index of their presence in the blood. In cats, intravenously injected C^{14}-histamine can be recovered almost quantitatively in the urine as C^{14}-histamine and metabolites[4].

In cats under Nembutal anaesthesia, C^{14}-histamine was administered either by perfusion of the ventricular system from the lateral ventricle to the aqueduct, as described by *Bhattacharya* and *Feldberg*[5], or by continuous infusion into a femoral vein, both at a rate of 0.11 ml/min. Blood pressure was recorded in a femoral artery. Urine was collected through polythene catheters inserted into the ureters, the first collection period commencing when the administration of C^{14}-histamine started. The urine was collected in vessels containing hydrochloric acid, and divided into aliquots for the determination of its content of C^{14}-histamine and metabolites, using the isotope dilution methods devised by SCHAYER (for details of the procedures, see[3,6]). The radioactive samples were counted under standardized 'infinite thickness' conditions[6]. At least 1000 counts were taken. 1 µg C^{14}-histamine base, and equimolar amounts of its metabolites, gave 3000 counts/min.

In two cats 0.9 µg C^{14}-histamine was infused intravenously, and the urine analysed for C^{14}-histamine and metabolites (Table I). It was found that C^{14}-histamine and C^{14}-methylhistamine were only excreted during the first 3 h. No free C^{14}-imidazoleacetic acid was found. The main urinary metabolite was C^{14}-methylimidazoleacetic acid, as shown previously by SCHAYER[4]. It was still present in the urine more than 7 h after the end of the infusion of histamine. At the end of the experiments, the kidneys were removed. They contained no C^{14}-

Tab. I. Urinary excretion of C^{14}-histamine and metabolites (expressed as counts/min) during and after intravenous infusion of 0.9 µg C^{14}-histamine in anaesthetized cats. Duration of infusion 40 min

Experiment		Minutes after start of infusion of C^{14}-histamine				
		1–60	61–180	181–300	301–420	421–480
1	Histamine	57	96	0	0	
	Methylhistamine	30	10	0	0	
	Methylimidazoleacetic acid	160	390	200	190	
	Imidazoleacetic acid	0	0	0	0	
2	Histamine	54	5	0	0	0
	Methylhistamine	56	8	0	0	0
	Methylimidazoleacetic acid	328	760	384	184	72

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Tab. II. Urinary excretion of C^{14}-histamine and metabolites (expressed as counts/min) in anaesthetized cats. Comparison between ventricular perfusions of C^{14}-histamine during 40 min, and intravenous infusions of C^{14}-histamine during 40 min

Experiment	Route of administration of C^{14}-histamine	Amount of C^{14}-histamine administered		Minutes after start of administration of C^{14}-histamine 1–60	61–120	121–180	181–240	241–300
1	Ventricular perfusion	9 μg	Histamine	16	5	32	9	
			Methylimidazoleacetic acid	40	136	120	96	
2	Ventricular perfusion	9 μg	Histamine	11	3	0	12	0
			Methylimidazoleacetic acid	72	316	432		
3	Intravenously	0.18 μg	Histamine	23	5	5	0	0
			Methylimidazoleacetic acid	112	120	72	56	36
4	Intravenously	0.9 μg	Histamine	72	10	3	5	
5	Intravenously	0.09 μg	Methylimidazoleacetic acid	20	44	30		

histamine, and only traces of C^{14}-methylimidazole-acetic acid.

In the following experiments (Table II), only C^{14}-histamine and C^{14}-methylimidazoleacetic acid were measured. Small amounts of C^{14}-histamine were excreted during and after the ventricular perfusions with C^{14}-histamine. Large amounts of C^{14}-methylimidazoleacetic acid were simultaneously excreted. Intravenous infusion of 0.18 μg C^{14}-histamine resulted in the urinary excretion of C^{14}-histamine and C^{14}-methylimidazoleacetic acid in amounts rather similar to those observed in the ventricular perfusions with 9 μg C^{14}-histamine. Correspondingly, 0.09 μg C^{14}-histamine intravenously gave less C^{14}-methylimidazoleacetic acid, and 0.9 μg intravenously gave more C^{14}-histamine, than 9 μg C^{14}-histamine perfused through the ventricles. This implies that roughly 2% of the C^{14}-histamine perfused through the ventricular system escaped into the blood stream. However, this conclusion may be somewhat uncertain since it is known that histamine catabolism *in vivo* can take place in the feline brain[3] and kidney[7,8]. The latter organ is probably similar to that of the dog, which has a considerable capacity to methylate histamine *in vivo*[9]. In the present experiments, also other organs may have contributed to the catabolism of administered histamine.

Using the gastric secretion as an index of the absorption of histamine into the blood stream, DRASKOCI et al.[2] obtained values indicating that 1–2% of the histamine perfused through the ventricles entered the blood stream. Thus, the estimates presented here agree fairly well with those obtained with doses of histamine several hundred times greater[2]. It remains to be established whether the histamine and its metabolites enter the blood stream directly from the ventricular fluid, or *via* the brain tissue.

Zusammenfassung. In narkotisierte Katzen wurde C^{14}-Histamin entweder durch Hirnventrikel perfundiert oder intravenös injiziert. Seine Ausscheidung und Metabolite in Urin wurde gleichzeitig bestimmt: Ca. 2% des durch die Hirnventrikel perfundierten C^{14}-Histamins wurde im Blutstrom resorbiert.

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The Endecapeptide Eledoisin as Powerful Vasodilating and Hypotensive Agent in Man

Recently SANDRIN and BOISSONNAS have synthesized the endecapeptide 'Eledoisin'[1], the active principle of the posterior salivary glands of *Eledone moschata* and *Aldrovandi*. This principle has been recognized, isolated and purified by ERSPAMER[2]. It has a striking hypotensive effect in several animal species and particularly in the dog; the non-vascular smooth muscles are equally very sensitive to this peptide[3]. The effects of eledoisin have not yet been tested in man.

The present paper deals with information obtained experimentally on the effects of the synthetic eledoisin[4] on the arterial and spinal fluid pressure in man. This paper aims also at assessing some threshold effects comparing this substance with other vasoactive compounds with greater vasomotor power, namely Bradykinin and Histamine[4]. We wished to assess also whether hypertensive substances, such as Norepinephrine and Hypertensin[4], would antagonize the hypotensive effect

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