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Mitotic and histoenzymatic activities of the intestinal mucosa in atrophic human sucklings and in undernourished rats. Folia histochem. cytochem. (Krakow) 3 no.2:101-114 '65.

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1. Faculty of Electrical Engineering, Ljubljana, Askerceva ulica 9.

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Analog computer for the synthesis of linear electric networks in the time space. Elektr vest 31 no.3/5184-93 My-Je '64

1. Faculty of Electrical Engineering, University of Ljubljana, Ljubljana.

11H

CA

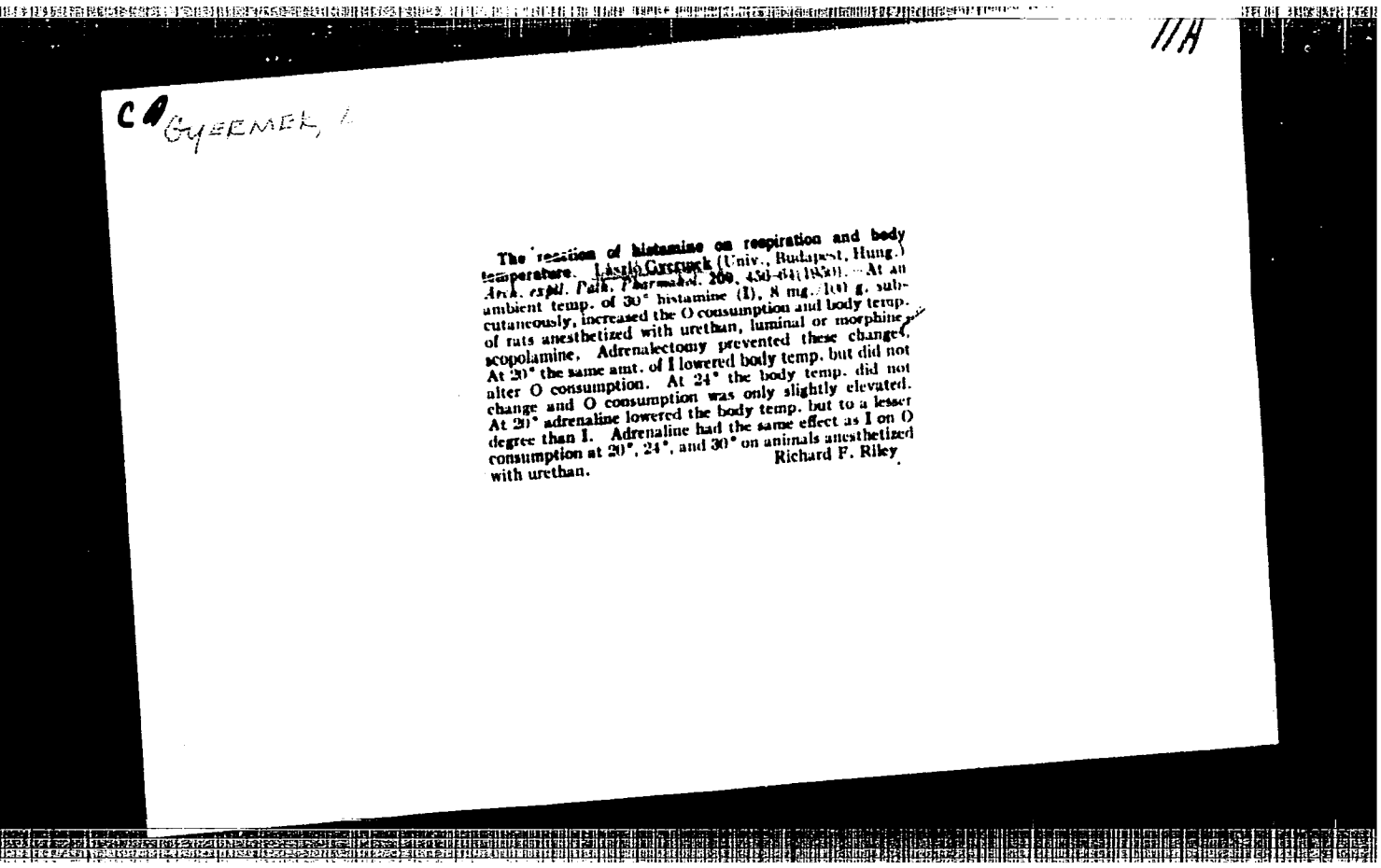
The adrenolytic and sympathicolytic efficiency of ergot alkaloids. László Gyermek, László Satanyik, and Edit Lang (Univ., Budapest). *Acta Physiol. Acad. Sci. Hung.* 1, 73–74(1950)(in English).—The adrenolytic and sympathicolytic effects of dihydroergocornine, dihydroergotamine, and ergotamine on blood pressure of cats were studied. Similar blood-pressure rises are observed as a result of administration of a given quantity of adrenaline and stimulation of the splanchnic nerve. After administration of 0.1 mg./kg. body wt. of dehydrogenated ergot alkaloids or 1 mg. per kg. of natural ergotamine a lowering of the blood pressure occurs. This decrease can be counteracted by isopropylnoradrenaline. Three tenths mg. to 0.6 mg. of dihydroergocornine per kg. of body wt., 0.6 to 0.8 mg. of dihydroergotamine, and 2 to 2.2 mg. of ergotamine are the doses necessary for the blocking of the blood-pressure-raising effect of adrenaline.

Gertrude E. Perlmann

1124

CA GYERMEK L

Blood pressure experiments with carbachol. L. Gyermek, L. Satanyik, E. Lang, and G. Pataky (Univ. Budapest, Hung.). *Acta Physiol. Acad. Sci. Hung.* 2, 33-40(1950).—In atropinized animals, the blood pressure elevation elicited by carbaminoylcholine was reversed by dihydroergocornine and by tetraethylammonium bromide (TEA). Vasodilation of sympathetic origin was not responsible for the fall in blood pressure since it was not prevented by adrenal ligation or inhibited by TEA or isopropylnoradrenaline. The blood pressure fall was of parasympathetic origin since it was completely inhibited by large doses of atropine.
Richard F. Riley



11A

CA GUERMEN

The reaction of histamine on respiration and body temperature. László Cserpnyák (Univ., Budapest, Hung.) *Arch. exptl. Path. Pharmakol.* 209, 450-64 (1950).—At an ambient temp. of 30° histamine (I), 8 mg./100 g. subcutaneously, increased the O consumption and body temp. of rats anesthetized with urethan, luminal or morphine-scopolamine. Adrenalectomy prevented these changes. At 20° the same amt. of I lowered body temp. but did not alter O consumption. At 24° the body temp. did not change and O consumption was only slightly elevated. At 20° adrenaline lowered the body temp. but to a lesser degree than I. Adrenaline had the same effect as I on O consumption at 20°, 24°, and 30° on animals anesthetized with urethan.

Richard F. Riley

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Blood pressure experiments with carbachol. Acta physiol. hung. 2 no.1:33-40 1951. (CIML 20:9)

1. Of the Pharmacological Institute of Budapest University.

CA

11 N

Ganglionic blocking activity of tropeins. L. Gyermek and L. Sztanyik (Univ. Budapest, Hung.). *Acta Physiol. Acad. Sci. Hung.* 2, 41-7(1951).—Atropine and homatropine blocked the nicotinic effects of carbaminoylcholine, the blood pressure rise resulting from splanchnic nerve stimulation, and the contraction of cats nictitating membrane from stimulation of the cervical sympathetic nerve. The tropein effect was of short duration. Based on the blood pressure expts., homatropine was 3 to 5 times stronger than atropine and 10 to 15 times stronger in the expts. on the nictitating membrane. Atropine methyl bromide paralyzed the superior cervical ganglion to an extent similar to homatropine; tetraethylammonium bromide was less effective than the quaternary tropeins.

Richard F. Riley

Ganglion-blocking action of tropine and tropinium. L. Gyermek (Univ. Budapest). *Acta Physiol. Acad. Sci. Hung.* 2, 175-7, 1951(in English); cf. *C.A.* 45, 8055i. Tropine (I) injected in 1-3 mg. doses produced a cervical-ganglion blocking effect in the cat for 4-6 min., while the effect of 5-6 mg. lasted for 12-15 min. The effect was practically the same as with atropine, but of shorter duration. The quaternization of I slightly increased the effect; esters of I have a much greater ganglion-blocking effect after quaternization. H. I. Chinn

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11 H

The action of histamine on metabolism. L. Gyermek and Gy. Pataky (Univ. Budapest). *Acta Physiol. Acad. Sci. Hung.* 2, 179-88(1951)(in German).—Guinea pigs were given a 0.2% histamine (I) soln. by aerosol and the time measured for appearance of dyspnea. After controls were obtained, the animals were given 1 mg./kg. thyroxine (II) subcutaneously for 3 days. The dyspnea time measured on the 4th and 5th days was not significantly changed. O consumption was increased by I (8 mg./100 g.) alone. O consumption increased by 71% when II (80-100 γ/100 g.) was given for 2 to 4 days. With I (4 mg./100 g.) alone the increase was 10%; after II the increase was 37%. O uptake was lower with adrenalectomized than with normal animals after I. Pyribenzamine (III) does not inhibit the increased metabolic action of I in rats. Treatment with II had no influence on the I-induced bronchospasm. In guinea pigs treated with III a rise in metabolism was prevented even when many-fold lethal doses of I were given.

H. I. Chinn

GYERMEK, L.

Studies on the cholinergic blocking substances. I. Sites of action of compounds of the atropine group. Acta physiol. hung. 2 no.3-4:511-517 1951. (CIML 22:1)

1. Of the Institute of Pharmacology of Budapest University.

GYERMEK, L.

GYERMEK L., FEKETE G.

Az adrenalin serum k es vercukor hatasanak befolyasolasa sympaticus benitokkal. /Inhibition of the effect of adrenalin on serum potassium and blood sugar levels by sympatholytic agents/ Kiserletes orvostud. 3:3 1951 p. 203-9.

1. Pharmaceutic Institute, Budapest Medical University.

CLML 20, 10, Oct. 51

FEKETE, G.; GYERMEK, L.; SZTANYIK, L.;

Investigation on the relation of serum potassium and carbohydrate metabolism. Kiserletes Orvostud. 3 no. 5:338-342 1951. (CIML 21:3)

1. Technical Associate for Csak. 2. Institute of Pharmaceutics, Budapest Medical University.

GYERMEK L.

A vegetativ ducokra hato gyogyszerekrol. [Drugs affecting the vegetative nervous ganglions] Orv. hetil., Budap. 92:25 24 June 51 p. 808-13.

1. Doctor. 2. Pharmaceutical Institute (Director--Prof. Dr. Bela Issekutz), Budapest Medical University.
CIML Vol. 20, No. 10 Oct 1951

GYERME, LASZLO

6

Synthesis of compounds of ~~chloroethylamine~~ type with Adrenaline-blocking action. Károly Nádor, Mátyás Kovalsits and László Gyermek (Med. Univ., Budapest). *Acta Chim. Acad. Sci. Hung.* 2, 153–61(1952)(in English).—With the object of finding compds. with Adrenaline-blocking effects, various $ArOCH_2CH_2NRCH_2CH_2X.HX$ (I.HX) were synthesized. $RN(CH_2CH_2OH)_2$ were converted to hemialcoholates and then treated with aralkyl halides to give $ArOCH_2CH_2NRCH_2CH_2OH$. These were converted with $SOCl_2$ or $SOBr_2$ to the corresponding Cl or Br derivs. The following I were prepd. {R, Ar, X, m. p., Adrenaline-blocking effect (the effect of Dibenamine = 1) given}: Me, $PhCH_2$, Et, —, 0.5; $PhCH_2$, $PhCH_2$, Cl, 120°, 0.5; $PhCH_2$, $PhCH_2$, Br, 98°, 1.5; 1-naphthylmethyl, $PhCH_2$, Cl, 130°, 1.5; $PhCH_2$, 1-naphthylmethyl, Cl, 195° (decompn.), 1.0; Me, 1,4-benzodioxan-2-ylmethyl (A), Cl, 120°, 0.2; $PhCH_2$, A, Cl, 130°, 1.0; $PhCH_2$, A, Br, 119–21°, 3.0. The I were readily sol. in H_2O. The last compd. caused complete adreno-sympathic paralysis with a dose of 3–4 mg./kg. and showed $L.D_{50}$ for mice on intraperitoneal application of 60 mg./kg. István Pirály

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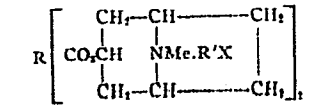
GYERMEK, LASZLO

Chemical Abst.
Vol. 48 No. 4
Feb. 25, 1954
Organic Chemistry

Attempts to find new compounds with curarelike effects. III. Quaternary derivatives of dicarbocyclic tropine esters. Károly Nádor and László Gyermek (Medical Univ., Budapest). *Acta Chim. Acad. Sci. Hung.* 2, 369-74(1952)(in English); cf. *C.A.* 46, 7547*f*.—Several quaternary derivs. of succinyl- and phthaloyltropine were synthesized with the object of establishing the changes in pharmacol. effects of the quaternization of bis-quaternary compds. by aralkyl compds. which, as a rule, yield derivs. with ganglion-blocking effects. Succinyl-*anti*-tropine (I), $b_{0.05}$ 140-50°, was prepd. in 6 g. yield 82% by pouring 2.5 ml. (0.025 mole) $(CH_2COCl)_2$ on 7.1 g. (0.04 mole) tropine-HCl, keeping the reaction mixt. 3 hrs. at 115-20° with air and moisture excluded, moistening with water when gas formation ceases, adding NH_3 to pH 8.5, shaking 8 times with eight 25 ml.-portions of $CHCl_3$, decolorizing with C, removing the solvent, and distg. under reduced pressure. Phthaloyl-*anti*-tropine (II), m. 66-7°, is obtained by reësterification of tropine with o-$C_6H_4(CO_2Et)_2$ in the presence of Na. The following



I.2R'X (R = $-CH_2CH_2-$) and II.2R'X (R = o-C_6H_4) were prepd. R'X and compd. no. given): (Ia), *MeI* (N-297); (Ib), *p-MeC$_6$H$_4$CH$_2$Br* (N-298); (Ic), *m-BrC$_6$H$_4$CH$_2$Br* (N-307); (IIa), *MeI* (N-305); (IIb), $PhCH_2Br$ (N-306). (Ia), m. 310° (decompn.), obtained by adding MeI to I in abs. Me_2CO, allowing to stand for a day, filtering, washing the ppt. with Me_2CO to remove unreacted substance, and recrystg. from MeOH-Et_2O. Ib, m. 290-2° (decompn.). from I in Me_2CO with *p*-$MeC_6H_4CH_2Br$. Ic, m. 285° (de-

compn.), prepd. by adding *m*-$BrC_6H_4CH_2Br$ to I in Me_2CO, allowing to stand 3 days, filtering, and recrystg. from MeOH-Et_2O. IIa, m. 298–300° (decompn.), prepd. by quaternizing II in Me_2CO with MeI and recrystg. from water. IIb, m. 216° (decompn.), obtained by refluxing II 3 hrs. in Me_2CO with $PhCH_2Br$, filtering, washing the salt with Me_2CO and recrystg. from MeOH-Et_2O. Pharmacol. tests revealed that the curare effect is predominant in the bis-quaternary derivs. Compd. N-307 proved in frog tests to be 3.5 times and N-300 5.0-times as strong as *d*-tubocurarine. István Finály

7-13-61

GYERMEK, L.

The role of the halogen groups in the pharmacological effects of dibenzyl β-chlorethylamine (dibenamine) and dibenzyl β-bromethylamine. Acta physiol. hung. 3 no.1:165-173 1952. (CLML 24:3)

1. Of the Research Institute of the Pharmaceutical Industry, Budapest.

GYERMEK, L.; NADOR, K.; KOVATSITS, M.

New adrenaline-blocking compounds. Acta physiol. hung. 3 no.1:175-182 1952. (CIML 24:3)

1. Of the Institute of Pharmacology of Budapest University.

GYERMEK, L.; NADOR, K.

Studies on cholinergic blocking substances. II. Correlations between structure and effect in antimuscarine, ganglion blocking and curare-like actions of mono- and bis-quaternary ammonium compounds. Acta physiol. hung. 3 no.1:183-193 1952. (CLML 24:3)

1. Of the Institute of Pharmacology of Budapest University.

GYERMEK, L.; CSAK, Z.

A method for the biological determination of ACTH. Acta physiol. hung. 3 no.3-4:563-570 1952. (CLML 24:5)

1. Of the Research Institute of the Pharmaceutical Industry, Budapest.

GYERMEK, L.:SZTANYIK, L.

The effect of histamine on the adrenal gland. Kiserletes orvostud. 4 no. 4:241-247 Aug 1952. (CIML 23:5)

1. Pharmaceutics Institute, Budapest Medical University.

GYERMEK, L.

Method of testing of local anesthetics. Kiserletes orvostud. 4 no. 6:401-405 Dec 1952. (CLML 24:1)

1. Pharmaceutical Industry Research Institute.

GYERMEK L.

HUNG

33. New compounds with local anaesthetic activity — D. Beke, K. Lempert and L. Gyermek. (*Magyar Kémiai Folyóirat* — Vol. 58, 1952, No. 10, pp. 310–312, Vol. 60, 1954, No. 5, pp. 117–151, 5 tabs.)

It is known mainly from the investigations carried out by Löfgren and collaborators that the aminosalicylic anilides, toluidides, etc. (the xylocaine group) possess valuable local anaesthetic properties. In order to establish the relations between the chemical structure and the local anaesthetic activity nuclear substituted halogen derivatives of these compounds were prepared. The diethylglycyl halogeno anilides and toluidides prepared from the corresponding chloroacetyl derivatives show local anaesthetic activity, and several compounds even surpass Novocaine in this respect; their toxicity is low but strong local irritating properties prohibit their practical use. These irritating properties may be diminished and simultaneously the biological activity of the compound increased by the introduction of a second free aromatic amino group. However, the thus obtained derivatives are highly toxic. This toxicity can be diminished by the acylation (acetylation or succinylation) of the

D. Bobbs etc.

second amino group but their activity is reduced thereby. The N-(diethylglycyl)-2,6-dichloro-4-sucinylamino anilide prepared has a "zwitter" ionic structure and therefore it is water soluble. It proved to be a more potent local anaesthetic than Novocaine in spite of its free (more precisely, ionized) carboxyl group. Several quaternary derivatives of the compounds mentioned above were prepared and investigated in respect to their pharmacological value. The local anaesthetic activity of the alkyl quaternary compounds is low, the activity of the allylic quaternary compounds was found to be of the same order as that of the tertiary salts. Due to their low solubility in water the biological activity of the benzylic quaternary compounds was not investigated. In respect to the effect of the nuclear substituents on the local anaesthetic potency of these compounds the conclusion can be drawn that not only the steric factors — assumed by Lölgren and collaborators to be solely responsible for the pharmacologic activity — but the electron affinity of the substituents is also of decisive importance.

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[illegible], I.

Gyermek, L.; Lazar, G.

"Experiments with the Biological Valuation of the Adrenocorticotropic Hormones." p. 60. (Acta Physiologica. Supplement to v. 4, 1953, Budapest)

SO: Monthly List of East European Accessions. Vol. 3, No 6 Library of Congress, Jun 54 Uncl.

GYERMEK, L.; NADOR, K.

Studies on cholinergic blocking substances. III. Neuromuscular blocking tropeines. Acta physiol. hung. 4 no.1-2:159-174 1953. (CLML 25:1)

1. Of the Institute of Pharmacology of Budapest University and of the Pharmaco-Industrial Research Institute, Budapest.

Gyermek, L

The pharmacology of tryptamine, tyramine, and phenethylamine. L. Gyermek (Pharm. Ind. Research Inst., Budapest). *Acta Physiol. Acad. Sci. Hung.* 4, 323–31 (1953)(in German).—The effect of tryptamine (I), tyramine (II), and phenethylamine (III) on the blood pressure of cats was studied. Pyribenzamine, antergan, thephorin, and trimeton diminish the ability of I, II, and III to raise the blood pressure. The main action of I, II, and III consists of a direct vascular contraction which is not altered by adrenergic blocking agents. A vasodilatory effect is also demonstrable.

Harold S. Bailey

GYERMEK, L.

Chemical Abst.
Vol. 48 No. 3
Feb. 10, 1954
Biological Chemistry

(2)

Cholinergic blocking substances. IV. Correlation between structure and effect of quaternary derivatives of benzoyltropine and benzoyl-ψ-tropine compounds. L. Gyermek (Pharm.-Ind. Research Inst., Budapest). *Acta Physiol. Acad. Sci. Hung.* 4, 333-40(1953)(in English); cf. *C.A.* 47, 12648a.—The correlations were studied between structure and effect of tropines having local anesthetic and cholinergic blocking activity by using the MeI (I), EtBr(II), PrBr(III), BuBr(IV), and $PhCH_2Br$(V) quaternary derivs. of benzoyltropine-HCl(VI) and benzoyl-ψ-tropine-HCl(VII) and the quaternary isoamyl(VIII) deriv. of VII. VI and its quaternary derivs. have greater antimuscarine activity than VII and its derivs. I, II, and III derivs. of VI > IV, V, and VI as parasympathetic blocking agents, whereas the derivs. of VII showed little difference in action. All compds. showed similar blocking action on both sympathetic and parasympathetic ganglia. I and V derivs. of VI showed least and IV derivs. of VI and VII showed greatest curative effect. The I derivs. of VI and VII are inferior to VI and VII as local anesthetics; however, II and V derivs. of VI and IV, V, and VIII derivs. of VII are similar in activity to VI and VII. Derivs. of VII increase anesthetic activity in direct proportion to increase in size of the quaternary group. Harold S. Bailey

Gyermek, L.

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No. 4

Cholinergic blocking substances. V. Pharmacology of monoquaternary tropines acting on vegetative ganglia. L. Gyermek and L. Nádor (Med. Univ., Budapest), *Acta Physiol. Acad. Sci. Hung.* 4, 341–54(1953)(in English); cf. *C.A.* 48, 1857*f*; 8407*f*.—The autonomic ganglion-blocking effects, parasympatholytic, curariform, and local anesthetic activities of a series of many new quaternary tropeines were studied. The compds. are acetate of 8-methyltropinium iodide (I), acetate of 8-benzyltropinium bromide, acetate of 8-(*p*-bromobenzyl)tropinium bromide, dimethylcarbamate of 8-methyltropinium iodide (II), dimethylcarbamate of 8-benzyltropinium bromide, benzoate of *trans*-8-methyltropinium iodide, benzoate of *cis*-8-methyltropinium iodide, benzoate of *trans*-8-benzyltropinium bromide, benzoate of *cis*-8-benzyltropinium bromide, benzoate of 8-(*p*-bromobenzyl)-tropinium bromide, benzoate of 8-(*p*-phenylbenzyl)tropinium bromide (III), *p*-aminobenzoate of 8-benzyltropinium bromide, *p*-aminobenzoate of 8-(*p*-chlorobenzyl)tropinium bromide, *p*-aminobenzoate of 8-(1-naphthylmethyl)tropinium chloride, *p*-nitrobenzoate of 8-(*p*-chlorobenzyl)tropinium bromide, *p*-chlorobenzoate of 8-benzyltropinium bromide, phenylacetate of 8-methyltropinium iodide, phenylacetate of 8-benzyltropinium bromide, phenylacetate of 8-(*p*-bromobenzyl)tropinium bromide, phenylacetate of 8-(*p*-phenylbenzyl)tropinium bromide, diphenylacetate of 8-methyltropinium iodide, diphenylacetate of 8-benzyltropinium bromide, diphenylacetate of 8-(*p*-phenylbenzyl)-tropinium bromide, tropate of 8-methyltropinium bromide, tropate of 8-benzyltropinium bromide, *dl*-tropate of 8-(*p*-bromobenzyl)tropinium bromide, *l*-tropate of 8-(*p*-bromobenzyl)tropinium bromide, tropate of 8-phenethyltropinium bromide, and the methyl bromide, ethyl bromide, isopropyl bromide, benzyl bromide, *o*-bromobenzyl bromide, *m*-bromobenzyl bromide, *p*-bromobenzyl bromide, *p*-chlorobenzyl bromide, *p*-methylbenzyl bromide, *p*-nitrobenzyl bromide, *p*-methoxybenzyl bromide, 1-naphthylmethyl chloride, 2-naphthylmethyl bromide, *p*-phenylbenzyl bromide (IV), diphenylmethyl bromide, α-methyltolyl bromide, phenethyl bromide, and *p*-bromobenzoylmethyl bromide quaternary derivs. of the *dl* mandelate of tropine. The *p*-phenylbenzyl and *p*-halobenzyl quaternaries were the most active ganglion-blocking agents. IV is 40 times stronger than tetraethylammonium chloride. Compds. I and II have muscarinic action. Compd. III is a very potent sympathetic ganglion stimulant.

Harold S. Bailey

GYERMEK, I.

Pharmacology of T-52 tris-(dimethylaminoethyl)-amine, an orally effective ganglion blocking agent. Orv. hetil. 94 no.14:381-382 5 Apr 1953.
(CLML 24:4)

1. Doctor. 2. Pharmaceutical Industry Research Institute.

GYERMEK, L.

CA

Synthesis and biological activity of diphenyl and indano derivatives. László Vargha, T. Horváth, T. Nógrádi, and L. Gyermek (Research Inst. Pharm. Ind., Budapest). *Acta Chim. Acad. Sci. Hung.* 5, 111-19(1954)(in German) (English summary); cf. *C.A.* 45, 6722*d*.—Synthesis of indane and diphenyl derivs. with side chains characteristic of corticosteroid hormones is reported. Only 4-$AcOC_6H_4$-$C_6H_4CH_2COCH_2OAc$-4 (I) showed weak cortisone-like activity. 4-$MeOC_6H_4C_6H_4Ac$-4 (45.2 g.) in 66 ml. morpholine refluxed with 11 g. S gives 53 g. *4-methoxydiphenyl-4-thioacetic acid morpholide* (Ia), m. 144° (from EtOH). Refluxing 50 g. Ia, 67.5 ml. 50% NaOH, and 335 ml. EtOH gives 30 g. 4-$MeOC_6H_4C_6H_4CH_2CO_2H$-4 (II), m. 184–5° (from AcOH). Refluxing 30 g. II in 200 ml. AcOH with 60 ml. 48% HBr gives 24 g. *4-$HOC_6H_4C_6H_4CH_2CO_2H$-4* (III), m. 241–3° (from AcOH). Heating 23.2 g. III with 23.2 g. dry NaOAc and 46 ml. Ac_2O gives 14 g. *4-*$AcOC_6H_4C_6H_4$-CH_2CO_2H-4 (IV), m. 186–7° (from EtOH). Refluxing 20 g. IV with 100 ml. C_6H_6 and 100 ml. $SOCl_2$ gives 20 g. 4-$AcOC_6H_4C_6H_4CH_2COCl$-4 (V), colorless crystals, m. 152–3°. V (8.67 g.) in 150 ml. abs. C_6H_6 treated with 16 g. CH_2N_2 in 800 ml. Et_2O gives 8.12 g. *4-acetoxydiphenyl-4′-diazomethylketone* (VI), light yellow crysts., m. 115–16° (from C_6H_6). VI (2.94 g.) in 40 ml. dioxane treated with 29.4 ml. 2*N*. H_2SO_4 gives 1.2 g. 4-$AcOC_6H_4C_6H_4CH_2COCH_2OH$-4 (VII), colorless needles, m. 136–7° (from alc.). VI (6.82 g.) heated with 60 ml. AcOH gives 4.23 g. I, snow-white leaves, m. 117–18° (from EtOH). Refluxing 2.84 g. VII with 15 ml. Ac_2O gives 2.9 g. I. Treatment of 121 g. of $HO_2CCH_2(Ph)CH_2CO_2H$ (VIII) with 240 g. PCl_5 followed by removal of $POCl_3$ and addn. of 121 g. anhyd. $AlCl_3$ in 360 ml. $PhNO_2$ gives 60–80 g. *3-indanone-1-carboxylic acid monohydrate* (IX), m. 83–5°. The keto-acid is reduced (cf. Fieser *C.A.* 43, 1378*f*) to the *indane-1-carboxylic acid* (X); *acid chloride* (XI), yellow oil, b_4 115–16°; the *amide* (XII), m. 166–7° (from H_2O). To a soln. of 3.5 g. CH_2N_2 in 135 ml. Et_2O is added 5 g. XI giving 5.2 g. *indanyl-1-diazomethyl ketone* (XIII), dark yellow oil. XIII (7 g.) in 70 ml. dioxane treated with 15 ml. 10% H_2SO_4 gives 3.6 g. *1-(ω-hydroxyacetyl)indane* (XIV), oil, $b_{0.1}$ 99–102°. XIV reduces cold Fehling and Tollens solns. Heating 7 g. XIII in 25 ml. AcOH gives *1-(ω-acetoxyacetyl)indane* (XV), oil, $b_{0.6}$ 118–21°, $b_{0.1}$ 125–8°. XIV (3.2 g.) in 5 ml. pyridine treated with 3.7 ml. Ac_2O gives XV, $b_{0.6}$ 117–20°. Heating 4.4 of XV in 120 ml. C_6H_6 with 5.3 g. $Pb(OAc)_4$ gives, on removal of Pb-salts as Pb-oxalate, 2.7 g. of *1-acetoxy-2-(ω-acetoxyacetyl)-indane* (XVI), oil, $b_{0.05}$ 107–10°, $b_{0.3}$ 145–50°. XVI (1.25 g.) in 12 ml. abs. MeOH treated with 5 ml. 1*N* MeONa followed by 0.3 ml. AcOH gives 0.67 g. of crude *1-hydroxy-1-(ω-hydroxyacetyl)indane* (XVII), thick syrup. Heating 0.53 g. XVII and 0.71 g. PhNCO in 3 ml. C_6H_6 under an inert gas gives 0.7 g. of the XVII *bisphenylurethan*, yellow crystals, m. 103–4° (from ligroine). Henry B. Hastie

(3)

GYERMEK, L.

Hungary/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61497

Author: Beke, D., Lempert, K., Gyermek, L.

Institution: None

Title: New Local Anesthetic Agents

Original Periodical: Neue Lokalanaesthetisch wirksame Verbindungen, Acta chim. Acad. sci., hung., 1954, 5, No 1-2, 143-149; German; Russian and English resumés

Abstract: There have been prepared a number of N-diethylglycylanilides $ArNHCOCH_2N(C_2H_5)_2$ (GA) containing various halogen and alkyl substituents in the aromatic nucleus and the local anesthetic properties of the hydrochlorides and acid succinates (AS) of these compounds have been investigated. On treatment of $ArNH_2ClCH_2COCl$ there are obtained $ArNHCOCH_2Cl$ (CA) with a yield of 70-90% which give with $HN(C_2H_5)_2$ the GA with a yield of 60-70%. The following CA and GA have been prepared (listed are: Ar, MP ^{o} C, of CA, and

Card 1/3

Hungary/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61497

Abstract: MP ° C of hydrochloride of GA): o-chlorophenyl, 74-75, 108-111; m-chlorophenyl, 100-101, 219-221; p-chlorophenyl, 168, 178-179; 2,4-dichlorophenyl, 117-118, 172-173; 2,5-dichlorophenyl, 115-116; 172-173; 2,6-dichlorophenyl, 172-173, 168-169, AS, MP 130-132°; 3,5-dichlorophenyl, 141-142, 206-207; 2,4,6-trichlorophenyl, 181, 218-220; p-bromophenyl, 176-177, 167-168; 2-brom-6-chlorophenyl, 167-170, 175-181; 2,5-dibromophenyl, 136-138, 188-190; 2,6-dibromophenyl, 170, 195, AS, 132-134; 2,4,6-tribromophenyl, 217-218, 211-213; 4-chlor-o-tolyl, 128-129, 120-121; 4,6-dichlor-o-tolyl, 177-178, 177.5, AS 102-103; 4-brom-o-tolyl, 132-134, 152-154; 4,6-dibrom-o-tolyl, 196-197, 135-137, AS 100-102; 2,6-dichlor-p-tolyl, 167-169, 193-195; 2-brom-p-tolyl, 118-119, 146-147; 2,6-dibrom-p-tolyl, 188-190, 188-190, AS 138-140; phenyl, 134-135, 108-109; o-tolyl, 112, 119-120; p-tolyl, 163-164, 147-148; o-ethylphenyl, 102-104, 138-140; α-naphthyl, 159-160, 162-163; 2-methylnaphthyl-1, 167-168, 210-211; about 1/2 of synthesized GA have local anesthetic properties approximating those of novocain. Substituents in ortho- and ortho'-positions are not indispensible for high anesthetic activity, thus GA (Ar = 3,5-dichlorophenyl) is as active as the

Card 2/3

Hungary/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61497

Abstract: 2,6-isomer and exceeds that of novocain, while GA (Ar = 4-chlor-o-tolyl) is 1.4 times as active as novocain.

Card 3/3

GYERMEK, L.

HUNG.

New local anæsthetics. II. E. Beke, K. Lempert, and L. Gyermek (*Acta chim. hung.*, 1954, 5, 151—158; cf. preceding abstract).—Pharmacological examination of the substituted diethylglycylanilides shows that, within this class of compounds, the introduction into the mol. of a further substituent (halogen, alkyl, NO_2, NH_2, or acylamide group) into the free *ortho* position (with respect to the diethylglycylamido group) increases the anæsthetic activity irrespective of the electron affinity of the new substituent. Steric factors therefore appear important. If the same substituents are introduced into the free *para* position of the 2 : 6-dihalogenodiethylglycylanilide, their effect on the biological activity of the product depends on their electron affinity. The prep. is described of a series of 2 : 6-dichloro- or -dibromo-4-acetamidoanilides with an N^1-diethylglycyl group. The dihalogeno-4-nitroaniline is treated with $CH_2Cl{\cdot}COCl$, and the product treated with $NHEt_2$ to give the dihalogeno-4-amino-*N*-diethylglycylanilide which is reduced and acylated to the dihalogeno-4-acetamido-*N*-diethylglycylanilide. Quaternary deriv. of the last-named are prepared. Formulæ and m.p. of all compounds are given.

H. WREN.

GYERMEK, L

3)

Cholinergic-blocking substances. VI. Pharmacology of hexamethonium- and pendiomid-type ganglionic-blocking compounds. L. Gyermek (Pharmaco-Industrial Research Inst., Budapest). *Acta Physiol. Acad. Sci. Hung.* 5, 165–71 (1954)(in English); cf. *C.A.* 48, 1557*f*.—The sympathetic ganglionic blocking actions, toxicity, absorption from the gastro-intestinal tract, and mydriatic action of each of the following compds. were detd. and compared: 1,6-bis(trimethylammonium)hexane dibromide, 1,6-bis(dimethylethylammonium)hexane dibromide, 1,6-bis(dimethylbenzylammonium)hexane dibromide, bis(dimethylethylammonium-ethyl)methylamine dibromide, bis(dimethylethylammoniumethyl)methylamine dichloride, bis(trimethylammonium-ethyl)amine dichloride hydrochloride, bis(dimethylaminoethyl)amine trihydrochloride, and tris(dimethylaminoethyl)amine trihydrochloride.

S. Ellis

N.M.H. 9-IV-54

FEKETE, Gyorgy,; GYERMEK, Laszlo.

Method of determination of dextran in the tissues. Kiserletes orvostud. 7 no.1:84-87 Jan 55.

1. Gyogyszeripari Kutato Intezet.
(DEXTRAN, determination in tissues)

SZENDEI, Adam, dr.,; KOMAROMY, Jozsef, dr.,; ERDELYI, Gabor,dr.,; GYERMEK, Laszlo, dr.

Effect of thiocyanogen and of other hypotensive agents on hepatic amino acid oxidase. Magy. velorv. arch. 8 no.2:55-57 Apr 55.

1. A Budapesti Orvostudomanyi Egyetem III. sz. Belklinikajanak (igazgato: Gomori Pal dr. egyetmi tanar) es a Gyogyszeripari Kutato-Intezet (igazgato: Gerecs Arpad dr. egyetemi tanar) kozlemenye.

(LIVER, metabolism,
amino acid oxidase, eff. of thyroidectomy, thiouracil, thiocyanogen hypotensive agents)
(DEHYDROGENASES,
amino acid oxidase in liver, eff. of thyroidectomy, thiouracil, thiocyanogen & hypotensive agents)
(THYROID GLAND, effect of exicision,
on liver amino acid oxidase)
(THIOURACIL, effects,
on liver amino acid oxidase)
(THIOCYANATES, effects,
on liver amino acid oxidase)

Cholinergic blocking substances. VII. Correlations between anticholinergic and cholinesterase-blocking effects. L. Gyermek (Pharmaceutical Research Inst., Budapest). *Acta Physiol. Acad. Sci. Hung.* 8, 43–8 (1955) (in English). cf. *C.A.* 48, 8938*h*. Mono and bis quaternary ammonium compds. with tropane structures were tested for inhibitory effect on pseudo and true cholinesterases (from rat intestinal mucosa and rat brain, resp.). True anticholinesterase activity increased with decrease in parasympathicolytic activity and with increased curariform and ganglionic blocking activities. The ratio of true cholinesterase inhibition to pseudocholinesterase inhibition was different for the curariform and ganglionic blocking activities on the one hand and for the anticholinergic activity on the other. The surface of receptors in the various cholinergic elements is similar to the active surface of the cholinesterase dominant at those particular sites. VIII. **Pharmacological actions of certain polymethylenebis- and azapentylenebis(pyrrolidine) and -(piperidine) derivatives.** *Ibid.* 49–60.—Hexamethylenebis(*N*-methylpiperidinium dibromide), tetramethylenebis(*N*-methylpiperidinium diiodide), trimethylenebis(*N*-methylpiperidinium diiodide), ethylenebis(*N*-methylpiperidinium dibromide), the corresponding polymethylenebis(*N*-ethylpiperidinium) derivs., pentamethylenebis(*N*-methylpyrrolidinium dibromide and diiodide) (I) and (II), 3-aza-1,5-pentylenebis(*N*-methylpyrrolidinium dichloride and diiodide) (III) and (IV), and 3-aza-1,5-pentylenebis(*N*-methylpiperidinium diiodide) (V) were studied. III, IV, and V had similar sympathetic ganglionic-blocking properties to the polymethylenebis(*N*-methylpyrrolidine and piperidine) derivs. I, II, III, IV, and V were about 3–5.5 times as active as hexamethonium. In the cat the sympathetic superior cervical ganglion and a parasympathetic ganglion system had no marked difference in sensitivity. Antinicotinic action on rabbit intestine varied from compd. to compd., while the ciliary ganglion of mice and rats was very readily paralyzed. Toxicity data for some of the compds. (in mice) are included. W. D. G.

2539. **Cholinergic blocking substances. VIII. Pharmacological actions of certain polymethylene-, bis- and azapentylene-bis-pyrrolidine and piperidine derivatives.** L. Gyermek *Acta physiol. Acad. Sci. hung.*, 1955, 8, 49—59.—The blocking actions on the superior cervical sympathetic and different parasympathetic ganglia and the neuro-muscular paralysing action in the frog were studied to discover eventual differences in potency. 13 mostly described, partly newly synthesised, compounds were studied. Azapentylene and pentamethylene-bis-*N*-methyl-pyrrolidinium salts are about 3 to 3·5 times as active as hexamethonium. In the cat, the sensitivity of the superior cervical ganglion and that of the parasympathetic pelvic nerve bladder prep. was similar. The anti-nicotine action on the isolated rabbit intestine and the blocking of sympathetic ganglia varied from compound to compound. The ciliary ganglion in the mouse and rat is paralysed by both polymethylene and azapentylene-bis-*N*-methylpiperidinium pyrrolidinium salts. In the different tests 50 to 100-fold differences were found in the sensitivity of various ganglia to different compounds. (Hungarian)

A. B. L. Bezsnák.

3

2635. Storage of dextran. Gy. Fekete, L. Gyermek, and I. Lázár *Acta physiol. Acad. Sci. hung.*, 1955, 8, 147—153 (Pharmaco-Industrial Res. Inst., Budapest, Hungary).—The dextran content of blood, liver, and spleen of rats was determined at different times following an i.v. injection of dextrans of different mol. wt. (35,000 to 300,000) and intrinsic η (0·1 to 0·32). The stored amount and storage time was proportional to mol. wt. After 144 hr. very little was found in the organism even of the dextran of the highest mol. wt. Histamine has no effect on dextran storage; i.v. colloidal Ag diminishes it.

A. B. L. Bezsák.

GYERMEK, L.

Simple method of liver glycogen estimation. L. Gyermek and Gy. Fekete (Pharm.-Ind. Research Inst., Budapest). *Acta Physiol. Acad. Sci. Hung.* 8, 259–67(1955)(in English); cf. *C.A.* 49, 9083*h*.—To a filtrate of rat liver homogenates, deproteinized with trichloroacetic acid (TCA), alc. was added and the resulting turbidity measured. Since surface-active substances in the liver interfere, the calibration curves were made with glycogen-free highly dild. liver filtrates. The method measures the glycogen fraction extractable with TCA (i.e., the fraction subject to physiol. variations); the values obtained are therefore lower than those detd. by methods that est. total liver glycogen. This nephelometric method is quick and simpler than methods involving glycogen hydrolysis. It is also more accurate and more readily reproducible than the simple glycogen estn. methods involving the use of iodine. G. Tritsch

CH

(1)

Also published in Nature 175, 386 (1955)

Gyermek, L.

The vasopressor and antidiuretic action of adrenocorticotropin (ACTH) preparations. G. Fekete and L. Gyermek (Chemical Works, Gedeon Richter, Budapest). *Pharmazie* 10, 420-2(1955).—The presence of posterior pituitary lobe hormones (PPL) as contaminants in ACTH preps. creates hazards of coronary spasm (hypertension) and edema (antidiuretic action). The object was to discover the extent of contamination of com. preps. by PPL. By using 15 com. ACTH preps., blood pressure tests were carried out on decapitated cats, diuretic tests on rats. All preps. (both Hungarian and non-Hungarian) showed some degree of contamination by PPL. Of the 2 tests, the antidiuretic proved more useful in showing PPL contamination. Amts. of PPL contamination were not proportional to amts. of ACTH present. Acid hydrolysis of the preps. reduced both the ACTH and PPL content. With $Zn_3(PO_4)_2$ pptn. only ACTH was adsorbed, whereas the binding with PPL impurities was very small. Hence, ACTH depot products (in which $Zn_3(PO_4)_2$ ppt. combination strengthens and prolongs ACTH activity) showed antidiuretic activity nearly to the same extent as the aq. solns. Sepn. of the ppt. from the clear aq. phase, showed 82% antidiuretic activity in latter, 17.5% in ppt.

G. M. Hocking

(1)

GYERMEK, L.

MD

Pharmacology of new compounds stimulating the vegetative ganglia. L. Gyermek and K. Nádor (Forschungsinst. Pharm. Ind., Budapest). *Pharmazie* 10, 485-8 (1955); cf. *C.A.* 48, 8038b.—The relations were studied between chem. structure and pharmacol. action of several new vegetative ganglia-stimulating compds. whose chem. structure is different from that of the ganglionic stimulants known up to now (*loc. cit.*). The strongest of these were diphenyl quaternary tropine esters: diphenylmethyl-*trans*-tropinium bromide *p*-alkinobenzoate (I); diphenylmethyl-*trans*-tropinium bromide benzoate; and the similar 1-diphenylmethyl-1,2,0-trimethyl-4-(*p*-aminobenzoyloxy)piperidinium bromide. Of these, I was the strongest in raising blood pressure in the cat, having 50 to 60 times the potency of nicotine in equigram-mol. dosage, hence represents the strongest known ganglion stimulant up to this time. The *p*-nitrobenzoyl ester corresponding to I had only a weak ganglion-blocking action and no ganglion stimulant action at all; the *p*-aminobenzoyl ester had no ganglionic stimulant action; diphenylmethyltrimethylammonium bromide had only a weak ganglionic stimulation. The trimethyl ammonium derivs. with N substituted not by the diphenylmethyl group but by another aromatic group had only weak ganglion-stimulating action. A curare-like action and toxicity were demonstrated in those with ganglion-stimulating action. Secondary to the ganglion-stimulating action, a ganglion-blocking action was demonstrated varying quantitatively in various compds. and producing variations in action. Discussion. G. M. Kosolapoff

EXCERPTA MEDICA Sec.3 Vol.10/10 Endocrinology Oct56

1926. GYERMEK L. and FEKETE G. Dept. of Pharmacol., Pharmaco-Industr. Res. Inst., Budapest. *On the vasopressor and antidiuretic activities of synthetic oxytocin EXPERIENTIA (Basel) 1955, 11/6 (238-239)

Synthetic oxytocin has both vasopressor and antidiuretic activity. The former is about 1/30 and the latter about 1/15 of the oxytocic activity. From these observations it appears that synthetic and highly purified natural oxytocin are not identical.

Handley - Houston,Tex. (II,3)

GYERMEK, L.

41. New compounds of local anaesthetic activity, III — D. Beke, K. Lempert, J. Sereas, L. Gyermek. (*Magyar Kémiai Folyóirat* — Vol. 61, 1955, No. 6, pp. 190—191, 1 tab.)

CH

Several new n-butylamino-acetyl-halogen-anilide and toluidide hydrochlorides were prepared and screened for local anaesthetic activity. The compounds were isomers of the most active diethylamino-acetyl-halogen-anilide and toluidide derivatives described in a former issue[1] and related to Hostacaine, an anaesthetic extensively used in dentistry. The compounds were prepared in the usual way through their corresponding chloroacetyl derivatives. It was surprising that the hydrochlorides of the n-butylamino-acetyl derivatives were hardly soluble in water compared to the corresponding diethylamino-acetyl derivatives and therefore difficulties were encountered during the toxicity tests. In respect to the activity of the newly prepared compounds it was found that they were more potent than Novocaine for infiltration and especially for conduction anaesthesia. The solutions of the compounds investigated did not irritate the tissues. The compound n-butylamino-acetyl-2,6-dichloroanilide hydrochloride revealed the most advantageous properties and thorough pharmacological examinations are in progress.

(3)

Gyermek, L.

2

32. New compounds with local anaesthetic activity, IV. K. Lempert, L. Gyermek. *Magyar Kémiai Folyóirat*. Vol. 61. 1955. No. 1. pp. 193—195

Analogues of 2-dimethyl-aminoethylindole — a compound of local anaesthetic activity — were prepared by introducing other heterocyclic systems into the molecule. (1) By reacting o-phenylenediamine with monochloroacetic acid and diethylamine 2-diethyl-amino-methylbenzimidazole was obtained which was converted to its crystalline dichlorohydrate (m. p. 209 to 211 °C) by the ethylacetate-hydrochloric acid-ether method. (2) The condensation of N,N'-diethyl-glycinonitrile with o-aminothiophenol yields directly 2-diethylamino-methylbenzthiazole. This compound was obtained in better yields by the interaction of o,o'-diamino-diphenyl disulphide with chloroacetyl chloride and diethylamine through the intermediates 2,2'-di-(chloroacetamino)-diphenyl disulphide and 2,2'-di-(diethylglycylamino)-diphenyl disulphide by reductive cyclization. The monochlorhydrate of this compound yields hygroscopic white needles melting at 132—133 °C. (3) The bromination of quinaldine with bromosuccinimide yields 2-bromomethyl quinoline which was reacted with diethylamine to obtain 2-diethylaminomethyl quinoline. Its dichlorohydrate, a powder, melted at 207 °C. According to the preliminary pharmacological examinations all three basically substituted heterocyclic compounds showed local anaesthetic activity at least equal to that of novocaine. Moreover the compound 2-diethylaminomethyl quinoline exhibited antihistaminic and antiadrenergic activity.

GYERMEK, L.

Antiserotonin action of chlorpromazine and some other phenothiazine derivatives. L. Gyermek, I. Lázár, and A. Zs. Csák (Pharm.-Ind. Research Inst., Budapest). *Arch. intern. pharmacodynamie* 107, 63–74(1956)(in English).—Chlorpromazine, Phenergan, Diparcol, multergan, and Ahistan were effective in decreasing order of potency against the action of serotonin on the isolated rat uterus, and on the blood pressure of decapitated cats or those under ganglionic blockade. The psychosedative effects seemed to parallel the antiserotonin action. M. L. C. Deráltesd...

Med

HUNGARY/Human and Animal Physiology - Circulation. V-4

Abs Jour : Ref Zhur - Biol., No 2, 1958, 8582

Author : Peter Veghelyi, Laszlo Gyermek and Arpad Eisert
Inst : -
Title : Ventricular Fibrillation and its Prevention

Orig Pub : Kiserl. orvostud., 1957, 9, No 1, 1-7

Abstract : A study was made of the effect of novocaine, xylocaine, benodaine, dacgrene, largactil and benzodioxane derivatives (N-73 and N-292) on the hearts of rats, cats and dogs under hypothermic conditions.

Card 1/1

USSR/ : Pharmacology, Toxicology. 5-Hydroxytryptamine.

Abs. Jour. : RZBiol., No. 12 1958, No. 56681

Author : Diaz, A., Gyermek, L., Tograi, T.
Inst. : -
Title : Adrenolytic Effects of Tryptamine and its Derivatives on Isolated Organs

Orig. Pub. : Kiserl. orvostud., 1957, Vol.9, No.4, 303-307

Abstract : In experiments on the isolated rabbit uterus, tryptamine (I) exerted an adrenolytic action in doses of 15.1 ± 9.6 gamma/ml (50 times weaker than the action of ergotamine). On the isolated rat and rabbit intestine, I in amounts of 20-1000 gamma/ml did not suppress contractions induced by acetylcholine or barium chloride, which testifies to the specific adrenolytic action of I. Intravenous administration of tryptamine to narcotized cats (even repeated injections) following adrenalin did not alter the effects of the latter on the blood pressure. Serotonin also possesses an

Card: 1/2

VEGHELYI, P.; GYERMEK, L.; EISERT, A.

Protection against ventricular fibrillation. I. Acta physiol. hung. 12 no.1-3:282-291 1957.

1. I. Kinderklinik der Medizinischen Universitat, Budapest, Forschungsinstitut fur Pharmazeutische Industrie, Budapest, und II. Chirurgische Klinik der Medizinischen Universitat Pecs.
(VENTRICULAR FIBRILLATION, exper.
protective eff. of various drugs in exper. animals (Ger))

Card 1/1

2509. THE PHARMACOLOGY OF *p*-BIPHENYLMETHYL-(DL-TROPYL-α-TROPINIUM) BROMIDE - Gyermek L. and Nádor K. Res. Inst. of Pharm. Industry and Res. Inst. of Exp. Med., Hungarian Acad. of Sci., Budapest - ARCH. INT. PHARMACODYN. 1957, 113/1-2 (1-14) Graphs 2 Tables 6 Illus. 3

The above-named anticholinergic compound ('N 399', 'gastropin') blocks not only parasympathetic nerve endings but also certain autonomic synaptic functions. An optimal combination of parasympatholytic and ganglion-blocking activities is claimed. Clinical trials gave good results.

Jeney - Debrecen

NADOR, Karoly, Dr.; GYERMEK, Laszlo, Dr.

Pharmacochemistry and pharmacology of gastropin. Orv. hetil. 99 no.43: 1504-1508 26 Oct 58.

1. A MTA. Kiserleti Orvostudomanyi Kutato Intezet Gyogyszerkutatasi Osztalyanak kozlemenye.

(ATROPINE, related cpds.
N-(p-biphenylmethyl)-atropinium bromide, chem. & pharmacol. (Hun))

GYERTYAN, Ervin

"Byron" by Geza Hegedus. Reviewed by Ervin Gyertyan. Elet tud 16 no.32:1013 6 Ag '61.

FOLDES, J.; KRASZNAI,I.; PAPP,M.; MEGYESI, K.; GYERTYANFFY, G.

Studies of the sensitivity of the thyroid to thyrotropic hormone. Acta med. acad. sci. Hung. 20 no.1:23-35 '64

1. First Department of Medicine, University Medical School, Budapest.

KRASZNAI, Istvan; FARKAS, Gyorgy; GYERTYANFFY, Geza

Geometrically independent large-volume scintillation counter.
Energia es atom 18 no.2/3:114-116 F-Mr '65.

1. No.1 and No.3 Clinics of Internal Diseases, Budapest.

L 9355-66 EWT(m)/T IJP(c)

ACC NR: AP5008461 H/0003/65/000/02-/0114/0116

AUTHOR: Krasznai, I.; Farkas, G.; Gyertyanffy, G

TITLE: Large capacity geometry-independent scintillation counter

SOURCE: Energia es Atomtechnika, no. 2-3, 1965, 114-116

TOPIC TAGS: radiation counter, radiation dosimeter, scintillation counter

ABSTRACT: The authors report on a large capacity, geometry-independent radiation counter operating with a liquid scintillator and, in addition to the measurements relevant to the technical data and geometry-independence of the device, discuss the field of possible applications. In addition to the laboratory work of the general purpose isotope where the problem arises of comparing the activities of inhomogeneous radiation sources of different capacity - they underline its importance in the field of medical-biological applications. The scintillation counter described here may be considered as geometry-independent up to an accuracy of 10%. By using it, it becomes possible to make individual diagnostic investigations with a substantially smaller quantity of isotope which favorably reduces the radiation dose to the patient. The device can be used in experimental work to radiation count the entire body of small animals. Orig. art. has: 1 table and 4 figures.

Card 1/2

ACC NR: AP5008461 4

ASSOCIATION: I sz. Belklinika - III sz. Belklinika, Budapest (Internal Medicine Clinic Number I - Internal Medicine Clinic Number III)

55 55

SUBMITTED: 00 ENCL: 00 SUB CODE: 18

NO REF SOV: 000 OTHER: 004

Card 2/2 sds

FOLDES, Janos, dr.; KRASZNAI, Istvan; GYERTYANFFY, Geza.

On the thyroid stimulating action of blood plasma from patients with Basedow's disease. (The "long acting thyroid stimulator" test in Basedow's disease). Orv. hetil. 106 no.19:883-886 9 My '65.

1. Budapesti Orvostudomanyi Egyetem, I. Belgyogyaszati Klinika.

GYERTYANOS, Zoltan

Courage in renumeration means more achievements. Ujit lap 17 no.2: 25
25 Ja '65.

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1. Institute of Pathophysiology, Medical University, Budapest.
(TYROSINE) (THYROID GLAND) (IODINE ISOTOPES)
(DIETARY PROTEINS)

FEHER, I.; DESI, I.; SIMON, Gy.; SZOLD, E.; GYETVAI, Gy.; SZABO, M.; SIPOS, K.

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1. Institute of Pathophysiology and Department of Urology, Medical University, Budapest.

(EDEMA) (BRAIN DISEASES) (CAPILLARY PERMEABILITY)
(UREMIA) (TOXINS AND ANTITOXINS) (NEPHRECTOMY)

DOBI, Sandor, dr.; GYETVAI, Erzsebet, dr.

Observations on spastic spinal paralysis in a family. Ideg. szemle 13 no.2:46-48 F '60.

1. Gyulai Megyei Korhaz Ideg-elme Osztalyanak (Foorvos: Dr. Juha Adolf candidatus) kozlemenye.
(PARALYSIS SPASTIC case reports)

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1. A Budapesti Orvostudomanyi Egyetem Korelettani Intezete.
(IODINE metab) (THYROID GLAND pharmacol)
(THYROXIN pharmacol)

GYEVAI, Angela T.

Studies on the heart. III. Histological studies of the heart of Abramis brama. Acta biol Hung 11 no.1:35-42 '60. (EEAI 10:4)

1. Institut fur Histologie und Embryologie der Medizinischen Universitat, Budapest. (Vorstand: I.Toro)
(HEART)
(HISTOLOGY)
(ROSEFISH)

POSALAKY, Zoltan; GYEVAI, Angela; BUKULYA, Bela

Data on the mechanism of spermatogenesis based on studies with acid-fast dyes on lipid and succinic dehydrogenase activity. Kiserletes Orvostud. 13 no.1:35-48 Mr '61.

1. Magyat Tudomanyos Akademia Kiserleti Orvostudomanyi Kutato Intezet Morphologiai Osztalya es Budapesti Orvostudomanyi Egyetem Szovet- es Fejtodestani Intezete.
(SPERMATOZOA chem)
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(SUCCINIC DEHYDROGENASE chem)

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P32 in the study on heart metabolism in rats receiving corhomon and isolanid. Kiserl. orvostud. 14 no.1:68-73 Mr '62.

1. MTA KOKI Morphologiai Osztalya es Orvostudomanyi Egyetem Szovetes Fejlodestani Intezete, Budapest.
(MYOCARDIUM metab) (PHOSPHORUS radioactive)
(HEART extract) (DIGITALIS pharmacol)

GHEVAI, Angela T.

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1. Morphological Department (Head: I. Toro), Research Institute for Experimental Medicine of the Hungarian Academy of Sciences, Budapest.
(HEART CONDUCTION SYSTEM) (MYOCARDIUM)
(GLYCOGEN) (PROTEINS) (FATS) (ACID PHOSPHATASE)
(SUCCINATE DEHYDROGENASE) (REPTILES)

GYEVAI, Angela T.; TOTH, G.; CSAKI, L.

Heart studies. V. Phosphorus metabolism in the heart of rats of different ages and of lower vertebrates. Acta biol. acad. sci. Hung. 13 no.1:117-122 '62.

1. Morphological Department (Head: I. Toro), Research Institute for Experimental Medicine of the Hungarian Academy of Sciences, Budapest, and Department of Histology and Embryology, Medical University, Budapest (Director: I. Toro).

(MYOCARDIUM) (PHOSPHORUS) (AGING)

STARK, Ervin, dr.; GYEVAI, Angela, dr.; SZALAY, K., dr.; ACS, Zsuzsanna, dr

Studies on the activity of the cells of the pituitary and adrenal glands in tissue culture. Orv. hetil. 104 no.47: 2225-2227 24 N '63.

1. Magyar Tudomanyos Akademia, Kiserleti Orvostudomanyi Kutato Intezet.

(PITUITARY GLAND) (ADRENAL GLANDS)
(ADRENAL CORTEX HORMONES) (PHYSIOLOGY)
(TISSUE CULTURE) (EMBRYO) (CORTICOTROPIN)
(HYDROCORTISONE) (CORTISONE)

Gyganski, Andrzej

POLAND/ Analytical Chemistry - General Questions G-1

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11983

Author : Boguslawski Lech, Gyganski Andrzej.
Inst : Lodz Polytechnicum
Title : New Reaction of Thiocyanates with Ions of Mercury, Bismuth and Zinc.

Orig Pub : Zesz. nauk. Politechn. lodzkiej, 1956, No 12, 35-40

Abstract : Addition of Zn^{2-} to solution containing Bi^{3-}, Hg^{2-} and SCN^{-} results in the formation of a brick-red precipitate which consists of a mixture of $Zn_3[Bi(SCN)_6]_2$ and $Zn[Hg(SCN)_4]$. The reagent containing 5 ml 0.5 M $Bi(NO_3)_3$, 4 ml 2 M NH_4SCN and 1 ml 0.2 M $Hg(NO_3)_2$, gives a still clearly apparent reaction with solutions containing 0.0075 g Zn.

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STARK, Ervin, dr. GYEVAI, Angela, dr. ; SZALAY, Katalin, dr. POSALAKY, Zoltan, dr.

ACTH production of isolated pituitary cells in tissue culture.
Orv. hetil. 105 no.4:1882-1883 4 0'64

1. Magyar Tudomanyos Akademia, Kiserleti Orvostudomanyi Kutato Intezet (igazgato; Rusznyak, Istvan, dr.).

HUNGARY

SOVAGO, Janos, Dr, GYETVAN, Imre, Dr; Jaras Council of Berettyoujfalu, Hospital, Surgical Ward (chief physician: MAKO, Istvan, Dr) (Berettyoujfalui Jarasi Tanacs Korhaz, Sebeszeti Osztaly).

"Experiences With Tetanus Serum Administration After Mixing it with the Patients' Own Blood, on the Basis of 4229 Cases."

Budapest, Orvosi Hetilap, Vol 107, No 37, 11 Sep 66, pages 1750-1752.

Abstract: [Authors' Hungarian summary] During the past 10 years, TAT was administered to 4229 patients by the authors after mixing it with the patients' own blood. The experiences indicate that this method of using passive, . tetanus antitoxin prophylaxis is more simple, less dangerous and less time-consuming than the Besredka type of desensitization. In spite of the gradual increase in the number of active immunizations among the public, the method reported is still of practical importance. 14 Hungarian, 3 Western references.

1/1

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Magy kem folyoir 66 no.9:365-367 S '60.

1. Nehezvegyipari Kutato Intezet, Veszprem.

GYIMES, Oliver

Properties of the CO conversion catalysts made of magnetite and goethite. Magy kem folyoir 66 no.10:381-383 O '60.

1. Nehezvegyipari Kutato Intezet, Veszprem.

GYIMESI, Ede

Development of highway traffic accidents. Auto motor 18 no.4: 3-4 21 F '65.

1. Division Chief, Central Statistical Office, Budapest.

BALOGH, Tibor, tudomanyos munkatars; GYIMESI, Ede; KERKAPOLY, Endre, egyetemi docens; HORVATH, Laszlo Gabor, dr.

Again a conference on transportation. Auto motor 17 no.23:3-5 6 D '64.

1. Road Research Institute, Budapest (for Balogh). 2. Division Chief, Central Statistical Office, Budapest (for Gyimesi). 3. Head, Aptitude Testing Station, Hungarian State Railways, Budapest.

GYIMESI, J. KASSZAN, P.

Experiments on the separation of oxytetracycline. p. 87.

(Magyar Kemiai Folyoirat. Vol. 63, no. 2/3, Feb./Mar. 1957. Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

GYIMESI, J.

Newer results in the chemistry of antibiotics. p. 158.

MAGYAR KEMIKUSOK LAPJA. (Magyar Kemikusok Egyesulete) Budapest, Hungary
Vol. 14, no. 4, Apr. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Uncla.

GYIMESI, J.; KASSZAN, B.

Experiments in the field of separation of oxytetracycline. II. p.102

MAGYAR KEMIAI FOLYOIRAT. Budapest, Hungary. Vol. 65, no. 3, Mar. 1959

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 9, September 1959

Uncl.

ERDEY, Laszlo, Prof.Dr. (Budapest XI. Gellert ter 4.); GYIMESI, Jozsef (Budapest XI. Gellert ter 4.); MEISEL, Tibor (Budapest XI. Gellert ter. 4)

Preparation of some new complex forming compounds and determination of their constants. In German. Acta chimica Hung. 21 no.3:327-332 '59. (EEAI 9:5)

1. Institute of General Chemistry, Technical University, Budapest.
(Complex compounds) (Dissociation)

HUNGARY/Forestry - Forest Cultures. K-5

Abs Jour: Ref Zhur. - Biol., No 19, 1958, 86887

Author : Gyimesi, Janos
Inst : Not given
Title : The Cultivation of Oaks with a Fibrous Root System

Orig Pub: Az erdo, 1956, 5, No 4, 155-157

Abstract: Acorns from an English oak (Q. robur L. or Q. pedunculata ehrh. collection of the same year were sown by the author (Hungary) in the ground during the first half of October, 1949. Rootlets 70-120 mm in length which appeared in the same autumn were by spring completely destroyed by frost. As a result of the subsequent increase in temperature to 10 - 15°, a rapid formation of about 2-12 new rootlets was observed. When the seedlings were dug up after a year, it was discovered that they had a strongly developed fibrous root system. The com-

Card 1/2

GYIMESI, J.

80. **Yarn slip in fabrics and methods of examination** — *A szövetek fonáskötésben és annak vizsgálati módszerei* — F. Illuri, J. Gyimesi, P. Holezer and J. Pollák. (Hungarian Textiles — *Magyar Textiltechnika* — 1953. Nos. 7-8. pp. 169-201. 4 figs., 2 tabs.)

By the action of relatively slight forces warp and weft yarns in fabrics have a tendency to slip which is influenced by the smoothness of the yarn surface, the setting of the yarns, the pattern and the method of finishing. According to the method used by the authors the extent of yarn slip is expressed by the force necessary for displacing the number of yarns per 5 mm. Tests were effected with the Holezer-Gyimesi apparatus. The apparatus is fitted with a vertically adjustable row of needles which are inserted between the yarns of the fabric to be tested. The apparatus is then attached to the moving clamp of a strength tester while the other end of the specimen is held in the fixed clamp. A graph is plotted during testing similarly to stress and strain tests. The force required for displacing the yarns is indicated by the maximum ordinate of the graph. It was proven by tests carried out on rayon fabrics that the "slipping force" acting in the direction of the warp yarns was directly proportional to the setting while the force acting in the direction of the wefts changed parabolically as a function of the setting. There were no major discrepancies between computed and practically obtained results.

GYIMESI, J.

HUNG

106. Investigations on the adsorbency of textiles — *Textilanyagok szivóképességének vizsgálata* — E. Báthory, J. Gyimesi and P. Holcrer (Hungarian Textiles — Magyar Textiltechnika — 1953, No. 9, pp. 258—262, 14 figs., 3 tabs.)

Until recently not much attention was paid to the adsorbency of textiles in spite of its importance in case of certain materials, e.g. for (1) towels, diapers, handkerchiefs etc., (2) gauze and cotton, for medical purposes, (3) wicks for oil lamps, (4) wetting agents. To satisfy this need an apparatus for testing adsorbency was constructed. The apparatus consists of a horizontal bar carrying 3 vertical transparent graduated scales. Materials to be tested are fastened to the scales. At the beginning of the test the device is lowered until the materials to be tested dip into a colored liquid contained in a basin. Every three minutes the fabric is examined to see how high the adsorbed liquid has reached. In the case of cotton yarns the higher the count the lower the adsorbency, as for wicks adsorbency increases parallelly with the width. Cotton has a higher adsorbency than linen. Wicks have a higher adsorbency than cotton yarn since the weft acts as a medium for transferring moisture.

GYIMESI, J

HUNG.

85. **The objective evaluation of the results of fastness to light tests** — *Fényvel szembeni színtartósági vizsgálatok eredményeinek kiértékelése* — P. Bálgri, J. Gyimesi, P. Holzer and L. Pollák (Hungarian Textile Research Institute) *Textilipar* — 1951, No. 3, pp. 91–97, 5 figs., 7 tabs.

The subjective evaluation of fastness to light tests conducted with sunlight and artificial light (quartz lamp, fadeometer) was greatly influenced by the original hue and depth of colour of the cloths examined. In most cases only a single series of blue standard samples was available in comparison to which the degree of fading of an e.g. pink specimen is difficult to determine. It is difficult to judge even in the event of blue samples if the hue of those specimens is lighter than that of the standard samples. The above causes a good deal of uncertainty in qualifications on a subjective basis. Fastness to light tests can only be evaluated in an objective manner by means of instruments. On the one hand the changes in hue and on the other the degree of fading are measured. In order to determine the degree of changes in hue the characteristic data of the colour to be tested must be determined with a photometer both before and after irradiation. The fading of a colour sample subjected to irradiation can also be easily determined from the difference between the light factors of the irradiated and non-irradiated samples. It is suggested that in the future the colour co-ordinates as well as the numerically determined tolerances should appear next to the fading reference standards. Thus the methods of testing can be made completely objective.

GYIMESI, J.

GYIMESI, J.
Comparison of twist-testing machines and methods; excerpts from a final report.
p. 283.
No. 8, Aug. 1956.
MAGYAR TEXTILTECHNIKA. (Textilipari Muszaki es Tudomanyos Egyesulet) Budapest.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

GYIMESI, Jozsef; KASSZAN, Bela

Experiments for separating oxytetracycline. Pt. 2. Magy kem folyoir 65 no.3:102-104 Mr 159.

1. Gyogyszeripari Kutato Intezet, Budapest.

Distr: 4E2c(j)/4E3d

204/60. 543.244.6—4

Preparation of some new complexing agents and the determination of their properties. L. Erdey, J. Gyimesi, T. Meisel. *Magyar Kémiai Folyóirat*, Vol. 66, 1960, No. 10, pp. 380—388, 3 figs.

Complexing properties were expected on the basis of practical considerations from the following compounds: DL—2,3-dihydroxypropylamine-N-diacetic acid, DL-serine-N-diacetic acid sodium salt and L-glutamic-N-diacetic acid disodium salt. These compounds were prepared and the dissociation constants as well as the stabilities of the alkaline-earth metal complexes of the analyzed pure materials were determined. It was found that the stability of the alkaline-earth metal complexes of DL—2,3-dihydroxy-propylamine-N-diacetic acid was higher than that of complexes derived from the similarly dibasic anilinodiacetic acid. The stability of the complexes of DL-serine-N-diacetic acid is higher by about one order of magnitude than the complex stabilities of the former compound. The stabilities of the complexes of L-glutamic-N-diacetic acid are in good agreement with the corresponding values of the aminomalonic-N-diacetic complexes. The prepared new compounds were examined also as auxiliary complexing agents, by adding them in various molar proportions to solutions of Zn^{2+}, Fe^{3+}, Cu^{2+}, Ni^{2+} and Al^{3+} ions. The experiments showed that the complexing properties of the prepared compounds were inferior to those of ethylenediamine tetraacetic or nitrilotriacetic acids. Consequently the field of application of these compounds is limited, they can be used only as auxiliary complexing agents.