

L 11259-63 EWT(m)/BDS--AFFTC/ASD

ACCESSION NR: AP5000596

S/0181/63/005/005/1238/1242

54
52

AUTHOR: Frantsevich, I. N.; Kalinovich, D. F.; Kovenskiy, I. I.; Smolin, M. D.

TITLE: Relative and total transfer of substance in metals under the influence of direct current

SOURCE: Fizika tverdogo tela, v. 5, no. 5, 1963, 1238-1242

TOPIC TAGS: electrotransference, transference numbers, alloys, Ag, Zn

ABSTRACT: The total and fractional velocities of transference and the transference numbers were determined for Ag-Zn alloys. Measurements were made on alloys with 25, 35, and 50 atomic % zinc. Rods 1 mm in diameter and 70 mm long were used, the

trotransference is greater for silver than for zinc. In the third sample (the
Card 1/2

L 11259-63
ACCESSION NR: AP3000596

Beta region of solid solution) the relations are reversed. The author concludes ²
that in using radioactive tracers to measure the electrotransference of the two
components of a binary alloy, it is sufficient to use tracer atoms of but one of
the components. Orig. art. has: 2 components of a

orig. art. nas: 9 formulas, 1 figure, and 1 table.

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov, AN USSR, Kiev
(Institute of Metal Ceramics and Special Alloys, Academy of Sciences UkrSSR)

SUBMITTED: 11Oct62

DATE ACQ: 11Jun63

ENCL: 00

SUB CODE: PH, ML

NO REF SOV: 001

OTHER: 002

Card

lb/wm
2/2

L 13029-63 EWT(1)/EWG(k)/EWP(q)/EWT(m)/BDS/EEC(b)-2 AFPTC/ASD/
ESD-3 Pz-4 AT/JD/HW-2/IJP(C)

ACCESSION NR: AP3000625

S/0181/63/005/005/1423/1427

AUTHOR: Kovenskiy, I. I.

TITLE: Electric displacement of injections in solid solutions

73
72

SOURCE: Fizika tverdogo tela, v. 5, no. 5, 1963, 1423-1427

TOPIC TAGS: current carrier, conduction electron, conduction hole, alloy, C, Fe, Co, Ni, Ti, Ta, W, scattering

ABSTRACT: The author investigates the electric displacement of C in Fe, Co, Ni, current-carrier ions: conduction electrons and holes. In these alloys the C was found to occur in the ionized state; the degree of ionization was determined for

21 21 21 21

found to occur in the ionized state; the degree of ionization was determined for each alloy (3.8, 2.6, 1.5, 4.0, 2.8, and 0.6 electron units respectively). The author considers the opinions of many investigators relative to the state and direction of displacement of C in various alloys, and he concludes that in austenite, at least, the ionization is positive and quadruple. By experiment and computation he finds the chief role in electrical displacement to occur by hole movement. In experiments at various temperatures (950-1200C) the effect of holes proved to be greater than movement of electrons in all the alloys tested. Orig. art. has: 2 tables and 2 formulas.

Card 1/2 Association: Inst. of Powder Metallurgy and Special Alloy, Academy of Sciences, SSSR

L 18008-63

ENP(q)/EWI(m)/EDS AFFTC/ASD JD/JG

ACCESSION NR: AP3001298

S/0181/63/005/006/1728/1730

AUTHORS: Frantsevich, I. N.; Kalinovich, D. F.; Kovenskiy, I. I.; Smolin, M. D.

TITLE: Determining the degree of ionization of components in Mo-W alloy 59

SOURCE: Fizika tverdogo tela, v. 5, no. 6, 1963, 1728-1730 57 58

TOPIC TAGS: ionization, alloy, Mo, W, donor, acceptor, interaction, effective charge, radioactive isotope

ABSTRACT: The metal studied was Mo alloyed with 15 atomic % W. Thin wire samples, 0.5 mm in diameter and about 70 mm long, were prepared from this alloy, and in the middle part of each sample a thin layer of radioactive isotope was about 3 mm.

samples, 0.5 mm in diameter and about 70 mm long, were prepared and in the middle part of each sample a thin layer of radioactive isotope (Mo^{99} or W^{185}) was deposited. The length of this coated segment was about 3 mm. The method of determining rate of movement of the radioactive zone has been described previously by D. F. Kalinovich, I. I. Kovenskiy, and M. D. Smolin (FTI, 3, 3367, 1961). Investigations were made in the temperature ranges 1773-2473K for W and 1973-2573K for Mo at 100° intervals. At all temperatures the Mo ions migrated toward the anode, the W ions toward the cathode. The values for effective charges indicate that the predominant effect in transfer of W ions

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L 18008-63

ACCESSION NR: AP3001298

is hole movement, that of Mo ions, electron movement. The data show that a definite proportion of the electrons supplied to the collective fund by Mo atoms migrate to W atoms. These electrons apparently contribute to the partial build-up of an imperfect 5d band in the W atoms. Thus, a donor-acceptor interaction takes place in the alloy. Orig. art. has: 3 tables and 3 formulas.

takes place in the alloy. Orig. art. has: 3 tables and 3 formulas.

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov AN USSR, Kiev
(Institute of Powder Metallurgy and Special Alloys, Academy of Sciences,
Ukrainian SSR)

SUBMITTED: 02Jan63

DATE ACQ: 01Jul63

ENCL: 00

SUB CODE: PH,ML

NO REF SOV: 004

OTHER: 000

Card 2/2

L 14286-63

EWP(q)/EWT(m)/BDS AFFTC/ASD JD

ACCESSION NR: AP300382

8/0185/63/008/007/0797/0798

AUTHOR: Kovens'ky'y, I. I.

TITLE: Investigation of carbon diffusion in titanium

SOURCE: Ukrayins'ky'y fizy'chnyy zhurnal, v. 8, no. 7, 1963, 797-798

TOPIC TAGS: carbon diffusion, carbon-diffusion titanium-carbon alloy, high-temperature diffusion temperature de

57
55

TOPIC TAGS: carbon diffusion, carbon-diffusion titanium-carbon alloy, high-temperature carbon-diffusion titanium alloy, carbon-diffusion temperature dependence, carbon-diffusion beta titanium, carbon-diffusion coefficient

ABSTRACT: The diffusion of carbon in a Ti-base solid solution containing 0.1% carbon has been investigated in the temperature range of 1293-1923K, i.e., above the temperature of the β -to- α transformation. The wire test specimens used were 0.5 mm in diameter and 70 mm long and had a central zone 10 mm long, which contained radioactive C^{14} . Carbon distribution was uniform both along the length and cross section of the specimens. Table 1 of the Enclosure gives the values of the diffusion coefficient D calculated from the radioactivity—¹⁴ specimen length diagrams. The temperature dependence of diffusion coefficients studied in the entire temperature range can be expressed by the

for the alloy studied in the entire temperature range can be expressed by

Card 1/8 ✓

L 14286-63

ACCESSION NR: AP3003824

equation $D = 3.18 \times 10^{-3} \exp(-79,100/RT)$ (cm²/sec), where the activation energy is expressed in joules/per mol. Orig. art. has: 1 figure and 1 table. 2

ASSOCIATION: Insty*tut metalokeramky* i spetsial'ny*kh splaviv AN URSR, Kiev
(Institute of Powder Metallurgy and Special Alloys, AN URSR)

(Institute of Powder Metallurgy and Special Alloys, AN URSR)

SUBMITTED: 09Feb63

DATE ACQ: 08Aug63

ENCL: 01

SUB CODE: ML

NO REF SOV: 001

OTHER: 001

Card 2/3

FRANTSEVICH, I.N. [Frantsevych, I.M.]; KALINOVICH, D.F. [Kalynovych, D.F.];
KOVENSKIY, I.I. [Kovens'kyi, I.I.]; SMOLIN, M.D.

Studying the diffusion of the components of a molybdenum-
tungsten alloy over a wide temperature range. Ukr. fiz. zhur.
§ no.9:1020-1025 S '63. (MIRA 17:8)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR,
Kiyev.

L 15557-63

EWP(a)/EWT(m)/BDS AFYTC/ASD JD

ACCESSION NR: AP3002855

S/0126/63/015/006/0940/0941

AUTHORS: Kovenskiy, I. I.; Samsonov, G. V.

TITLE: Electrical resistivity of some transition metals at high temperatures

SOURCE: Fizika metallov i metallovedeniye, v. 15, no. 6, 1963, 940-941

TOPIC TAGS: transition metal, electrical resistivity, high temperature

ABSTRACT: The electrical conductivities of six transition metals were measured and compared. The samples were in the form of wires. Their composition was:

- 1) 99.86% Ni with C, Co, Cu, Si, Fe, S;
- 2) 99.82% Co with C, Ni, Mn, Cu, S, Fe;
- 3) 99.34% Fe with C, Mn, Si, S, P;
- 4) 99.86% Ti with C, W, Ni, Nb, Ta, Zn, Cr, O;
- 5) 99.78% Ta with C, Nb, W, Mg, Mo, Ni, Ti;
- 6) 99.86% W with C, Cu, Zn, Fe, Si, S, P, O.

Electrical current was passed through the wires in an argon atmosphere. During the experiments the temperature varied from 600 to 1400C. The thermal coeffi-

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L 15557-63

ACCESSION NR: AP3002855

icients of electrical conductivity were calculated by the least square method. They were (10^{-5} ohm/cm/degree): Fe- 4.79; Co- 4.29; Ni- 3.69; Ti- 4.88; Ta- 3.73, and W- 2.98. It was proved that the relation of temperature to electrical conductivity is linear. The results showed that the magnitude of thermal coefficient and electrical resistivity decreases at the transition from iron to cobalt to nickel and from titanium to tantalum to tungsten. This was explained by the lowered accepting capacity of the d-electron levels of the metals in this series and by the relation of the free path of electrons to the accepting capacity magnitude of the corresponding metals. Orig. art. has: 2 figures.

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR (Institute of Powder Metallurgy and Special Alloys, Academy of Sciences, Ukrainian SSR)

SUBMITTED: 27Nov62

DATE ACQ: 23Jul63

ENCL: 00

SUB CODE: ML

NO REF SOV: 008

OTHER: 000

Card 2/2

KALINOVICH, D.F.; KOVENSKIY, I.I.; SMOLIN, M.D.

Investigating electron transfer in binary metal alloys. Fiz.
met. i metalloved. 16 no.2:232-235 Ag '63. (MIRA 16:8)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR.
(Iron-aluminum alloys) (Electrons)

KOVENSKIY, I.I.

Diffusion of carbon in its solid solutions on an iron group metal base. Fiz. met. i metalloved. 16 no.4:613-614 0 '63.

(MIRA 16:12)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR.

KALINOVICH, D.F.; KOVENSKIY, I.I.; SMOLIN, M.D.

Diffusion of the components of an iron-chromium alloy in a broad
range of composition. Fiz. met. i metalloved. 16 no.4:619-620
0 '63. (MIRA 16:12)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR.

ACCESSION NR: AP/009384

S/0126/63/016/006/0904/0907

AUTHORS: Samsonov, G. V.; Kovenskiy, I. I.

TITLE: The state of carbon in the carbides of transition metals

SOURCE: Fizika metallov i metallovedeniye, v. 16, no. 6, 1963, 904-907

TOPIC TAGS: titanium, titanium carbide, tantalum, tantalum carbide, tungsten, tungsten carbide, iron, iron carbide, cobalt, cobalt carbide, nickel, nickel carbide, transition metal, carbide physical property

ABSTRACT: The magnitude and the sign of the charges on carbon ions in solid alloys (on Ti, Ta, W, Fe, Co and Ni base) were calculated from the experimental data. It was desired to find the correlation between these values and certain physical properties of the corresponding carbides. It was determined that C atoms in these metals were ionized positively, i.e., the metallic bonds prevailed between the metal and C atoms. It was also established that: 1) the magnitude of C charge in W was much smaller than that in Ti and Ta. This was explained by the nature of statistical electron redistribution; 2) in the series Fe-Co-Ni the C charge decreased with the increased filling of the vacancies in the atomic 3d-levels of these metals; 3) the amount of heat generated during the formation of carbides decreased from Ti to

Card 1/2

Card 2/2

ACCESSION NR: AT4045011

S/0000/64/000/000/0171/0176

AUTHOR: Frantsevich, I. N.; D. F., Kallnovich; I. I. Kovenskly; M. D. Smolin

TITLE: Study of the passage of electricity through metallic solid solutions

SOURCE: Soveshchaniye po probleme Ispol'zovaniye atomnoy energii, Kiev, 1961. Radiatsionnaya avtomatika, izotopy* i yaderny*ye izlucheniya v nauke i tekhnike (Radiation automation control systems, isotopes, and nuclear radiation in science and technology); doklady* soveshchaniya. Kiev, Izd-vo AN UkrSSR, 1964, 171-176

TOPIC TAGS: electroconductivity, solid solution, solid solution conductivity, metal solid solution, ion migration, electron density, electron vacancy, hole

ABSTRACT: The Institut metallokeramiki i spetsial'ny*kh splavov AN USSR (Institute of Powder Metallurgy and Special Alloys, AN Ukr. SSR) has worked out a method for studying the passage of electricity through solids by means of radioactive isotopes. This method makes it possible to study such passage not only in extrinsic elements but also in basic alloys. Some of the binary systems studied were: iron-carbon, nickel-chromium, cobalt-tungsten, nickel-tungsten, molybdenum-chromium, silver-palladium, etc. The radioactive isotopes used included carbon-14, iron-55, nickel-63, silver-110, etc. The experimental method has been discussed in an earlier paper by the same authors. According to

Card 1/3

KALINOVICH, D.F. [Kalynovych, D.F.]; KOVCHESKIY, I.I. [Kovens'kiyi, I.I.];
SMOLIN, H.D.

Partial and total mass transfer in the nickel-chromium system.
Ukr. fiz. zhur. 8 no.11:1259-1260 N '64. (MIRA 17:9)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR, Kiyev.

KALINOVICH, D.F.; KOVENSKIY, I.I.; SMOLIN, M.D.

Electrolysis in the system tungsten -- molybdenum.
Elektrokhimiya 1 no.12:1488-1490 D '65. (MIRA 1961)

1. Institut problem materialovedeniya AN UkrSSR. Submitted
March 30, 1965.

I. 11135-66 EWT(m)/T/EWP(t)/EWP(s)/EWP(D)/EMA(C) 107(10) 007(11)

ACC NR: AP5020694

UR/0185/65/010/008/0917/0919

AUTHOR: Kalynovych, D. F.; Kovens'kyi, I. I.; Smolin, M. D.

TITLE: Diffusion mobility in solid solutions of nickel in iron

SOURCE: Ukrayins'kyi fizychnyy zhurnal, v. 10, no. 8, 1965, 917-919

TOPIC TAGS: nickel containing alloy, metal diffusion, solid solution

ABSTRACT: The diffusion of both components of two nickel-iron alloys with a nickel content of 2 and 4 at.% was investigated. A previously described method (Ukr. fizychn. zh. v. 8, 1020, 1963) was used, employing wires 0.05 mm in diameter and about 70 mm long. A thin layer 2--3 mm long of the radioisotopes Fe⁵⁵ and Ni⁶³ were electrolytically deposited on the central portion of the samples. After sintering in an inert atmosphere at various temperatures the activity distribution of the tagged atoms was measured. Since the activity is proportional to the radioisotope concentration, the ratio of the activities measured at two different points of the sample was equal to the ratio of the concentrations at these points. The diffusion coefficients obtained by processing the data by two procedures were averaged and tabulated. The temperature dependence of the diffusion coefficients has been found to follow the usual law. Orig. art. has: 2 formulas and 2 tables.

ASSOCIATION: Instytut problem materialoznavstva AN URSR [Institut problem materialovedeniya AN UkrSSR] (Materials Research Institute, AN UkrSSR)

Card 1/2

L 4435-66

ACC NR: AP5020694

SUBMITTED: 15Mar65

NR REF SOV: 004

ENCL: 00

OTHER: 001

SUB CODE: SS, MM

Card 2/2



L 13116-66 EWT(m)/T/EWP(t)/EWP(b)/EWA(c) DIAAP/IJP(c) JD/JG

ACC NR: AP6002030

SOURCE CODE: UR/0185/65/010/012/1365/1367

AUTHORS: Kalynovych, D. F. (Kalinovich, D. F.); Kovens'kyy, I. I. (Kovenskiy, I. I.); Smolin, M. D.

ORG: Institute of Materials Science Problems AN UkrSSR, Kiev (Instytut problem materialoznavstva AN URSR)

TITLE: The mobility of atoms, in a molybdenum-tungsten alloy

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 10, no. 12, 1965, 1365-1367

TOPIC TAGS: molybdenum alloy, tungsten containing alloy, physical diffusion

ABSTRACT: Radioactive isotopes of ¹⁹⁵Mo⁹⁹ and W¹⁸⁵ were used to study the diffusion of the two components of an alloy of molybdenum and 35 at.% tungsten every 100C in a temperature range 1500 -- 2400C. The samples were in the form of wires 0.5 mm in diameter and about 70 mm long, the central portions of the surfaces of which were specially treated and then electrolytically covered with the radioactive isotope whose diffusion was studied. After heating of the samples with alternating current in a helium atmosphere at a certain temperature which assured a sufficiently high diffusion mobility of the investigated component, a uniform distribution of this isotope over the cross section was obtained

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L 13116-66

ACC NR: AP6002030

The distribution of the radioactivity was then determined along the sample. After additional annealing at another temperature the activity distribution was measured along the sample. Two diffusion curves were thus obtained for each sample. In spite of the considerable range of temperature, the diffusion coefficients fit well the usual relation $D = D_0 \exp(-E/RT)$, with $D_0 = 6.9$ and 28 and $E = 85,000$ and $92,000$ for W and Mo, respectively. The data indicate an increase in the activation energy of diffusion of tungsten with increasing tungsten content in the alloy. Orig. art. has: 2 tables and 3 formulas.

SUB CODE: 20/ SUB DATE: 26Dec64/ ORIG REF: 006/ OTH REF: 003

Card

2/2 HW

ACC NR: AP6012441

SOURCE CODE: UR/0364/65/001/012/1488/1490

AUTHOR: Kalinovich, D. F.; Kovenskiy, I. I.; Smolin, M. D.

ORG: Institute of Problems of Materials Science, Academy of Sciences UkrSSR (Institut problem materialovedeniya Akademii nauk SSSR)

TITLE: Electrolysis in the tungsten-molybdenum system

SOURCE: Elektrokhimiya, v. 1, no. 12, 1965, 1488-1490

TOPIC TAGS: tungsten containing alloy, molybdenum containing alloy

ABSTRACT: An investigation was made of partial and total transport of matter in tungsten alloys containing 0.1, 15, 20, 25, 35 and 50 at% of Mo. Specimens in the form of wire segments 0.5 mm in diameter and about 70 mm long were electroplated in their central part with a thin film of radiotracer Mo⁹⁹ or W¹⁸⁵. The length of the deposited layer was 2-3 mm. A special homogenizing annealing of the specimens insured uniform distribution of atoms along the cross section. The starting position of the tagged zone was measured with respect to the end of the specimen. A marker was made in order to measure the total transport in the center of the specimen. Constant current was passed through specimens in an inert atmosphere. The magnitude of current was regulated by rheostats and the temperature was controlled by an optical pyrometer. After completion of the heating, the distribution of tagged atoms was again measured

UDC: 541.13

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ACC NR: AP6012441

along the length of the wire. On the basis of these measurements it was possible to calculate the rate of transport v^A , where the total rate of transport v consists of two components

$$v = v^A - w$$

where w is the rate of displacement of the central part. In all the investigated alloys, molybdenum migrated to the anode and tungsten to the cathode. In tungsten alloys containing 15, 20 and 25% Mo the latter is predominantly involved in transport. In the first alloy (0.1% Mo) almost all of the material transport occurs due to tungsten. In tungsten alloys containing 35 and 50% Mo at 2000°C, inversion of the sign of the overall transport takes place. Below this temperature transport of molybdenum predominates and above it the transport of tungsten becomes predominant. In the first of these two alloys, transport of both components is practically equal to 2200°C. Orig. art. has: 6 tables.

SUB CODE: 11, 07/ SUBM DATE: 30Mar65/ ORIG REF: 004/ OTH REF: 005

Card 2/2

ACC NR: AP6036901 (A)

SOURCE CODE: UR/0226/66/000/011/0057/0061

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000825630002-5"

AUTHOR: Kalinovich, D. F.; Kovenskiy, I. I.; Smolin, M. D.

ORG: Institute for Problems in Science of Materials, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: High-temperature mobility of atoms of components in a molybdenum-tungsten system

SOURCE: Poroshkovaya metallurgiya, no. 11, 1966, 57-61

TOPIC TAGS: molybdenum, tungsten, high temperature effect

ABSTRACT: An investigation was made of the diffusion of two components in eleven alloys of the molybdenum-tungsten system, containing 0.1, 15, 20, 25, 35, 50, 65, 75, 80, 85, and 99.9 at % of tungsten. The temperature range of experiments, carried out with the aid of Mo⁹⁹ and W¹⁸⁵ tracers, was 600—1000C. The values of D_0 and E (in cal/mol) were calculated for all the alloys used for the investigation. Orig. art. has: 3 formulas and 3 tables. [Based on authors' abstract]

[NT]

SUB CODE: 11/SUBM DATE: 03Mar66/ORIG REF: 006/OTH REF: 002/

Card 1/1

KOVENSKIY, Ye.

Utilization of State Bank loans is an important lever in technical progress. Rech. transp. 21 no.12:47 D '62. (MIRA 15:12)

1. Inzhener po novoy tekhnike sluzhby promyshlennykh predpriyatiy Volzhskogo ob'yedinennogo rechnogo parokhodstva. (Credit)

KOVENSKIY, Ye.

Develop a power supply network for ship repair enterprises.
Rech. transp. 22 no.5:53 My '63. (MIRA 16:8)

1. Starshiy inzh. tekhnicheskogo otdela Volzhskogo
ob'yedinennogo rechnogo parokhodstva.
(Ships—Maintenance and repair)
(Electric power)

KOVER, A.

Went, I.; Varga, E.; Kover, A.

"Blood Histamine Contents of Chronic Hypertensive Dogs." p. 62. (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.

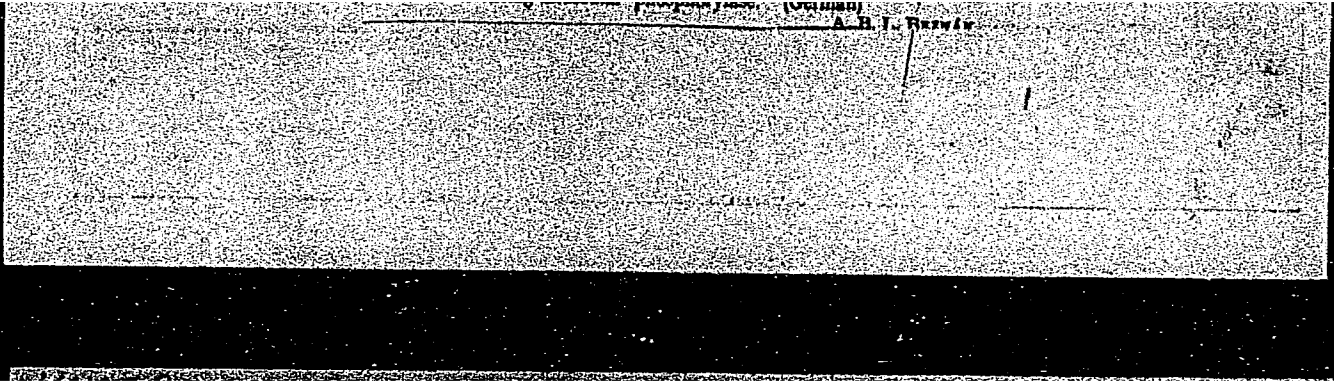
Kövecz A.

6404. Delaying action of adenosinetriphosphate, on atrophic processes in muscle. G. Bot, A. Kövecz, and E. Varga *Acta physiol. Acad. Sci. Hung.* 1965, 8: 321-328 (Inst. of Physiol. Med. Univ., Debrecen, Hungary).—It was shown previously that treatment with ATP diminishes the decrease in the phosphorylation of

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"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000825630002-5



APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000825630002-5"

SZENTIVANYI, Matyas; KOVER, Andras

Influence of gangliotropic substances on the bi-phasic effect of acetylcholine and epinephrine. Kiserletes orvostud. 8 no.2: 140-148 March 56.

1. Debreceni Orvost. Egyetem Elettani Intezete.
 - (HEART, eff. of drugs on acetylcholine & epinephrine, antag. of inverted secondary eff. in isolated rabbit heart by cresoxycholine & hexamethonium bromide. (Hun))
 - (ACETYLCHOLINE, antag. cresoxycholine & hexamethonium bromide, inhib. of inverted secondary eff. of acetylcholine & epinephrine in isolated rabbit heart. (Hun))
 - (EPINEPHRINE, antag. same.)
 - (MUSCLE RELAXANTS, eff. cresoxycholine & hexamethonium bromide, antag. of inverted secondary eff. of acetylcholine & epinephrine in isolated rabbit heart. (Hun))

HUNGARY/Human and Animal Physiology - Metabolism. Ferments.

T-1

Abstr Jour : Ref Zhur - Biol., No 18, 1958, 83947

Author : Varga, E., Kover, A., Kovacs, T., Hetenyi, E.

Inst : Hungarian Academy of Sciences.

Title : Changes of Cholinesterase Activity in Striated Muscles
after Denervation.

Orig Pub : Acta physiol. Acad. sci. hung., 1957, 11, No 3-4, 235-242

Abstract : At various times after unilateral severance of sciatic nerves in dogs and rabbits, quantity of myosin, activity (A) of myosin choline-sterase (I), i.e., ability of myosin to hydrolyze acetylcholin into the sum total of A cholinesterase (II) of muscles, were determined in intact and denervated gastrocnemius muscles. According to the difference between the last two measurements, A of true cholinesterase (III) was inferred. It was shown that it is

Card 1/2

COUNTRY : Hungary
CATEGORY :

B-4

ABS. JOUR. : RZBiol., No. / 1959, No. 281

AUTHOR : Varga, E.; Kover, A.; Kovacs, T.; Hetenyi, E.

INST. * : ~~Hungarian Academy of Sciences~~

TITLE : Changes in the Acetylcholine-Sensitivity and Cholinesterase Activity of Skeletal Muscles in the Course of Ontogenesis.

ORIG. PUB. : Acta physiol. Acad. sci. hung., 1957, 11, No 3-4, 243-251

ABSTRACT : During the first days of postembryonic life the activity of acetyl-cholinesterase (I) of striated skeletal muscles of rabbit is considerably increased, reaching a maximum by the 7th day, after which it drops gradually, although on the 46th day it exceeds by about 3 times the norm which has been determined in adult animals. Relatively lesser changes are exhibited by the myosin-cholinesterase (II); its activity exceeds by about 3 times the norm during the first days following birth, it reaches a relatively constant level, without a sharply manifested maximum, then decreases gradually. However, on the 46th day it still exceeds the norm. Total activity of

CARD: 1/2

Instit. Physiology, Med Univ. Albrecht

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Kövé **EXCERPTA MEDICA** Sec.2 Vol.11/4 Physic-biochem-pharm Apr58

1495. PROPERTIES OF MYOSINCHOLINESTERASE - Kövér A., Kovács T. and König T. Inst. of Physiol., Med. Univ., Debrecen - ACTA PHYSIOL. ACAD. SCIENT. HUNG. (Budapest) 1957, 11/3-4 (253-258) Graphs 4
The optimum conditions for myosin-ChE action are a pH of 8.5, ACh substrate concentration of 1.5×10^{-3} M and an ionic strength of 0.02. Enzyme activity is enhanced by K ions in concentrations of 1.0 to 0.2 M and inhibited by higher K ion concentrations. Ca, Mg and Mn ions have no influence.

KOVER, A.; BALLA, L.B.; FUSZTAI, L.

Automatic apparatus for biological titration. Acta physiol. hung.
11 no.3-4:363-370 1957.

1. Physiologisches institut der medizinischen universitat, Debrecen.
(BIOCHEMISTRY, appar. & instruments
automatic appar. for titration of substances on surface
of isolated organs (Ger))

KOVER, A.

KOVACS, T.; KOVER, A.

Changes of cholinesterase activity of cross-striated muscles after motor denervation. Acta physiol. hung. 11(Suppl):14-15 1957.

1. Physiologisches Institut der Medizinischen Universität, Debrecen.
(MUSCLES, physiol.
eff. of motor denervation on cholinesterase activity in cross-striated musc. (Ger))
(CHOLINESTERASE
in cross-striated musc., eff. of motor denervation on activity (Ger))

KOVER, A.; KOVACS, T.

Specificity of myosin-cholinesterase. Acta physiol. hung. 11(Suppl):
16-17 1957.

1. Physiologisches Institut der Medizinischen Universität, Debrecen.
(CHOLINESTERASE
myosin-cholinesterase inhibitors & specificity (Ger))
(MUSCLE PROTEINS, metab.
same)

EXCERPTA MEDICA Sec 2 Vol 12/9 Physiology Sept 59

3899. FACTORS INFLUENCING MYOSIN-CHOLINESTERASE ACTIVITY - A miozinkolinesteráz aktivitását befolyásoló tényezők vizsgálata - Kovács A., Kovács T. and König T. Debreceni Orvostud. Egyet. Élettani Int. és Budapest Orvostud. Egyet. Biokém. Int. - KISÉRL. ORVOSTUD. 1958. 10/6 (654-658) Graphs 4

Experimental studies have demonstrated the following characteristics of myosin-ChE: pH optimum 8.5; optimal substrate concentration 1.5×10^{-3} ACh at pH 7.4 and ionic strength 0.02; K ion enhances activity at concentrations of 0.1-0.2 M but inhibits activity at higher concentrations. At higher pH values the activability becomes less and the tendency to inhibition greater. The effect of K ion is specific and is not due to a change in ionic strength. Unlike other cholinesterases, myosin-ChE is not influenced by bivalent cations (Ca, Mg, Mn).

SZILAGYI, Tiber; KOVAR, Andras; CSABA, Bela

Effect of hypothermia on histamine liberation under the
influence of adrenalin. Kiserletes Orvostudomány 12
no.1:26-29 F '60.

1. Debreceni Orvostudományi Egyetem Korelettani es Klettani
Intezetei.

(HISTAMINE physiol)
(HYPOTHERMIA INDUCED eff)
(EPINEPHRINE pharmacol)

KOVER, A.; BEREGSZASZY, Gy.; NOLNAR, Gy.; WENT, I.

Pressor-depressor counterregulation in experimental hypertension induced by various methods. Acta physiol.hung. 18 no.1:37-45 '60.

1. Institute of Physiology, Medical University, Debrecen.
(HYPERTENSION exper)
(BLOOD PRESSURE, physiol)

CSABA, Bela; BEREGSZASZI, Gyula; KOVER, Andras; CSONGOR, Jozsef; SZILAGYI, Tibor

The histamine content of guinea pig ileum in Schultz-Dale reaction.
Acta physiol Hung 20 no.2:165-170 '61.

1. Institute of Pathophysiology and Institute of Physiology, Medical
University, Debrecen.

+

HUNGARY

VARDA, B.; KOVÉR, A.; KOVACS, T.; JOKAY, I.; SZILAGYI, T.; Medical University of Debrecen, Institute of Physiology and Pathology (Debreceni Orvostudományi Egyetem Elejtani es Korelettani Intezete)

"Differentiation of Myosins Extracted From Tonic and Tetanic Muscles Based on Their Antigenic Properties."

Budapest, Kiserletes Orvostudomány, Vol XIV, No 6, 1962, pp 593-599.

Abstract: [Authors' summary] Based on immunological determinations, the authors concluded that

1. myosin is a class-specific antigen,
2. the myosin which exhibits a relatively high cholinesterase and a low adenosinetriphosphatase activity and is obtained from tonic muscles had a structure different from that of the myosin obtained from tetanic muscles.

[Of 25 references, about 9 are Soviet-bloc, 16 Western]

1/1

VARGA, E.; KOVER, A.; KOVACS, T.; JOKAY, I.; SZILAGYI, T.

Differentiation of myosins extracted from tonic and tetanic muscles on the basis of their antigenic properties. Acta physiol. acad. sci. hung. 22 no.1:21-28 '62.

1. Institute of Physiology and Institute of Pathophysiology, Medical University, Debrecen.

(ADENOSINE TRIPHOSPHATASE) (ANTIGENS) (MUSCLES)

VARGA, E.; KOVER, A.; KOVACS, T.; SZABOLCS, M.; JOKAY, I.

The myosin structure of the different types of muscle. Acta physiol. acad. sci. hung. 22 no.2:119-123 '62.

1. Institute of Physiology, Central Research Laboratory, Institute of Pathophysiology, Medical University, Debrecen.
(ADENOSINE TRIPHOSPHATE) (MUSCLES)

KOVER, A.; KONYA, L.; KOVACS, L.; SZOOR, A.

Positive inotropic action of cholinesterase on the hypodynamic frog heart. Acta physiol. acad. sci. hung. 22 no.2:145-153 1962.

1. Institute of Physiology, Medical University, Debrecen.
(CHOLINESTERASE) (HEART)

CSABA, Bela; SZILAGYI, Tibor; KOVER, Andras; CSONGOR, Jozsef

Data on the mechanism of action of 48/80. Kiserl. orvostud.
15 no.5:457-464 0 '63.

1. Debreceni Orvostudományi Egyetem Kóreltani és Elettani
Intézete.

(SYMPATHOMIMETICS) (BLOOD PRESSURE DETERMINATION)

(HISTAMINE LIBERATION) (ACETYLCHOLINE)

(HYPOTENSION, CONTROLLED)

CSABA, Bela; SZILAGYI, Tibor; DAMJANOVICH, Sandor; KOVER, Andras

The role of histamine in anaphylactic shock in the dog. Kiserl.
orvostud. 15 no.5:465-470 0 '63.

1. Debreceni Orvostudományi Egyetem Korelettani es Eletani
Intezete.

(ANAPHYLAXIS) (HISTAMINE LIBERATION)
(LIVER FUNCTION) (BLOOD CHEMICAL ANALYSIS)
(LUNG) (HYPOTENSION, CONTROLLED)

HUNGARY

CSAPA, Bela, SZILAGYI, Tiber, KOVAC, Andras, CSOMOR, Jozsef; Medical University of Debrecen, Institute of Physiology and Pathophysiology (Debreceni Orvostudományi Egyetem, Elettani és Kiselektani Intezete).

"Data on the Action Mechanism of 48/80."

Budapest, Kiselektani Orvostudomány, Vol XV, No 5, Oct 63, pages 457-464.

Abstract: [Authors' Hungarian summary modified] The effect of 48/80 has been investigated in various animals and some data obtained on its mechanism of action. On frog heart, 48/80 is ineffective by itself but adheres firmly to the acetylcholine receptors. The decrease of acetylcholine sensitivity after pre-treatment with 48/80 can be explained by this property. If 48/80 is given after the acetylcholine, the effect of the latter ceases promptly. On the intestines of rabbits, 48/80 has an effect similar to acetylcholine. There is a competitive inhibition between the effect of 48/80 and acetylcholine. Previous treatment with hexamethonium bromide or atropine inhibits the effect of both compounds. Guinea pig ileum, with added 48/80, exhibits an increased motor activity. The Schultz-Dale reaction of the passively sensitized intestine is not influenced by an incubation with 48/80. In dogs, i.v. infusion of 48/80 causes a severe drop of blood pressure which is caused by the liberated histamine that enters the blood stream. 2 Hungarian, 20 Western references.

1/1

CSABA, Bela; SZILAGYI, Tibor; DAMJANOVICH, Sandor; KOVER, Andras

The role of histamine in peptone shock in the dog. Kiserl.
orvostud. 15 no.5:471-477 O '63.

1. Debreceni Orvostudományi Egyetem Kóreltani és Elettani
Intézete.

(SHOCK, TOXIC) (PEPTONES)
(HISTAMINE LIBERATION)
(BLOOD CHEMICAL ANALYSIS)
(LIVER FUNCTION TESTS)
(BLOOD PRESSURE DETERMINATION)
(ANAPHYLAXIS) (HYPOTENSION, CONTROLLED)

CSABA, Bela; SZILAGYI, Tibor; DAMJANOVICH, Sandor; KOVER, Andras

Effect of 48/80 on anaphylactic and peptone shock in the
dog. Kiserl. orvostud. 15 no.5:478-484 0 '63.

1. Debreceni Orvostudományi Egyetem Korelettani es Elettani
Intezete.

(HISTAMIN LIBERATION) (ANAPHYLAXIS)

(SHOCK, TOXIC) (PEPTONES)

(ANTIGEN-ANTIBODY REACTIONS)

(BLOOD CHEMICAL ANALYSIS)

(LIVER FUNCTION TESTS)

(ANTIHYPERTENSIVE AGENTS)

(SYMPATHOMIMETICS)

(HYPOTENSION, CONTROLLED)

CSABA, Bela; SZILAGYI, Tibor; DAMJANOVICH, Sandor; KOVER, Andras

Effect of hypothermia on anaphylactic and peptone shock in the dog. Kiserl. orvostud. 15 no.5:485-491 0 '63.

1. Debreceni Orvostudományi Egyetem Korelettani és Elettani Intézete.

(HYPOTHERMIA, INDUCED) (ANAPHYLAXIS)
(SHOCK, TOXIC) (PEPTONES)
(CHLORPROMAZINE) (HISTAMINE LIBERATION)

KOVER, A.; SZABOLCS, M.; BENKO, K.

Studies of the physicochemical and enzymochemical properties of structural proteins extracted from fish muscle. I. Stability, enzymochemical and structural properties of fish myosin. Acta physiol. acad. sci. hung. 23 no.3:229-237 '63.

1. Institute of Physiology and Central Laboratory, Medical University, Debrecen.

(ADENOSINE TRIPHOSPHATASE) (CHOLINESTERASE)
(MUSCLE PROTEINS)

SZABOLCS, M.; KOVER, A.; BENKO, K.

Studies of the physicochemical and enzymochemical properties of structural proteins extracted from fish muscle. II. The effect of changes in the conditions of extraction of the homogeneity and enzymatic activity of fish myosin preparations. Acta physiol. acad. sci. hung. 23 no.3:239-245 '63.

1. Central Laboratory and Institute of Physiology, Medical University, Debrecen.

(ADENOSINE TRIPHOSPHATASE) (MUSCLE PROTEINS)
(CHOLINESTERASE) (MAGNESIUM)

HUNGARY

SZCZOR, Arpad, KOVER, Andras, KOVACS, Tibor; Medical University of Debrecen, Institute of Physiology (Debreceni Orvostudományi Egyetem, Elettani Intezet).

"Preparation of True Cholinesterase From the Striated Muscle of the Rabbit."

Budapest, Acta Physiologica Academiae Scientiarum Hungaricae, Vol XXIII, No 4, 1963, pages 333-337.

Abstract: [English article, authors' English summary] Myosin-free cholinesterase has been prepared from the striated muscle of rabbits. The overall purification was about 20-fold. As regards substrate specificity and substrate inhibition, the purified preparation belongs to the group of true cholinesterases. 12 Western, 5 Eastern European references.

1/1

CSABA, B.; SZILAGYI, T.; DAMJANOVICH, S.; KOVER, A.

Anaphylactic shock and peptone shock in the dog. I. The role of histamine in anaphylactic shock. Acta physiol. acad. sci. hung. 23 no.4:363-369 '63.

1. Institute of Pathophysiology and Institute of Physiology, Medical University, Debrecen.

(ANAPHYLAXIS) (PEPTONES) (HISTAMINE LIBERATION)
(HISTAMINE) (BLOOD PRESSURE) (KYMOGRAPHY)
(LIVER CIRCULATION) (LUNG) (BLOOD CHEMICAL ANALYSIS)

CSABA, B.; SZILAGYI, T.; DAMJANOVICH, S.; KOVER, A.

Anaphylactic shock and peptone shock in the dog. III. Effect of compound 48/80 on anaphylactic shock and peptone shock. Acta physiol. acad. sci. hung. 23 no.4:379-385 '63.

1. Institute of Pathophysiology and Institute of Physiology, Medical University, Debrecen.

(ANAPHYLAXIS) (PEPTONES)
(ANTIHYPERTENSIVE AGENTS) (HISTAMINE LIBERATION)
(BLOOD PRESSURE) (LIVER CIRCULATION)
(HEPATIC ARTERY) (IMMUNE SERUM)
(HISTAMINE) (BLOOD CHEMICAL ANALYSIS)

CSABA, B.; SZILAGYI, T.; DAMJANOVICH, S.; KOVER, A.

Anaphylactic shock and peptone shock of the dog. IV. Effect of hypothermia on anaphylactic shock and peptone shock. Acta physiol. acad. sci. hung. 23 no.4:387-395 '63.

1. Institute of Pathophysiology and Institute of Physiology, Medical University, Debrecen.

(ANAPHYLAXIS) (PEPTONES) (HYPOTHERMIA, INDUCED)
(HISTAMINE LIBERATION) (ANTIGENS)
(BLOOD PRESSURE) (LUNG) (CHLORPROMAZINE)
(BODY TEMPERATURE) (IMMUNE SERUM) (LIVER)
(HISTAMINE) (BLOOD CHEMICAL ANALYSIS)

HUNGARY

CSABA, Bela, SZILAGYI, Tibor, KOVER, Andras, CSONGOR, Jozsef; Medical University of Debrecen, Institutes of Pathophysiology and Physiology (Debreceni Orvostudományi Egyetem, Korelettani és Eletteni Intézetek).

"Data on the Mode of Action of 48/80."

Budapest, Acta Physiologica Academiae Scientiarum Hungaricae, Vol XXIII, No 4, 1963, pages 397-405.

Abstract: [English article, authors' English summary] The effects of 48/80 have been examined in various tests and information has been obtained as to its mode of action. It has been shown that, in the frog's heart, 48/80 by itself is inactive, but it is linked firmly to the acetylcholine receptors. This property may explain the decrease of sensitivity to acetylcholine after pretreatment with 48/80. Given after the administration of acetylcholine, 48/80 promptly suspends its effect. The compound acts on the rabbit's intestine like acetylcholine. 48/80 and acetylcholine inhibit each other's actions competitively. Pretreatment with hexamethonium bromide or atropine blocks the effect of 48/80 and of acetylcholine. Added to the guinea pig ileum, 48/80 increases motor activity, presumably by dual action: by causing a release of histamine from the intestinal wall, a small part of which escapes into the bath, and by stimulating the intramural ganglia of the intestine. After incubation with 48/80, the Schultz-Dale reaction takes place in the passively sensitized intestine. After the Schultz-Dale reaction or incubation with 48/80, as well as after incubation with 48/80 and the specific antigen, the histamine content of the passively sensitized ileum segment is significantly more than in the control segments. Dogs anaesthetized with chloralose respond to the intravenous administration of 1 mg/kg of 48/80 with a considerable fall of blood pressure. This hypotension is produced by the histamine released in large quantities by 48/80 and entering the blood stream. 2 Hungarian, 20 Western references.

1/2

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HUNGARY

APPROVED FOR RELEASE: 06/14/2000 Acta Physiologica Academiae Scientiarum Hungaricae, Vol XXIII, No 4, 1963, pages 397-405. **CIA-RDP86-00513R000825630002-5"**

4, 1963, pages 397-405.

ments is significantly more than in the control segments. Dogs anaesthetized with chloralose respond to the intravenous administration of 1 mg/kg of 48/80 with a considerable fall of blood pressure. This hypotension is produced by the histamine released in large quantities by 48/80 and entering the blood stream. 2 Hungarian, 20 Western references.

SZOOR, A.; KOVER, A.; POHANKA, O.

Studies of the specificity of muscle. Cholinesterases. I. The role of active anionic sites. Acta physiol. acad. sci. Hung. 24 no.2:157-163 '63.

1. Institute of Physiology, Medical University, Debrecen.

(CHOLINESTERASE)
(DECAMETHONIUM COMPOUNDS)
(PENTAMETHONIUM COMPOUNDS)
(CHEMISTRY) (MUSCLE PROTEINS)
(HYDROGEN-ION CONCENTRATION)
(MUSCLES)

CSABA, B.; SZILAGYI, T.; DAMJANOVICH, S.; KOVER, A.

Anaphylactic shock and peptone shock in the dog. II. The role of histamine in peptone shock. Acta physiol. acad. sci. hung. 23 no.4:371-378 '63.

1. Institute of Pathophysiology and institute of Physiology, Medical University, Debrecen.

(ANAPHYLAXIS) (PEPTONES) (HISTAMINE LIBERATION)
(LIVER CIRCULATION) (BLOOD PRESSURE)
(HISTAMINE) (SURGERY, OPERATIVE) (TISSUE CULTURE)
(HEPATIC ARTERY) (LUNG) (IMMUNE SERUM)

SZOOR, A.; KOVER, A.; KOVACS, T.

Studies of the specificity of muscle cholinesterases. Acta
physiol. acad. sci. Hung. 24 no. 2:165-169 '63.

1. Institute of Physiology, Medical University, Debrecen.

L 15525-66 EWA(j)/EWA(b)-2 RO

ACC NR: AT6007388

SOURCE CODE: HU/2505/65/026/OOX/0016/0017

AUTHOR: Szoor, A.; Szabolcs, M.; Kover, A.

ORG: Institute of Physiology and Central Laboratory, Medical University of Debrecen (Debreceni Orvostudományi Egyetem, Élettani Intézet és Kozponti Laboratorium)

TITLE: Effect of heat on the cholinesterase activity of actomyosin [This paper was presented at the 29th Meeting of the Hungarian Physiological Society held in Szeged from 2 to 4 July, 1964]

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 26, Supplement, 1965, 16-17

TOPIC TAGS: muscle physiology, protein, heat biologic effect, enzyme, rabbit, biochemistry

ABSTRACT:

It has been investigated whether the presence of actin would modify the ultracentrifugal homogeneity and the distribution of cholinesterase activity of the fractions obtained by heat treatment from a myosin solution. Pure actomyosin with a cholinesterase activity between 15-30 µg acetylcholine/mg protein/hr was prepared from striated muscles of the rabbit. On exposure to 53° at pH 5.0-8.0 for 5 minutes, the cholin-

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I 15525-66

ACC NR: AT6007388

esterase active fraction of the highest specific activity could be separated from actomyosin at pH 6.0-6.2. In subsequent experiments, heat treatment was carried out at pH 6.0-6.2. The liberated fraction (S) was separated by dialysis into a fraction P, precipitated at 0.05 μ , and a fraction D which had remained in solution. The cholinesterase activity was increased in fraction P. The properties of the cholinesterase active fraction, obtained from trypsin-digested actomyosin by heat treatment, undergo significant changes insofar as in such cases the cholinesterase activity is increased not in the P but in the D fraction. [JPRS]

SUB CODE: 06 / SUEM DATE: none

PC
Card 2/2

L 15524-66 EWA(j)/EWA(b)-2 RO

ACC NR: AT6007389

SOURCE CODE: HU/2505/65/026/00X/0017/0017

AUTHOR: Kover, A.; Szabolcs, M.; Dezso, Gy.

41
B+1

ORG: Central Research Laboratory, Institute of Physiology, Medical University of Debrecen (Debreceni Orvostudományi Egyetem, Elettani Intezet, Kozponti Kutató Laboratorium); Institute of Pathophysiology, Medical University of Debrecen (Debreceni Orvostudományi Egyetem, Kozponti Intezet)

TITLE: Effects of cholinesterase inhibitor and receptor blocking agents on the Ca sup ++ uptake of the vesicular relaxation system [This paper was presented at the 29th Meeting of the Hungarian Physiological Society held in Szeged from 2 to 4 July, 1964]

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 26, Supplement, 1965, 17

TOPIC TAGS: calcium, enzyme, radioisotope, drug effect, pharmacology, animal physiology

ABSTRACT: The vesicular relaxation system was prepared according to the method of NAGAI et al. (1960). From the fraction, 0.1 mg of protein was applied to a cellulose column followed by 5 ml

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2

L 15524-66

ACC NR: AT6007389

of an incubating solution containing Ca^{45} and 8 ml of a Ca^{++} -free incubating fluid. The specific activity of the Ca^{45} stock solution was 1.26 mC. The activity of the fluid which had passed through the column was determined after evaporation, and the Ca^{++} uptake was computed from the decrease in the impulse count. The impulse count obtained without the application of the fraction or without the use of ATP served as the control. It was found that the Ca^{++} uptake of the fractions prepared ranged from 8-14 μM Ca^{++}/mg protein. The Ca^{++} uptake by the vesicular relaxation system was inhibited by 1×10^{-3} M of d-tubocurarine completely, by 1×10^{-2} M of physostigmine to 70-80 per cent, and by 1×10^{-3} M of neostigmine to 60-70 per cent.

[JPRS]

SUB CODE: 06 / SUBM DATE: none

Ⓟ
Card 2/2

L 31089-66

ACC NR: AT6022817

SOURCE CODE: HU/2505/65/028/003/0217/0225

AUTHOR: Szoor, Arpad--Ser, A.; Szabolcs, Marton--Sabol'ch, M.; Kover, Andras--Kover, A.

ORG: Institute of Physiology, Medical University, Debrecen (Orvostudományi Egyetem Elettani Intézet); Central Laboratory, Medical University, Debrecen (Orvostudományi Egyetem Központi Laboratóriuma)

TITLE: Effect of heat treatment on the cholinesterase activity of actomyosin

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 28, no. 3, 1965, 217-225

TOPIC TAGS: enzyme, protein

ABSTRACT: The effect of heat treatment has been studied on the cholinesterase activity of actomyosin and of actomyosin digested briefly with trypsin. 1) On heat treatment in the pH range 5.0-8.0, a higher proportion of the total cholinesterase activity remained in solution at the higher pH values. Supernatant solutions with the highest specific activity were obtained at pH 6.0-6.2. 2) The fractions with cholinesterase activity which were liberated from actomyosin solutions can be separated by dialysis into a fraction precipitated at 0.05-0.07 μ (P) and another which remains in solution (D). Fractions P and D have about the same cholinesterase activity. Ultracentrifugal studies indicate that fraction P shows a tendency for aggregation; this is attributed to the presence of actin. 3) The properties of the cholinesterase fractions liberated by heat treatment were greatly altered by trypsin digestion. When the ionic strength of the supernatant liquid was reduced, almost 80 per cent of the total cholinesterase activity remained in solution at 0.05-0.07 μ . The authors thank Dr. E. Varga for his interest and helpful suggestions. Orig. art. has: 3 figures and 3 tables. [Orig.

art. in Eng. J. [JPRS]
 SUB CODE: 06 / SUM DATE: 25Nov64 / ORIG REF: 006 / OTH REF: 013
 Card 1/1 ac

KOVER, B. 1948

(Pediatric Clinic, U. of Debrecen)

"Acute Yellow Atrophy of the Liver in Childhood,"

Annales Paediatrici, Basle, 1948, 170/6(299-303)
Abst: Exc. Med. V. Vol. 11, No. 8, p. 602

SZEKELY, Katalin, dr.; KOVER, Bela

Experiences in interstitial pneumonia in newborn and atrophic infants. Gyermekgyógyászat 5 no.4:122-129 Ap '54. (REAL 3:8)

1. A Debreceni Orvostudományi Egyetem Gyermekklinikájának
(Igazgató: Kulín László dr. egy. tanár) közleménye,
(PNEUMONIA, in inf. & child
*interstitial, plasma cell in newborn & atrophic inf.)
(INFANT, NEWBORN, dis.
*pneumonia, interstitial plasma cell)

KOVER, Bela, dr.; KECSKES, Jozsef, dr.

Cerebrospinal fluid diagnosis in tuberculous meningitis.
Gyermekgyógyászat 5 no.10:303-308 Oct 54.

1. A debreceni Orvostudományi Egyetem Gyermekklinikajának közleménye (igazgató: dr. Kulín László egyetemi tanár)
(TUBERCULOSIS, MENINGEAL, CSF in
diag. value)
(CEREBROSPINAL FLUID, in various dis.
tuber., meningeal, diag. value)

KULIN, Laszlo, dr.; KOVÉR, Bela, dr.; LENGYEL, Ferenc, dr.; LUDMANY,
Konrad, dr.; POLYA, Imre, dr.; SZEKELY, Katalin, dr.

Cyclic penicillin therapy of scarlet fever as a prophylaxis against
complications due to superinfection. Orv hetil 95 no.17:449-453
Ap '54. (REAL 3:8)

1. A Debreceni Orvostudományi Egyetem Gyermekklinikajának (igazgató:
Kulin Laszlo dr. egyetemi tanár) közleménye.

(PENICILLIN, ther. use

*scarlet fever, cyclic ther. in prev. of compl.

(SCARLET FEVER, ther.

*penicillin, cyclic ther. in prev. of compl.)

KOVER, Bela, Dr.

Nutrition of atrophic and dystrophic infants. Gyermekgyógyászat 9 no.4-6:
158-161 Apr-June 58.

1. A Debreceni Orvostudományi Egyetem Gyermekklinika-jának (igazgató:
Kulin László dr. egyetemi tanár* közleménye.

(INFANT NUTRITION DISORDERS

nutrition of atrophic & dystrophic inf. (Hun))

KOVER, B.; BEREGSZASZI, Gy.

On the 24-hour rhythm of heat production in premature infants.
Acta pediat. 4.no.1:23-31 '63.

1. Kinderklinik (Direktor: Prof. Dr. L. Kulin) der Medizinischen
Universitat Debrecen.

(BODY TEMPERATURE) (INFANT, PREMATURE)
(PERIODICITY)

KOVER, B.; KISS SZABO, A.

Contribution to the question of the specific dynamic action of
glycocoll loading in premature infants. Acta pediat. 4 no.1:
33-40 '63.

1. Kinderklinik (Direktor: Prof. Dr. L. Kulin) der Medizinischen
Universitat Dabrecen.

(GLYCINE)

(METABOLISM)

(INFANT, PREMATURE)

KOVES, Bela; KISS, Pal, dr.; LENCSEPETI, Jeno

Questions relating to the settlement of meat industry plants.
Elelm ipar 17 no.12:361-367 D '63.

1. Husipari Igazgatosag (for Koves). 2. Elelmiszeripari
Ipargazdasagi es Uzemszervezesi Intezet (for Kiss). 3. Orszagos
Husipari Kutatointezet (for Lencsepeti).

SZEKELY, Katalin; KOVER, B.; ZOLNAI, V.

Cytomegalovirus: Clinical observation of newborn and infantile excretors. Acta paediat. acad. sci. Hung. 6 no.3/4:313-322 '65.

1. Department of Paediatrics, University Medical School, Debrecen.
Submitted March 11, 1965.

KOVER, C

RUMANIA / Chemical Technology, Chemical Products and Their
Application. Pharmaceuticals. Vitamins. Antibiotics.

H-17

Abs Jour : Ref Zhur - Khimiya, No 5, 1959, No. 16475

Author : Schreiber, L.; Kover, C.

Inst : Not given

Title : Calculation Formula for Pharmacists

Orig Pub : Farmacia (Roman), 1957, 5, No 4, 353-356

Abstract : Presented are examples in the use of the "cross" formula
for solving problems related to dilutions or concentra-
tions of drug preparations. -- E. Natkhan

Card 1/1

H-47

RUMANIA / Chemical Technology, Chemical Products and Their
Application. Pharmaceuticals. Vitamins. Antibiotics.

H-17

Abs Jour : Ref Zhur - Khimiya, No 5, 1959, No. 16535

Author : Schreiber, L.; Kover, C.

Inst : Not given

Title : Use of Standard Control Methods Discussed in the New
Issue of the Romanian Pharmacopoeia

Orig Pub : Farmacia (Romin), 1958, 6, No 2, 171-175

Abstract : Evaluation of the improved testing and analysis standards
imposed on pharmacists by the VII issue of the Romanian
pharmacopoeia is presented. -- E. Natkhan

Card 1/1

H-63

MANDACHE, F.; PRODESCU, V.; CONSTANTINESCU, S.; KOVER, G.; STANCIULESCU, P.

Sympathectomy associated with adreno-mentopexy. A method for portal derivation of the circulation of the adrenal glands. Rumanian med. rev. no.2:63-70 '62.

(SYMPATHECTOMY) (ADRENAL GLANDS) (PORTAL SYSTEM)

TURAI, I.; MANDACHE, Fl., Assistant Prof.; KOVER, Gh., Dr.

lumbar sympathectomy associated with medullosclerosis of the adrenal glands in the treatment of arteritis: long-term results. Rumanian M. Rev. 3 no.1:45-48 Jan-Mar 59.

1. Correspondent member of the R.P.R. Academy (for Mandache).
(ARTERITIS, surg.)

lumbar sympathectomy combined with chem.-induced adrenal medullosclerosis)

(SYMPATHECTOMY, in various dis.

lumbar, in arteritis, with chem-induced adrenal medullosclerosis)

(ADRENAL MEDULLA, eff. of drugs on

chem.-induced sclerosis in ther. of arteritis, with lumbar sympathectomy)

KOVER, G H

SURNAME, Given Name

Country: Rumania

Academic Degrees: -not given-

Affiliation: *)

Source: Timisoara, Timisoara Medicala, Vol VI, No 1, Jan-Jun 1961, pp 33-37.

Data: "Reanimation in Terminal Collapse State With Transfusions of Oxygenated Blood Through Artificial Heart-Lungs."

Authors:

MANDACHE, F.

MATEESCU, D.

PRODESCU, V.

KOVER, Gh.

ROSCA, S.

CIOPALA, E.

MATEICA, Monica

CONSTANTINESCU, S.

LUTESCU, I.

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TANCIU, I.

*) Work performed at the Surgical Clinic of "Brincovenesc" Hospital (Clinica de Chirurgie a Spitalului "Brincovenesc"), Director: F. MANDACHE.

MANDACHE, Fl.; MATEESCU, D.; KOVER, Gh.; POPESCU, M.

Role of the adrenal glands in hemodynamic disorders in shock patients. Stud. cercet. endocr. 15 no.3:233-240 '64.

VEGHELYI, Peter, dr.; HARSING, László, dr.; KABAT, Maria; KOVÉR, György;
FONYÓDY, Lajosné, dr., technikai segitsegevel.

Hypothermia and hibernation. III. Renal function in hypothermia.
Orv. hetil. 96 no.1:14-15 2 Jan 55.

1. A Budapesti Orvostudományi Egyetem I. Gyermekklinikájának
(igazgató: Gegesi-Kiss, Pál dr. egyetemi tanár) és Élettani
Intézetének (igazgató: Balint, Péter dr. egyetemi tanár)
közleménye.

(BODY TEMPERATURE,
hypothermia, kidney funct. tests in dogs.)

(KIDNEY FUNCTION TESTS,
in hypothermia in dogs.)

KOVER, Gyorgy

HARSING, Lasso; JELLINEK, Harry; KOVER, Gyorgy; LASZLO, Katalin;
VEGHELYI, Peter; PONYODI, Sarolta.

Effects of hypothermia on ischemic kidney lesions. Kísérletes
orvostud. 8 no.1:85-92 1956.

1. Budapesti Orvostudományi Egyetem Élettani Intézete, II. sz.
Koronctani Intézete és I. sz. Gyermekklinika.

(KIDNEYS, blood supply

ischemia, exper., prev. of consequent fatal lesions
by hypothermia in dogs (Hun))

(BODY TEMPERATURE

hypothermia, controlled, in prev. of fatal kidney
lesions after exper. ischemia of kidneys in dogs (Hun))

HARSING, L.; JELLINEK, H.; KOVÉR, Gy.; LASZLO, K.; VEGHELYI, P.;
FONYODY, S.

The effect of hypothermia on ischaemic changes in the kidney.
Acta physiol. hung. 10 no.2-4:429-436 1956.

1. Institute of Physiology 2nd Institute of Pathology and 1st
Department of Pediatrics, University Medical School, Budapest.
(HYPOTHERMIA, exper.

eff. on exper. ischemic changes in dog kidneys.)

(KIDNEYS, blood supply

ischemia, exper., eff. of exper. hypothermia on ischemic
changes in dogs)

Kovex. Gy

HARSING, L.; PONYODI, S.; KABAT, M.; KOVER, Gy.

Effect of phlorizin and of mercurial diuretics on renal hemodynamics.
Acta physiol. hung. 12 no.4:363-371 1957.

1. Institute of Physiology, Medical University, Budapest.

(PHLORIZIN, eff.

on renal hemodynamics in dogs)

(DIURETICS, MERCURIAL, eff.

same)

(KIDNEYS, eff. of drugs on

mercurial diuretics & phlorizin on hemodynamics in dogs)

HARSING, Laszlo; DUBECZ, Erzsébet; KOVER, György; NAGY, Janos; es
GERBER, Katalin; TAKACS, Eva, technikai segedletevei

Effect of hypothermia on the level of substituted Na. Kiserletes
orvostud. 13 no.4:373-380 Ag '61.

1. Budapesti Orvostudományi Egyetem Elettani es Orvosfizikai Intezete.

(BODY TEMPERATURE) (SODIUM metab)

HARSING, Laszlo; KOVER, Gyorgy; DUBECZ, Erzsébet; NENES, Byorgy

Effect of hypothermia on the inulin space. Kiserletes orvostud. 13
no.4:381-384 Ag '61.

1. Budapesti Orvostudományi Egyetem Elettani Intézete.

(BODY TEMPERATURE) (INULIN metab)

HARSING, Laszlo; NAGY, Janos; KOVER, Gyorgy; DUBECZ, Ersebet; es GERBER,
Katalin; TAKACS, Eva technikai segedletevel

Effect of hypothermia on transcapillary Na substitution. Kiserletes
orvostud. 13 no.4:385-391 Ag '61.

1. Budapesti Orvostudományi Egyetem Elettani es Orvosfizikai Intezete.

(BODY TEMPERATURE) (SODIUM blood)

MAJUSS, M.; FIVAR, Gy.

The effect of papaverine on the function of renal tubular cells.
Acta physiol. Acad. sci. Hung. 27 no. 359-63 1965

1. Institute of physiology, University Medical School, Budapest.

KOVER, G.; MALYUSZ, M.; ELLO, Erzsebet; SZOCS, Eva

The effect of antiotensin on renal circulation. Acta physiol.
acad. sci. Hung. 28 no.1:53-57 '65.

1. Institute of Physiology, University Medical School, Budapest.
Submitted November 24, 1964.

L-15475-66

ACC NR: AT6007434

SOURCE CODE: HU/2505/65/026/00X/0042/0043

AUTHOR: Kover, O.; Ello, Erzsébet; Szocs, Eva

ORG: Institute of Physiology, Medical University of Budapest, Budapest (Budapesti Orvostudományi Egyetem, Klettani Intézet) 15
B+

TITLE: Effect of angiotensin on renal circulation / This paper was presented at the 29th Meeting of the Hungarian Physiological Society held in Szeged from 2 to 4 July 1964/

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 26, Supplement, 1965, 42-43

TOPIC TAGS: amino acid, blood circulation, animal physiology, biologic secretion, blood pressure

ABSTRACT:

fusion of angiotensin II, at a rate of 0.1-1.0 µg/minute, was followed by an intense vasoconstriction in the kidney. The directly measured renal blood flow decreased by about 40 per cent both in kidneys with intact nerve. It has been noted that the in-

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L 15475-66

ACC NR: AT6007434

supply and in isolated kidneys deprived of their nerves. In comparison with the controls, in the in situ kidneys the C_{PAH} and C_{creat.} decreased by 25 per cent while the E_{PAH} and E_{creat.} increased by 15 and 30 per cent, respectively. In the isolated kidneys, the C_{PAH} and C_{creat.} decreased by 10 per cent, the E_{PAH} and E_{creat.} increased by about 30 per cent. All these data indicate that there may exist in the kidney pathways which avert the blood from the functioning parts, and these are the ones constricted by angiotensin in the first place. When angiotensin is injected into the renal artery, the blood pressure of the animal falls; the hypotension can not be ascribed to the technique used. JPRS

SUB CODE: 06 / SUEM DATE: none

28

Card 2/2

L 33786-66

ACC NR: AT6025180

SOURCE CODE: HU/2505/65/028/001/0053/0057

AUTHOR: ~~Kover, Gyorgy~~---Kover, D. (Budapest); ~~Malyusz, Miklos~~---Malyus, M. (Budapest); ~~Ello, Erzsebet~~---Elle, E. (Budapest); ~~Szocs, Eva~~---Sech, E. (Budapest)

ORG: Institute of Physiology, Medical University of Budapest (Budapesti Orvostudományi Egyetem, Elottani Intezet)

TITLE: Effect of angiotensin on renal circulation 22

14
B+1

SOURCE: Academia scientiarum hungaricae. Acta physiologica , v. 28, no. 1, 1965, 53-57

TOPIC TAGS: hormone, endocrinology, animal physiology

ABSTRACT: The effect of angiotensin II on "in situ" and "isolated" kidneys has been studied. 1) When infused into the renal artery of the in-situ kidney, angiotensin increased the renal resistance and decreased the RBF_{dir}, CPAH and C_{creat}. There was a significant increase in E_{creat} and EPAH. 2) In the isolated kidney, renal resistance was increased and RBF_{dir} was diminished by angiotensin. There was no change in the CPAH and C_{creat}, whereas E_{creat} and EPAH increased significantly. 3) The increase in EPAH in response to angiotensin may be ascribed to an improvement in the PAH-secreting activity of the tubular cells. Another possibility is the presence of shunts in the kidney which may be constricted by angiotensin more than the blood vessels of the functioning renal substance are. Orig. art. has: 2 tables. /Orig. art. in Eng. 7/ JPRS: 33,5007

SUB CODE: 06 / SUBM DATE: 24Nov64 / ORIG REF: 002 / OTH REF: 007
Card 1/1 288

0976 . 0544

L 27439-66

ACC NR: AP6001960

SOURCE CODE: HU/0018/65/017/001/0088/0092

AUTHOR: Harsing, Laszlo--Kharshing, L.; Kover, Gyorgy--Kever, D.; Malyusz, Miklos--
Mayus, M.; Toth, Gigella--Tot, G.

ORG: Institute of Physiology, Medical University of Budapest, Budapest
(Orvostudományi Egység Elettani Intézet)

21
B

TITLE: Function of the isolated kidney

SOURCE: Kiserletes Orvostudomány, v. 17, no. 1, 1965, 88-92

TOPIC TAGS: urology, biochemistry, excretion, blood, hematology, internal medicine

ABSTRACT: In the isolated kidney, renal resistance was found to be higher, diuresis, PAH and creatinine clearances as well as Na excretion lower than in the in situ kidneys used as controls. The hemodynamic changes can be explained by the increase in preglomerular resistance. The lesser water and Na excretion is presumably related to a decrease in glomerular filtration. Orig. art. has: 8 formulas and 2 tables. [SPRS]

SUB CODE: 06 / SUBM DATE: 12May64 / OTH REF: 014

Cord 1/1

L 43640-66 RO

ACC NR: AT6032348

SOURCE CODE: HU/2505/65/027/001/0059/0063

AUTHOR: Malyusz, Miklos; Kover, Gyorgy

15
B+1

ORG: Institute of Physiology, Medical University of Budapest, Budapest (Budapesti Orvostudományi Egyetem, Elektani Intezet)

TITLE: Effect of papaverine on the function of the renal tubular cells

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 27, no. 1, 1965, 59-63

TOPIC TAGS: pharmacology, animal physiology

ABSTRACT: The PAH transport and oxygen consumption by rat kidney cortex slices was studied at 28° and 37° C. At 28°, the oxygen uptake was 2.96 μ l/h/mg and the S/M ratio was 18.34. At 37°, the oxygen consumption averaged 4.26 μ l/h/mg with an S/M value of 6.89. The release of PAH from the tubular cells into the tubular lumen was inhibited at 28°. With an unchanged PAH uptake, this fact resulted in an increased PAH accumulation and an increased S/M ratio. Papaverine decreased the PAH accumulation and the oxygen uptake at both temperatures. The oxygen consumption showed a linear decrease while the S/M ratio decreased exponentially. This effect of papaverine can be accounted for by the drug-induced uncoupling of oxidative phosphorylation. Orig. art. has: 3 figures and 1 table. [Orig. art. in Eng.] [JPRS]

SUB CODE: 06 / SUBM DATE: 28Nov63 / OTH REF: 012

Card 1/1 LS

0919.2401

HUNGARY

KOVER, Gyorgy, and PUSKOPI, Gabriella, Institute of Physiology at the Medical University (Orvostudományi Egyetem Elettani Intezete) in Budapest.

"Effect of Antidiuretic Hormone on Cell Membrane Permeability"

Budapest, Acta Physiologica Academiae Scientiarum Hungaricae, Vol 29, No 3-4, 8 Jun 1966, pp 219-223.

Abstract: [English article] The purpose of these studies is the investigation of the permeability-increasing action of vasopressin on inulin transport in rats. Any inulin introduced into the organism is supposed to remain in the extracellular compartment. In the tests described, the amount of inulin introduced into rats increased in the kidneys and in the urinary tract if antidiuretic hormone was introduced. Since inulin is not secreted in the kidney, the introduced antidiuretic hormone must have either reduced glomerular filtration or caused a reabsorption of inulin at some point of the nephron or in the renal pelvis, owing to increased permeability. 15 references, including 2 Hungarian, 1 German, and 12 Western. (Manuscript received 10 Jul 1965).

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- 68 -

KOVER, Gyorgy, HARZA, Tibor, PUSPOKI, Gabriella; Medical University of Budapest, Institute of Physiology (Budapesti Orvostudományi Egyetem, Elettani Intezet).

"Renal Function in the Rat During Obstruction of the Ureter."

Budapest, Kiserletes Orvostudomány, Vol XVIII, No 5, Oct 66, pages 531-535.

Abstract: [Authors' Hungarian summary] 1) The extent of GFR was studied in the rat during ureteral obstruction in the presence of various degrees of hydration. 2) It was found that non-hydrated (control) animals had a GFR value of 0.131 ml/min; in physiological salt diuresis, the GFR value was 0.129 ml/min and in water diuresis it was 0.106 ml/min. 3) In osmotic diuresis produced with Mannit, the GFR value in the kidney with obstructed ureter drops to 7-8 per cent of the normal value (0.0237 ml/min). 4) The mechanisms are discussed which may insure glomerular filtration during ureteral obstruction. 5) A simple method is described which is suited for the study of glomerular filtration during ureteral obstruction and the nature of the necessary calculations is also presented. 3 Hungarian, 12 Western references. [Manuscript received 17 Nov 65.]

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