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ALTORJAY ISTVÁN, FÜZESI KRISTÓF, PRAEPORT LÁSZLÓ, SZABÓ MIHÁLY, TORNYOS SZABOLCS: Nyelőcsőpótlás csecsemő- és gyermekkorban

Ösophagusersatz im Säuglings- und Kindesalter

Gyermekgyógyászat 35, 147-152, 1984./Ungarisch/

Aufgrund der Analyse ihres Krankengutes besprechen Autoren die Ösophagusplastik bei angeborener Aplasie und Ätzverletzungen des Ösophagus. Nach Übersicht der relevanten Literatur geben sie die, am eigenen Krankengut unternommenen Operationstechniken, -komplikationen und -schwierigkeiten bekannt. Die besten Erfahrungen wurden mit der substernalen Kolonplastik erzielt. Die weiters bestehenden Entwicklungsstörungen beeinflussten bedeutend die Operationsergebnisse.

ALTORJAY ISTVÁN, FÜZESI KRISTÓF, TORNYOS SZABOLCS: Csecsemőkori máj-hamartoma

Leberhamartom im Säuglingsalter

Gyermekgyógyászat 35, 520-522, 1984./Ungarisch/

Autoren berichten über einen, im Alter von 4 Monaten diagnostisierten Leberhamartomfall. Die kinderfaustgrosse Geschwulst füllte fast den gesamten linken Leberlappen aus. Mittels nicht-invasiven Untersuchungen /Szintigraphie, Ultraschall, Radiologie/ gelang es das Ausmass und die Lokalisierung der Geschwulst

festzustellen. Die Entfernung des linken Leberlappens erfolgte mittels Thorakolaparotomie. Die Geschwulst konnte radikal entfernt werden. Laut der Kontrolluntersuchungen ist das Kind nach 2 1/2 Jahren gesund, die Entwicklung ist normal, es kann nur eine kompensatorische Vergrösserung des rechten Leberlappens beobachtet werden.

ALTORJAY ISTVÁN, SAS MIHÁLY: A húgyszervek és a rectum /szomszédos szervek/ gyakoribb megbetegedései

Häufigere Erkrankungen des uropoetischen Organen und des Mastdarms
In: Gyermek és fiatalkori nőgyógyászat
by Sas-Kovács, Medicina, Budapest, 1984.
Kapitel 19. pp. 220. /Ungarisch/

DOMOKOS BODA: Role of hyperuricaemia in critically ill patients especially newborns
Acta Paed.Hung. 25, 23-32, 1984. /English/

The results of animal experiments and clinical observations concerning the pathological role of hyperuricaemia and the effect of allopurinol treatment in acute metabolic disturbances and critically ill patients is reported.

In uricase enzyme blocked rats treated by oxonic acid, urate nephropathy could be elicited by endogenous purine catabolism in shock. Hyperuricaemia aggravated the shock, while allopur-

inol increased the survival time. In shock resistant rats hyperuricaemia did not develop when shock was elicited. Allopurinol prevented hyperuricaemia and increased the physical performance of swimming rats, while in experimental DIC allopurinol reduced markedly the hyperuricaemia and the kidney damage.

In clinical studies a close correlation was observed between the degree of hyperuricaemia and the severity of illness. Serum uric acid values were lowered in cases treated by peritoneal dialysis. In randomized control studies of newborns with IRDS the survival rate was improved by allopurinol treatment.

In critically ill patients with various illnesses allopurinol prevented the progression of the pathological process and improved the clinical condition.

The effect of allopurinol in acute clinical metabolic disturbances may be due to its protection against the renal damage by hyperuricaemia and against purine loss by inhibition of xanthine oxidase during the hypoxic stress and the enhancement of hypoxanthine salvage by HGPRT. Allopurinol reduced the production of superoxide radicals and thus the effect of injury may also be moderated by xanthine oxidase blockade.

BODA DOMOKOS: Ujdonságok és kiegészitések. Pótfüzet a "Gyermekgyógyászat tankönyve" első kiadásához.

Novelties and supplements. Supplementary copybook to the I. edition of the Textbook of Paediatrics.
University of Szeged. 1984.

BODA DOMOKOS, GYURKOVITS KÁLMÁN: Cefotaxim /Claforan/ alkalmazása súlyos gyermekkori infekciókban

Use of cefotaxime /Claforan/ in severe infections of children
Orv.Hetil. 125, 2431-2436, 1984. /Hungarian/

The therapeutic effect of cefotaxime /Claforan/ used as monotherapy was examined in 34 childhood infections which were critically severe or resistant to other treatment. It was found that the compound belonging to the third generation cephalosporines was very effective in overcoming most of the severe bacterial infections and it could be applied effectiv ely also in infections resistant to other treatment even in hopeless cases. Appearently free of toxicity the medicine can be used safely also in the most sensitive premature newborn infant cases.

DOMOKOS BODA, ILONA NÉMETH, PÉTER HENCZ, KATALIN DÉNES: Effect of allopurinol treatment in premature infants with idiopathic respiratory distress syndrome
Dev.Pharmacol.Ther. 7, 357-367, 1984./English/

A randomized prospective study of the effectiveness of allopurinol /Ap/, a pontent and specific inhibitor of the enzyme xanthine oxidase, was performed in premature infants endangered by hypoxia. The drug was given at a dose of 20 mg/kg/day orally for 3 days. In the Ap-treated group the expected decrease in the serum concentration and urinary excretion of uric acid was accompanied by a decrease in the mortality rate of infants with idiopathic respiratory distress syndrome. In these patients a concomitant improvement in renal function, as indicated by an increased urinary flow rate and creatinine output, was also obvious. It is suggested that the observed benefical effect is due to the specific inhibition of xanthine oxidase associated with Ap therapy leading to reduced generation of superoxide radicals and decreased urinary loss of purine.

BODA MÁRTA, VÁRKONYI ÁGNES, SCHEERSCHMIDT J.: Gyógyszerfelszivódási zavar epilepsziás betegként kezelt Gierke-kóros eset fertőzött bél szindrómája miatt

Arzneimittel-Resorptionsstörung infolge eines infektiösen Darmsyndroms bei einem als Epileptiker behandelten Patienten mit Gierke' Krankheit

Gyermekgyógyászat 35, 102-104, 1984. /Ungarisch/

Autoren berichten über einen, bei Glykogenese Typ I zustandegekommenen Fall eines infektiösen Darmsyndroms. Die Häufigkeit der krampfhaften Übelkeit wurde durch die, infolge der allgemeinen Malabsorption entstandene schlechte Arzneimittelresorption gefördert.

BODA MÁRTA, VÁRKONYI ÁGNES: A postenteritis szindróma

The postenteritis syndrome

Orv.Hetil. 125, 3043-3046, 1984. /Hungarian/

The authors summarize the clinical picture of the postgastroenteritis syndrome /PES/. They describe the pathomechanism of the disease, the therapeutic possibilities and the way of prevention. They emphasize the complexity of the disease which lead to mucosal lesions. A vicious circle can be interrupted by give of raw human milk or cow's milk and lactose free, low fat diet. Antibiotics are only used exceptionally and carefully in PES.

BÉLA BOZÓKY, DÉNES BARA, ERZSÉBET KERTÉSZ: Autopsy study of cerebral complications of congenital heart disease and cardiac surgery

J.Neurol. 231, 153-161, 1984. /English/

Detailed histological investigations of the brains of 45 neonates, infants and children who had died of various congenital heart defects revealed that the damage to the white matter occurred mostly below 3 months of age, while that to the gray matter occurred above this age. The lesions /glial fatty metamorphosis, telencephalic leucoencephalopathy, focal white matter necrosis, focal nerve cell pyknosis and symmetrical cortical necrosis/ were often combined with each other. The necroses were generally not a consequence of microembolization. Various cerebral complications occurred in most of the patients who had undergone cardiac surgery. However, the various cerebral lesions each had several causes and in general the accumulation of predisposing damaging noxae resulted in more serious changes.

DRASKÓCZY MIKLÓS, GYURKOVITS KÁLMÁN, RÁPÓ JOLÁN:

Kapnográfiával kontrollált futásos légúti provokáció fokozott bronchusaktivitás kimutatására 3-6 éves asztmás és nem asztmás gyermekeken

Capnography-controlled respiratory provocation by running to identify increased bronchoreactivity of children aged 3-6 years with asthma bronchiale

Pulmonologia Hungarica 37, 209-215, 1984./Hung./

A method was developed for the objective examination of EIB which may be used for 3-6 years old children. The method comprises open-air running and capnographical control of the consecutive reaction of the bronchi. 49 children without - and 26 with asthma /aged between 3-6 years/ were examined. Near the half of those with - and 3 without asthma were found EIB positive. The method is recommended for routine clinical practice.

E. DUX, P. TEMESVÁRI, F. JOÓ, D. ÁDÁM, F. CLEMENTI, L. DUX, J. HIDEG, K.-A. HOSSMANN: The blood-brain barrier in hypoxia: ultrastructural aspects and adenylate cyclase activity of brain capillaries
Neuroscience 12, 951-958, 1984. /English/

The ultrastructure of brain microvessels, their permeability to serum albumin, the activities of some endothelial enzymes and the effect of histamine were investigated in rats after a prolonged hypobaric-hypoxic treatment. After prolonged hypoxia, the permeation of serum albumin into endothelial cells increased together with the number of pinocytotic vesicles of the endothelium. Intracarotid histamine stimulated this process even further, and its effect was mediated by H_2-histamine receptors. After hypoxia the specific activity of capillary alkaline phosphate and γ-glutamyl transpeptidase remained unchanged, while that of adenylate cyclase was greatly increased. Histamine did not modify the structure of tight junctions of isolated capillaries of normoxic animals. Both hypoxia- and histamine-induced modification of the brain microvessels

were accompanied by an increase of pinocytosis, which may be stimulated by the activation of capillary adenylate cyclase.

FÜZESI KRISTÓF, VÁRKONYI ÁGNES, ALTORJAY ISTVÁN: A gyermekkori colitis ulcerosa sebészi kezelésével szerzett eddigi tapasztalataink

Erfahrungen mit der operativen Behandlung der Colitis ulcerosa im Kindesalter

Gyermekgyógyászat 35, 64-67, 1984. /Ungarisch/

Die bisherigen Erfahrungen mit der operativen Behandlung der Colitis ulcerosa im Kindesalter wurden besprochen. Nach totaler Proktokolektomie wurde, nebst Erhalten des distalen Abschnitts des rektalen Muskelscheide das Ausführen der Ileoanastomie bestrebt.

GYURKOVITS KÁLMÁN, SZABÓ ÁGNES: Mucoviscidosisos betegek májszövődményei

Liver complications in patients with mucoviscidosis

Orv.Hetil. 125, 437-441, 1984. /Hungarian/

Over a period of 15 years mucoviscidosis /cf/ cases were analyzed from the point of view of liver complications. In the 107 homozygous patients decreased serum albumin/globulin ratio and raised GGT activity were observed, suggesting affected liver function. Histologically the fatty degeneration of the liver was characteristic of those died in infancy of dystrophy. As a late complication multilobular biliary cirrhosis, a susceptibility to diffuse fibrosis and oesophageal varix hemorrhage due to portal hypertension - associated with both diseases mentioned - may develop. Two rare occurrences of extensive fat deposits are described, too. The authors think that the biochemical methods used to detect liver degeneration at an early stage, are not precise enough. Invasive diagnostic methods are suggested in exceptional cases only. It is indispensable to know exactly the clinical picture and pathomechanism of the degeneration since it helps to detect all the still unknown of cases and to establish accurate differential diagnosis of liver diseases in childhood.

HAVASS ZOLTÁN: Tiroxinmérésen alapuló, hipotireózis-szűrővizsgálati módszer

Hypothyreosis screening based on the determination of thyroxin level

Izotóptechnika 27, 75-80, 1984. /Hungarian/

The method makes use of dried blood samples and is easy, simple and rapid. The statistical parameters meet international expectations, so can be used for mass screening of newborns. Several thousand investigations performed in the Pediatric Clinic of Szeged Medical University justify this conclusion.

HENCZ PÉTER, BALTÁS BÉLA, TEKULICS PÉTER: Gyermekkori heveny életveszélyállapotokat kisérő stressz ulcus kezelése cimetidinnel

Cimetidine treatment of critically ill children with stress ulcer

Orv.Hetil. 125, 2005-2007, 1984. /Hungarian/

13 critically ill children with stress ulcer were treated by Cimetidine. The age of the children was between 5 days and 13 years. Cimetidine was administered in 20-40 mgs/kg/day dose devided into 4 parts in the form of tablets or injections. Bleeding stopped in the majority of the cases on the first day; in two cases bleeding failed to cease. Origin of the clinical picture, predisposing factors and pathomechanism of the disease

are discussed. The importance of stress ulcer of critically ill children is emphasized. Cimetidine treatment of stress ulcer may provide new perspective of the intensive care of children.

FERENC JOÓ, ANDRÁS MIHÁLY, PÉTER TEMESVÁRI, ERNŐ DUX:

Basic molecular events underlying transendothelial transport in brain capillaries

In: Recent Progress in the Study and Therapy of Brain Edema by K.G. GO and A. BAETHMANN. Plenum Press, New York, London 1984. pp.107-116. /English/

The presence of adenylate and guanylate cyclase in brain microvessels has already been revealed by histochemical methods. In vitro studies, carried out on a fraction being enriched by brain microvessels, mainly capillaries, have indicated previously the responsiveness of these enzymes to vasoactive substances.

In the present study, an activation of adenylate cyclase was found in capillaries isolated from rats with decompression edema. The reactivity of capillary adenylate cyclase isolated from edematous brains differed significantly from those of controls. In other studies, dibutyryl cyclic guanosine monophosphate was infused intracarotically and found to be able to open the blood-brain barrier.

Our results provide further support for the involvement of cyclic nucleotides in the regulation of permeability in brain capillaries.

KATONA MÁRTA, HENCZ PÉTER, KERTÉSZ ERZSÉBET, TEKULICS PÉTER, BEVIZ JÓZSEF: Persistaló foetalis keringés diagnosztikája és kezelése

Treatment of persisting foetal circulation

Orv.Hetil. 125, 1753-1758, 1984. /Hungarian/

The authors report on 14 babies suffering from persisting foetal circulation. Cyanosis unreactive to oxygen treatment, hypoxaemia refractory to CPAP-treatment are considered to be of diagnostic value in addition to the broadening of the pre-, and postductal oxygen-tension /10 Hgmm/. Heartcatheterization had to be applied in two cases in order to exclude the possible existance of congenital vitium. Pathophysiology, and pathognomy of the disease, and treatment are discussed. Alpha-adrenergic blocker Hibernal was found to be very useful for the treatment of the disease, which did not caused hypotension in contrast to the generally used Tolazolin. Five patients have been lost from 14 ones. According to their experiences Hibernal treatment may improve the chances of the serious disease: persisting foetal circulation.

ARANKA LÁSZLÓ, MÁRIA ILYÉS, LÁSZLÓ KLUJBER: Leukocyte beta--glucosidase in a child with Gaucher's disease and his kinship

Acta Paed.Hung. 25, 237-240, 1984. /English/

Beta-glucosidase was determined in leukocyte homogenates of

a male child with Gaucher's disease and members of his family. An important difference in enzyme activity was found in the heterozygous gene carriers; in one obligate heterozygote, the mother, a high residual enzyme capacity was detected. Various methods of enzyme determination using various substrates are recommended for the detection of the gene carrier condition.

ARANKA LÁSZLÓ, GABRIELLA KAISER, SÁNDOR TURI, TIBOR BODROGI: Typing of HLA antigens in a child population with nephrosis syndrome

Acta Paed.Hung. 25, 241-245, 1984. /English/

Using the microlymphocytotoxicity test of Terasaki, HLA-A, B, Cw antigen typing was done for 37 antigens in 28 children with steroidsensitive nephrosis and five children with steroid--resistant nephrosis. Evaluation was made by the χ^2 test as corrected by the method of Yeates.

In steroid-sensitive nephrosis the frequency of HLA-B 8 antigen was 33.3% and in the resistant cases 40% as against 18.5% in the controls. The difference, however, was not significant, the B 12 and B 13 antigens were more frequent in both steroid--sensitive and resistant nephrosis, though not significantly.

ARANKA LÁSZLÓ, LÁSZLÓ KLUJBER: Urinary 3-methylhistidine and urinary 3-methylhistidine/creatinine ratio in Duchenne-muscular dystrophy in hemizygotes and in gene-carriers

Acta Paed.Hung. 25, 339-341, 1984. /English/

The informative value of urinary 3-methylhistidine excretion and urinary 3-methylhistidine/creatinine ratio was investigated in DMD hemizygote male children /n=13/ and in gene-carrier mothers. A significant increase of the urinary 3-methylhistidine/creatinine ratio was found in DMD hemizygotes.

There was no significant correlation between serum CK and the clinical stages of DMD and the above mentioned laboratory parameters. These parameters were not found suitable in genetic counselling concerning the DMD gene-carrier status.

A. MÁGORI, J. ORMOS, S. SONKODI, S. TURI, J. ZOMBORI, B. IVÁNYI, É. KEMÉNY: Arteriolar lesions in human renal biopsy material with special regard to the ultrastructural changes in the basal lamina network of the vascular wall

Ultrastructural Pathology 6, 185-198, 1984. /English/

The arteriolar changes in renal biopsy samples were studied by light and electron microscopy and immunohistologic observations. Arteriolar hyaline thickening was found to occur in virtually all renal diseases, regardless of whether these were accompanied by hypertension or not. Only amyloidosis and dense deposit glomerulonephritis were accompanied by specific ultrastructural arteriolar changes. The nonspecific "hyalin" was shown ultrastructurally to contain various components: accumulated basement membrane material, fine granular deposit /with filamentous or lipid details/, and granulovesicular and

threadlike membrane structures. Presumably the material constituting these structures originates partly from the blood and partly from elements of the vascular wall itself.

MEGYERI PÁL, HENCZ PÉTER: Alacsony születési súlyú, intenziv kezelésre szoruló újszülöttek naso-duodenalis táplálása

Naso-duodenal feeding of low birthweight newborns requiring intensive care
Orv.Hetil. 125, 2499-2501, 1984. /Hungarian/

14 low birthweight newborns were fed by continuous infusion of breast milk through a naso-duodenal feeding tube. The calculated total daily calorie and energy requirement can be met this way by the 3th-5th day of life. Taking into account advantages and complications of the procedure this method of feeding can be proposed as an alternative in the feeding of seriously ill low birthweight newborns. In selected cases the naso-duodenal feeding has appreciable advantages as compared to other known methods.

MEGYERI PÁL, TURI SÁNDOR, ENDREFFY EMŐKE: Gyermekek fagocitáló fehérvérsejtjeinek O_2 fogyasztása, kemotaxisa nephrosis szindrómában és krónikus pyelonephritisben

O_2 consumption and chemotaxis of phagocytizing white blood cells in childhood nephrotic syndrome and chronic pyelonephritis

Orv.Hetil. 125, 1187-1189, 1984. /Hungarian/

O_2 consumption of phagocytizing white blood cells and chemotaxis of neutrophils were studied in childhood nephrotic syndrome and chronic pyelonephritis. Chemotaxis was found significantly lower in both groups of patients, while in the cases of nephrotic syndrome O_2 consumption was below normal, too. Possible role of circulating immune complexes and of chemotactic factor inhibitor /CFI/ is discussed.

MONOSTORI ÉVA, SZÜTS PÉTER, VERES G., ANDÓ I.: Anyai szérum alfa-fetoprotein mérése monoklonális ellenanyagok segitségével ELISA módszerrel

The measurement of maternal serum alpha-fetoprotein by ELISA system using monoclonal antibodies

Orv.Hetil. 125, 3251-3253, 1984. /Hungarian/

Monoclonal antibodies were produced to the human alpha-fetoprotein and used in a TANDEM-ELISA system. All the elements of the system were produced in their laboratory coating antibody, AFP standard, calibrated to the WHO standard reagent and horse radish peroxidase conjugated antibody. 77 serum samples were tested for AFP concentration. The data showed

that the system is suitable for determining AFP level in the range of 4-100 ng/ml concentration and the results are highly reproducible.

ZOLTÁN RAKONCZAY, PÉTER NÉMETH: Change in the distribution of acetylcholinesterase molecular forms in Hirschsprung's disease

J.Neurochem. 43, 1194-1196, 1984. /English/

Density gradient ultracentrifugation shows that two molecular forms of acetylcholinesterase /4S and 10S/ can be distinguished in the bowels of both normal subjects and Hirschsprung's disease patients. In this disease, besides the very large elevation of acetylcholinesterase activity, the relative distribution of the heavy and light forms was also changed. In the affected bowel the 10S64S ratio was 2.5 times higher than the normal value. It is assumed that the accumulation of the 10S form might be a response of the intestine to this pathological state. It is also suggested that the increase in the heavy form is closely connected with the nerve fibre proliferation in the aganglionic megacolon.

RUBECZ ISTVÁN, VINCELLÉR MÁRIA, HASZON IBOLYA: Gyermekkori peritoneális dializis során végzett egyenlegvizsgálatok

Bilanzuntersuchungen bei Peritonealdialyse im Kindesalter

Gyermekgyógyászat 35, 244-253, 1984. /Ungarisch/

Autoren untersuchten die Änderungen der Serumkonstanten, der peritonealen UN-, Na-, K- und Ca-Bilanz, sowie die Wirkung des Volumens und der osmotischen Konzentration der Dialysierlösung auf die erwähnten Bilanzen mittels Nachuntersuchung der 40 je 8 stündigen Perioden von 6 Peritonealdialysen an 3 Kindern. Es konnte festgestellt werden, dass 1./ von den Serumkonstanten das Se-K innerhalb von 2.5 Tagen auf die Hälfte der Ausgangswerte sich verringerte. Die Normalisierung der Se-Na und Se-Ca-Werte erfolgte langsamer. 2./ Aus der Änderung der Serumkonstanten kann nur mit Rückhalt auf die peritoneale Bilanz gefolgert werden, da die Se-K und UN-Werte sich geringer verringern als dies aufgrund ihrer peritonealen Bilanz zu erwarten wäre und trotz Erhöhung der Se-Na und Se-Ca-Werte ihre peritoneale Bilanz negativ ist. 3./ Die Änderung der osmotischen Konzentration, die Menge und/oder die Strömungsgeschwindigkeit der Dialyselösung beeinflussen bedeutend die Wirksamkeit der Dialyse. Deshalb erfordern die technischen Änderungen der Peritonealdialyse bei der Dialyse des Kindesalters eine sorgsame Individualisierung und erhöhte Kontrolle der Patienten.

L. SALGÓ, K. MOHOLI, G. PETHEÖ, L. BÓDIS: Cadmium determination in pregnancy

"Trace Element" - Analytical Chemistry in Medicine and Biology, Vol.3. pp. 703-709, 1984. /English/

Conclusions

From the data reported in this paper the following conclusions can be drawn:

1. The cadmium levels in the amniotic fluid are higher than those in maternal blood samples during pregnancy. The cadmium concentration is higher in the early period of pregnancy than later.
2. The cadmium levels in cord blood samples are similar to those in maternal blood. We consider that the placenta does not provide a "protective barrier" against this element.
3. The cadmium values of maternal blood samples are similar to those of control blood samples.
4. The iron and zinc levels increase continuously, while the copper level increases from the 15th to the 34th weeks of gestation, and afterwards decreases in the amniotic fluid.
5. The maternal blood copper concentration increases during pregnancy, while the zinc and iron levels fall.
6. The total protein level of the amniotic fluid is very low compared to that of the maternal blood.

L. SALGÓ, A. PÁL, K. MOHOLI, K. GYURKOVITS, L. KOVÁCS:
Significance and role of zinc in the anti-bacterial /Group-B Streptococci/ action of the amniotic fluid
"Trace Element" - Analytical Chemistry in Medicine and Biology, Vol.3. pp. 677-685, 1984. /English/

Conclusions

1. The amniotic fluid has antimicrobial /anti-group B streptococci/ activity, but the inhibition is highest between the 37th and 40th weeks of gestation.
2. The inhibitory activity is bacteriostatic.
3. The antibacterial activity is higher when Zn is added to the amniotic fluid.
4. The zinc and lysozyme levels correlate well with the gestational age and with the observed increase in inhibitory activity.
5. The phosphate and total protein values decrease during pregnancy.

SAS MIHÁLY, ALTORJAY ISTVÁN: A kismedence és a nemi szervek sérülései

Die Verletzungen im Bereich des Beckens und Geschlechtsorganen
In: Gyermek- és fiatalkori nőgyógyászat
by Sas-Kovács, Medicina, Budapest 1984.pp. 216.
Kapitel 18. /Ungarisch/

SZABÓ IDA, VÁRKONYI ÁGNES: Krónikus agressziv hepatitis miatt gondozott eseteink

Betreuung wegen chronisch agressiver Hepatitis
Gyermekgyógyászat 35, 307-310, 1984./Ungarisch/

Die Krankheitsgeschichte der an chronisch agressiver Hepatitis leidenden Kranken wurde bekanntgegeben und auf die diagnostischen und therapeutischen Möglichkeiten und Schwierigkeiten eingegangen. Die Krankheitsgeschichte eines geheilten 15jährigen Patienten wird hervorgehoben. Die Wichtigkeit der histologischen Überwachung der Krankheit wird betont.

PÉTER SZÜTS, ZOLTÁN KATONA, JENŐ KÓBOR: Effect of thiamine on defective chemotaxis of polymorphonuclear granulocytes

Acta Paed.Hung. 25, 419-420, 1984. /English/

A preliminary report.

P. SZÜTS, Z. KATONA, M. ILYÉS, I. SZABÓ, M. CSATÓ: Correction of defective chemotaxis with thiamine in Shwachman-Diamond syndrome

The Lancet 1, 1072, 1984. /English/

Letter.

TEKULICS PÉTER, MESTER JÁNOS, CSERNAY LÁSZLÓ: Izotópdiagnosztikai vizsgálómódszerek alkalmazásának lehetőségei a gyermekkardiológiában

Use of isotope-diagnostic examination methods in pediatric cardiology

Orvosképzés 59, 106-113, 1984. /Hungarian/

Radioactive isotope examination of the cardiac and central circulation - a noninvasive diagnostic procedure - has been used so far mainly in adult-cardiology. On the basis of a high number of literary data as well as on the experiences of the Central Isotope-diagnostic Laboratory and Department of Pediatrics of the University of Medicine, Szeged, the authors describe the methods that can be applied in pediatric cardiology, too. Computer processing of data obtained with gamma-camera gives information on several disorders, firstly congenital vitium cordis with left-to-right shunt, myocardial diseases and on the ventricular function. These information could be obtained so far only with heart catheterization and angiography. It is hoped that the rapid development of nuclear medicine will contribute to the wider application of this non-invasive technique in the examination of the congenital developmental defects of the heart, too.

P. TEMESVÁRI, D. BODA, L. KECSKEMÉTI, ERNA ECK, EMŐKE ENDREFFY:
Deleterious effects of smoking during pregnancy: studies on blood oxygen affinity
Acta Paed.Hung. 25, 371-376, 1984. /English/

16 mothers smoking 1-40 cigarettes daily during pregnancy and their infants were studied at delivery compared to 13 non-smoking controls. The infants of smoking mothers had significantly decreased weight and length at birth compared to the infants of non-smokers. In the smoker group the thiocyanate level in maternal venous and newborn cord blood sera was sig-

nificantly higher than in the non-smokers. The standard blood oxygen affinity of cord blood was significantly increased in the smokers' group and was positively correlated to the thiocyanate level in cord blood. At the age of three and five days there were no differences in the newborns' capillary blood standard oxygen affinity between the two groups. The deleterious effect of maternal smoking on the fetus and newborn is discussed.

P. TEMESVÁRI, P. HENCZ, F. JOÓ, ERNA ECK, P. SZERDAHELYI, D. BODA: Modulation of the blood-brain barrier permeability in neonatal cytotoxic brain edema: laboratory and morphological findings obtained on newborn piglets with experimental pneumothorax
Biol.Neonate 46, 198-208, 1984. /English/

Acute, bilateral pneumothorax /PT/ was produced in 14 newborn piglets. The clinical status of the operated and 14 control animals was monitored by measuring the arterial blood gases, acid-base balance and mean arterial blood pressure. Different brain regions were processed for electron microscopy and albumin immunohistochemistry; water and electrolyte contents were also determined at the end stage of experimental intervention. Electron microscopy showed more intense pinocytotic activity in the endothelium of brain capillaries from PT animals evaluated by morphometry. Statistically significant /$p < 0.01$/ differences were found in the distribution of pinocytotic vesicles in different brain areas of PT animals. The blood-brain barrier

seemed to be impermeable to albumin in all brain regions both in the controls and in the PT group. Parallel with the changes observed in pinocytosis, the water and sodium contents were also increased in the PT group in the parietal cortex /water content 85.18 ± SD 0.81% vs. 84.10 ± SD 0.52%, $p < 0.01$; sodium content in wet brain tissue 70.94 ± SD 8.44 mmol/kg vs. 65.09 ± SD 4.43 mmol/kg, $p < 0.05$, in dry brain tissue 481.70 ± SD 75.70 mmol/kg vs. 410.15 ± SD 35.45 mmol/kg, $p < 0.05$/ and in the cerebellum /water content 83.95 ± SD 1.08% vs. 83.02 ± SD 0.89%, $p < 0.05$; sodium content in wet brain tissue 60.67 ± SD 3.16 mmol/kg vs. 55.90 ± SD 6.26 mmol/kg, $p < 0.01$/. However, in other brain regions - especially in the water-shed area - there was no correlation between the changes of pinocytosis and water-electrolyte contents of the tissues.

It is suggested that the type of edema developing in this severe cardiovascular/hypoxic collapse is cytotoxic of origin and this fact should be more seriously taken into account in the treatment of the disease.

P. TEMESVÁRI, F. JOÓ, M. KOLTAI, ERNA ECK, G. ÁDÁM, L. SIKLÓS, D. BODA: Cerebroprotective effect of dexamethasone by increasing the tolerance to hypoxia and preventing brain oedema in newborn piglets with experimental pneumothorax

Neuroscience Letters 49, 87-92, 1984. /English/

The effect of dexamethasone /DXM/ pretreatment in newborn piglets with experimental pneumothorax /EPT/ was studied. Nei-

ther low DXM doses nor those administered 1 or 2 h prior to the induction of EPT were found to be effective against its course. In contrast, 5 mg/kg of body wt. of DXM given subcutaneously 4 h prior to EPT improved significantly both the tolerance and laboratory data of the animals. The extent of brain oedema, measured 4 h after recovery, was also considerably lowered. Actinomycin D pretreatment almost completely the benefical effect offered by DXM suggesting the involvement of newly synthesized protein/s/ in the cerebroprotective effect of DXM.

TOLDI ZOLTÁN, KERTÉSZ ERZSÉBET, ENDREFFY EMŐKE: A vörösvérsejtek és a plazma Na^+, K^+ koncentrációja kongenitális vitiumos gyermekekben

Sodium and potassium concentration of red blood cells and plasma in children suffering from congenital heart disease

Orv.Hetil. 125, 695-698, 1984. /Hungarian/

Sodium and potassium concentrations in the red blood cells and blood plasma were investigated in 93 children with cardiological diseases, most of them with congenital heart disease. The results were compared with the values found in 48 healthy children of the same age. Constant red blood cell sodium and potassium concentrations were found within a narrow range in normal cases but profound alterations of those in pathological states. Red blood cell sodium concentration was very high in

critically ill patients with congestive heart failure treated with digitalis. Even without congestive heart failure higher erythrocytic sodium values were found in cardiac malformations with left to right shunt. Cyanotic patients with right to left shunt showed higher erythrocytic potassium levels. Red blood cell sodium concentrations were lower in cases of hyperkinetic circulation without any congenital heart disease. The only alteration regarding plasma concentrations was the elevated plasma potassium level found in cases of congenital heart disease with right to left shunt. In the authors' opinion measuring changes of erythrocytic sodium and potassium concentrations is not an appropriate method for assessing the efficacy of digitalis treatment. Present investigations point to the accompanying phenomena at cellular level in cardiological diseases.

TOLDI ZOLTÁN, TURI SÁNDOR: A vörösvérsejtek és a plazma Na^+, K^+ koncentrációja nephrosis szindrómás, uremiás és pyelonephritises gyermekekben

Sodium and potassium concentration in red blood cells and blood plasma of children with nephrotic syndrome, uremia and pyelonephritis

Orv.Hetil. 125, 2053-2056, 1984. /Hungarian/

Sodium and potassium concentrations in red blood cells and blood plasma of children - suffering from pyelonephritis, acute: 19, chronic: 10, healed: 9 cases; uremia: 5, nephrotic syndrome: 20 cases - were compared with those of control children. Red

blood cell Na^+ concentration was lower in patients suffering from acute pyelonephritis, uremia and nephrotic syndrome treated with steroids. Higher Na^+ level was found in red blood cells of children with chronic pyelonephritis and nephrotic syndrome without steroid treatment. These alterations were not accompanied by plasmatic sodium and potassium changes, except in uremic cases. Results might be explained by pathological Na^+, K^+ transport processes of the red cell membrane.

TURI SÁNDOR, HAVASS ZOLTÁN, BODROGI TIBOR: Vizelet ciklikus AMP, prosztaglandin E és szérum parathormon vizsgálatok gyermekkori nephrosis szindrómában és vesekövességben

Urinary cyclic AMP, prostaglandin E and serum parathormone examinations in children with nephrotic syndrome and urinary stone formers
Orv.Hetil. 125, 387-391, 1984. /Hungarian/

Urinary prostaglandin E and cyclic AMP excretion paralleling the changes of kidney function were studied by radioimmunoassay in children with nephrotic syndrome, calcium containing nephrolithiasis and in control cases as well. Significantly elevated urinary prostaglandin E amounts were found in nephrotic cases, simultaneously, urinary cyclic AMP excretion decreased significantly. There was a definite correlation between daily prostaglandin E excretion and creatinine clearance as well as the diuresis per minute in the groups of controls and nephrotic

syndrome. In addition, there was a positive correlation between the urinary cyclic AMP and osmolality values /U_{osm}/P_{osm}/, on the other hand an inverse correlation was found between the former and the amounts of urine excretion per minute. Consequently, there was a negative correlation between the values of prostaglandin E excretion and urinary cyclic AMP, which relates to that the latter functions for vasopressin mediator. These relations were not observed in the cases of calcium containing urinary stone formers during a permanent slightly increased water intake.

SÁNDOR TURI, ILONA NÉMETH, TIBOR BODROGI: Serum and urinary arginine-esterase activity in paediatric kidney diseases

Acta Paed.Hung. 25, 399-407, 1984. /English/

Serum and urinary kallikrein activities were determined from the arginine-esterase activities in various groups of kidney diseases and were compared with urinary /β-glucuronidase excretion, urinary output, urinary protein content and creatinine clearance. Serum arginine-esterase activity was significantly augmented in the active stage of diffuse renal diseases but was not related to the severity of parenchymal damage. The values improved during remission; the enzyme activity in chronic uraemic patient was as low as in the control sera. There was a positive correlation between urinary output and serum arginine-esterase activity, and consequently serum kallikrein might have an enhancing effect on diuresis.

ÁGNES VÁRKONYI, GY. FALKAY: Hyperprolaktinämie bei Kindern mit Zöliakie

Mschr.Kinderheilk. 132, 547-549, 1984./Deutsch/

Es wurde der Serumprolaktingehalt von ein- bis 14 jährigen gesunden Kinder, sowie Diät haltenden bzw. unter Glutenwirkung stehenden Zöliakiepatienten bestimmt. Innerhalb normaler Grenzen lag der Prolaktinspiegel bei sämtlichen untersuchten gesunden und unter Diät gehaltenen Zöliakie-Patienten, bei 42 Prozent der keine Diät enthaltenden Fälle hingegen war eine Hyperprolaktinämie zu beobachten.

ÁGNES VÁRKONYI, TERÉZ SZELECZKI, JOLÁN CSANÁDI, K. GYURKOVITS: Non-specific drug-metabolizing enzyme activity in Gilbert disease

Acta Medica Hung. 41, 239-246, 1984. /English/

Gilbert disease was diagnosed in a 15-year-old boy on the basis of the clinical pattern and the changing drug-metabolizing capacity of the liver-enzyme apparatus, which was drug-induced.

VÁRKONYI ÁGNES, VÁRKONYI TIBOR, FARKAS ZOLTÁN: Felszini struktúrák scanning elektronmikroszkópos képe a vékonybél normál és pathológiás állapotaiban

Scanning electronmicroscopic image of surface structures in normal and pathological conditions of the small intestine

Orvosképzés 59, 75-79, 1984. /Hungarian/

The authors describe the scanning electronmicroscopic characteristics of the mucous membrane of small intestines in normal and celiac state. Scanning electronmicroscope was found to be a quick and well applicable completive examination for the study of the surface structure of the mucous membrane of the small intestine where the technical installations are available.

1985

ALTORJAY ISTVÁN, PRAEFORT LÁSZLÓ, VRANEK IBOLYA: Születésük napján műtéttel szétválasztott ikrek

Am Tag ihrer Geburt operativ getrennte Zwillinge

Magyar Sebészet 38, 117-122, 1985./Ungarisch/

Berichtet wird über ein per vaginam auf die Welt gekommenes und im 4stündigen Alter erfolgreich getrenntes Omphalopagus--Zwillingspaar. Dank den vorteilhaften Verhältnissen blieben die Zwillinge am Leben und sie entwickelten sich ungestört. Die mit der Häufigkeit und der Trennung der zusammengewachsenen Zwillingen verbundenen diagnostischen und therapeutischen Fragen werden überblickt.

BARA DÉNES, BOZÓKY BÉLA, KERTÉSZ ERZSÉBET: Congenitalis vitiumok agyi szövődményeinek klinikopathológiai elemzése

Clinicopathological analysis of cerebral complications of congenital heart disease

Orv.Hetil. 126, 1231-1235, 1985. /Hungarian/

The clinical background of micro- and macroscopic cerebral changes often in combination of 49 mature newborns, infants and children who had died of various congenital heart defects

was investigated. Among the lesions revealed by the detailed neurohistologic investigation the damage to the white matter /glial fatty metamorphosis, telencephalic leukoencephalopathy, focal necrosis/ is more frequent in neonates and in young infants, while that to the gray matter /focal nerce cell pyknosis, symmetrical cortical necrosis/ is more frequent in older age. The acidosis and the hypoxia /low pO_2 value/ are the most important factors in the origin of the cerebral damage. These can be aggravated or brought about by opportunistic infections. By application of arteficial ventilation the TL and GIP, and in case of resustitation the GIP were relatively frequent morphologic findings. Repeated and prolonged cyanotic attacks may result in encephalomalacia. Particularly, the clinical complications after the long-lasting by-pass surgeries cause cerebral lesions. Almost in every cases the necroses are the consequences of the local circulatory disturbances. In general, the greater the number of damaging factors, the more serious the cerebral lesions are.

BODA DOMOKOS: Markusovszky emlékezete

Memorial lecture about Markusovszky
Orv.Hetil. 126, 2263-2266, 1985. /Hungarian/

BODA DOMOKOS: Gyermekgyógyászat tankönyve. II. kiadás

Textbook of Paediatrics. II. Edition
Medicina, Budapest, 1985. /Hungarian/

BODA DOMOKOS, BARTYIK KATALIN, SZÜTS PÉTER, TURI SÁNDOR:
Varicella elleni aktiv védőoltások subcutan és intracutan alkalmazott gyengitett élővirus vakcinával kórházi fertőzéseknek kitett gyermekeken

Activ immunization of children exposed to varicella infection in a hospital ward using live attenuated varicella vaccine given subcutaneously or intracutaneously

Orv.Hetil. 126, 2577-2580, 1985. /Hungarian/

Active immunization using Takahashi OKA live attenuated varicella vaccine was carried out 5 times to prevent the spread of "imported" varicella in a hospital ward. Susceptibility was previously tested by serological examinations: 14 children were vaccinated subcutaneously, the other 19 got the vaccine intracutaneously. Vaccination within a few days following exposure provides complete immunity in the great majority of the cases. The intracutaneous administration can be considered nearly as protective as the subcutaneous one.

BITTERA ISTVÁN, JEAN BOUSQUET: Méh- és darázscsipés allergia

Bee-sting and wasp bite allergy

Orvosképzés 60, 140-147, 1985. /Hungarian/

After a historical and epidemiological outline, toxic and allergic reactions, provoked by the toxin of bee and wasp, are discussed. Up-to-date in vivo and in vitro possibilities of the diagnosis are demonstrated. Detailed instructions about the possibilities of symptomatic and specific treatment are presented.

GYURKOVITS KÁLMÁN, BODA KRISZTINA: A maximális kilégzési tüdőtérfogatok és áramlási sebességek egészséges, iskolás korú gyermekekben

Maximal expiratory volumes and flow rates in healthy school children

Pneumologia Hung. 38, 175-180, 1985. /Hungarian/

Determination of the forced expiratory vital capacity and its derivative parameters of respiratory functions is rendered possible by the use of several novel devices. 80 school children, void of chronic respiratory disease, were examined as to their respiratory normal parameters. Values of respiratory flow rate--volume curve were obtained by an automatic computer evaluation process. No significant difference could be found between the data of boys and girls aged 6-14 years whereas there was a strict correlation between body height and respiratory functions' data. The results obtained were compared to the normal data of Zapletan and a satisfactory homology was found.

If the normal values of the healthy school children population are known, more children with pathological respiratory function can be found by screening.

GYURKOVITS KÁLMÁN, ZSIDAY-GALGÓCZY KÁROLY, DRASKÓCZY MIKLÓS, BUTOR ÉVA, TOLDI ZOLTÁN: Bronchusgörcs provokáció és gyógyszeres oldás gyermekkori asthma és obstruktiv bronchitisekben

Provocation and broncholytic elimination of bronchospasm in bronchial asthma and obstructive bronchitis of childhood

Gyermekgyógyászat 36, 363-370, 1985. /Hungarian/

The pharmacocapnographic respiratory function test was found most suitable for the follow-up of bronchial reaction in children aged 3 years and over. The process of obstruction developing during provocation, as well as the muscular spasmolysis after administration of spasmolytics is readily determined by computer-assisted curve analysis. Histamine or acetylcholine induced was carried out by this method in more than 500 children with asthma, suspected asthma and chronic bronchitis. The method is harmless and represents no stress. A disadvantage in the diagnosis of asthma was that an increased bronchial reaction to histamine and/or acetylcholine was found in about 50 per cent of the patients with bronchitis. Spasmolysis with Bricanyl yielded a quick improvement of respiratory function in bronchial asthma. The ratio of a good response was lower in recurrent bronchitis. Selective sympathomimetic action in cases of chronic inflammation-dependent obstructive respiratory diseases was found insignificant. Results appreciable by respiratory function of the drug effect are serviceable, in establishing treatment in addition to setting up bronchial asthma diagnosis.

HAJDU JULIANNA, PÁL ATTILA, KATONA MÁRTA, KOVÁCS LÁSZLÓ:

Az igen alacsony születési súlyú koraszülöttek letalitása és a túlélést befolyásoló néhány tényező vizsgálata

Lethality of premature babies of very low birth-weight and the examination of several factors affecting survival

Orv.Hetil. 126, 2511-2515, 1985. /Hungarian/

Lethality of 389 babies born of very low birth-weight /below 1500 g/ between the 1st of January, 1976 and the 31st of December, 1983 during an 8 years periode was examined by the authors in addition to the analysis of the factors which might supposingly influence survival. The survival of these extremely immature newborns was 41.6 per cent. Significant differences were obtained in the parameters as follows, when the data of died and surviving babies were compared: hospitalization of the mother at least 24 hours before delivery, time elapsed between the rupture of membranes and birth, IRDS prophylaxis, tocolytic treatment, resuscitation of the newborn in the delivery-room /5 min Apgar less than 4/, respirator treatment, intrauterine retardation and incidental occurrence of septic symptoms. On the basis of the results the newborn's sex and the methodology of the assistance at birth had no effect on survival.

Z. HANTOS, B. DARÓCZY, K. GYURKOVITS: Total respiratory impedance in healthy children

Pediatric Pulmonology 1, 91-98, 1985. /English/

Impedance of the total respiratory system was measured in 121 healthy children aged 4-16 years during spontaneous breathing

by pseudo-random forced oscillations between 3 and 10 Hz. Total respiratory resistance /R_{rs}/, inertance /I_{rs}/ and compliance /C_{rs}/ were determined by least-mean-squares fitting. Estimates for inertance were reliable only for the larger children, where the values of I_{rs} /0.0127 $\pm$ 0.0034 SD/ were similar to those reported for normal adults. R_{rs} correlated significantly /$p < 0.001$/ with height /$r = -0.868$/, age /$r = -0.865$/, and, in a subpopulation of the 6- to 16-year-old children, with forced vital capacity /$r = -0.803$/. The corresponding correlation coefficients for C_{rs} were 0.873, 0.844, and 0.853, respectively. C_{rs} amounted to about a third of the static total compliance values of Sharp et al. /J Appl Physiol 1970;29: 775-779/ over the same interval of heights. In these relationships no significant difference was found between boys and girls.

KATONA MÁRTA, HENCZ PÉTER, KERTÉSZ ERZSÉBET, BEVIZ JÓZSEF, HAJDU JULIA: Az újszülöttkori cardiomyopathia diabetica

Cardiomyopathy in infants of diabetic mothers

Orv.Hetil. 126, 1087-1091, 1985. /Hungarian/

The authors describe their experience with therapy and diagnosis of cardiomyopathia diabetica /CMD/, known as a part of the symptoms of foetopathia diabetica. The disease is generally harmless, however, in about one-third of the cases it leads to severe congestive heart failure. In establishing the diagnosis echography is of significance. Settling the hypoglycaemia, improving oxigenization, decreasing the fluid intake and applying diuretics form the basis of therapy. In cases of CMD where obstruction of

the outflow tract occurs, drugs with positive inotropic effect /Digoxin, Dopamine/ are contraindicates as they may result in fatal outcome of the condition. The disease can be prevented by settling and controlling effectively the therapy of diabetes mellitus of the mother.

LÁSZLÓ ARANKA, BARTHA L., CSOBÁLY S., KAISER GABRIELLA, SVÉKUS A.:
Neurocutan kórképek - sclerosis tuberosa és neurofibromatosis - klinikai genetikai aspektusai, HLA-antigén vizsgálatok és computer tomographiás diagnosztikája

Neurokutane Krankheitsbilder - klinisch-genetische Aspekte, HLA-Untersuchungen und computertomographische Diagnostik der Sklerosis tuberosa und Neurofibromatosis
Ideggyógy.Szle. 38, 347-355, 1985. /Ungarisch/

Es wurden in 5 Familien mit tuberöser Sklerose HLA-Typisierungen ausgeführt. Das Vorkommen des HLA-A w31 Antigen war, ohne Berührung der B-Antigengruppe signifikant häufiger. Untersuchung der Haut in UV-Licht bewies auf Grund der detektierbaren Fluoreszenz der kaffeebraunen Flecken in 4 Familien autosomale dominante, in einer Familie erste Genmutationsherkunft. Von den 6 Fällen mit Neurofibromatose waren 4 forma fruste. Der diagnostische Wert der CT wird besprochen.

ARANKA LÁSZLÓ, ZOLTÁN HAVASS: Mukopolysaccharidurie bei Genodermatosen, Epidermolysis bullosa hereditaria, Ichthyosis congenita und ektodermaler Dysplasie
Z. Hautkrh. 60, 254-256, 1985. /Deutsch/

Bei vier Patienten mit Epidermolysis bullosa, elf weiteren mit verschiedenen vererblichen Ichthyosen und drei mit X-gebundener, rezessiv vererblicher ektodermaler Dysplasie wurden im 24-Stunden-Urin das Ausmass der Ausscheidung von sauren Mukopolysacchariden /=Glycosaminoglycanen /GAG// untersucht und die GAG-Fraktionen mittels GAG-Dünnschichtkromatographie analysiert.

In allen drei Genodermatosengruppen war eine signifikant erhöhte GAG-Urie festzustellen; die einzelnen GAG-Fraktionen erwiesen sich als Chondroitin-6-sulfat, Chondroitin-4-sulfat und Heparansulfat. Als Pathomechanismus der vermehrten GAG-Urie vermuten wir eine gesteigerte GAG-Degradation.

ARANKA LÁSZLÓ, Z. HAVASS, I. JOÓ, T. BODROGI, S. TURI:
Lipid- und Lipoproteinuntersuchungen bei Nephrose-Syndrom-Fällen im Kindesalter
Kinderärztl. Praxis 53, 199-203, 1985. /Deutsch/

Bei 17 Kindern mit Nephrose-Syndrom wurden der Gesamtlipid-, der Cholesterol-, Triglyzerid-, HDL-Cholesterol-, und β-Lipoproteingehalt im Serum bestimmt, die Lipoproteine auf Agarose-Gel anhand densitometrierter Elektropherogramme analysiert und die Fredricksonschen Hyperlipoproteinämie- /HLP/ Typen determiniert.

Die Serum-Gesamtlipid-, Cholesterol-, Triglyzerid-, und /ß-Lipoproteinwerte sind beim Nephrose-Syndrom signifikant erhöht, die antiatherogene HDL-Cholesterolfraktion dagegen ist signifikant verringert. Serum-Cholesterol und -Triglyzerid korrelierten auf positiver Ebene signifikant mit der Proteinurie. Zwischen dem Serum-Gesamteiweiss- und dem -Triglyzeridspiegel war eine signifikant negative Korrelation nachweisbar.

Von den HLP-Typen kamen IIa und IIb in nahezu gleichen Verhältnis vor, während Typ IV /mit Hypertriglyzeridämie und VLDL-Lipoproteinerhöhung/ nur in zwei Fällen beobachtet wurde.

ARANKA LÁSZLÓ, F. KÓSA, ILONA ZILÁNYI, ÁGNES EGYED:
Erythrocyte enzyme allotypes in the X-linked recessive disorders, Duchenne muscular dystrophy and haemophilia-A hemizygotes and heterozygotes
Acta Paed.Hung. 26, 87-96, 1985. /English/

The erythrocyte enzyme-systems acid phosphatase, phosphoglucomutase, glutamate pyruvate transaminase, adenosine desaminase, adenylate kinase, glyoxase, glucose-6-phosphate dehydrogenase and esterase-D-isoenzyme phenotypes were studied for their percentile distribution and were compared with their incidence in the diseases with X-linked recessive heredity, Duchenne muscular dystrophy /DMD/ and haemophilia-A, in hemizygous male children and heterozygous mothers.

Considering the frequency distribution of the above mentioned isoenzyme phenotypes of the enzyme-systems in DMD, the phenotyped proved to be homogeneous, only the X transmitted 6-phosphogluco-

nate dehydrogenase /6-PGD/ isoenzyme types were found to be genetic markers in DMD hemizygotes and heterozygotes. In these genotypes the 6-PGD A phenotype showed a decrease while the phenotypes 6-PGD AB and B were significantly increased.

The adenylate kinase /AK/ 2-1 isoenzyme phenotype was increased to 25% against the population frequency of 6.34%, while the AK 1-1 phenotype occurred in 75% against its population frequency of 93.59%, showing a significantly decreasing tendency in haemophilia-A hemizygotes and heterozygotes.

ARANKA LÁSZLÓ, J. ZOMBORI, Z. HAVASS, J. HALÁSZ, SAROLTA KARCSU, MAGDA MÉSZÁROS, L. KLUJBER: Histochemichal and ultrastructural investigations, as diagnostic aid for Duchenne muscular dystrophy, for type IIb of hyperlipoproteinaemia /HLP/ and in the lymphocytes in the lysosomal enzymopathies

Clinical Genetics 28, 445, 1985. /English/

Muscle fibres of type 1 and 2 were distinguished through examinations of succinyl-dehydrogenase, NADH-diaphorase and ATP-ase /at pH 9.2, 4.6, 4.3/, lipid staining, van Giesen, and digested PAS techniques. The proportions of atrophic and hypertrophic muscle fibres were established in DMD cases. On the basis of the ultrastructural stage classification, Spearman rank correlations were calculated between the serum CK, the clinical stage and the duration of DMD. There were significant correlations between the proportions of atrophic and hypertrophic muscle fibres, and between the proportions of

atrophic fibres /types 1./ and the clinical stages.

In HLP IIb the hepatocytes were moderately swollen, their cytoplasm was vacuolated suggesting lipid content. The real level of the lipid storage was seen only in frozen section stained with oil red O. The crystals proved to be cholesterol ones under polarised light. On electronmicroscopy /EM/ the vacuoles and the crystals were limited by a trilaminar membrane. /Intracytoplasmatic myelin figures in the lymphocytes./

Pathological vacuole and inclusion body formation was observed in Gaucher disease, GM_2 gangliosidosis and in MPS /I.II./ in the cytoplasme of Ly.

MEGYERI PÁL, TURI SÁNDOR, FÜZESI KRISTÓF, TEKULICS PÉTER:

Sulfametoxasol-Trimethoprim /Sumetrolim/ kombinációval sikeresen kezelt krónikus granulómás betegség esetünk

Successful treatment of a chronic granulomatous disease with sulfamethoxasole-trimethoprim /Sumetrolim/. Case report.

Gyermekgyógyászat 36, 417-420, 1985. /Hungarian/

A case of chronic granulomatous disease present in form of repeated infections, septicemic states and acute abdomen has been reported. The negative NBT test and disturbance of the oxidative metabolism of neutrophil granulocytes confirmed the diagnosis. The administration of 15 mg/kg/day trimethoprim /Sumetrolim/ during the acute phase followed by the continuous

administration of 3 mg/kg/day trimethoprim resulted in a clinical state free of symptoms.

NÉMETH PÉTER, FÜZESI KRISTÓF, ALTORJAY ISTVÁN: 1971-82 között kongenitális hipertrófiás pylorus stenosis miatt kezelt betegeink

Report on the treatment of patients with connate hypertrophic pyloric stenosis between 1971 and 1982

Gyermekgyógyászat 36, 408-411, 1985. /Hungarian/

Because of connate hypertrophic pyloric stenosis 235 infants have been operated between 1971-82. By means of general anaesthesia and the known operation technique treatment of the connate anomaly will be successful. Radiological diagnosis during the second half of the analysed period has been used only occasionally. Case history, clinical and laboratory findings of salt- and fluid, as well as acid-base metabolism and palpation enable diagnosis and indication of the operation.

PÁL ATTILA, SALGÓ LÁSZLÓ, HAJDU JULIA, KOVÁCS LÁSZLÓ:

Az újszülött cardiális állapotának vizsgálata tokolytikus kezelést követően /kreatin-kináz MB frakciójának vizsgálata/

Untersuchung des kardialen Zustandes Neugeborener nach tokolytischer Behandlung. /Untersuchung der Kreatinkinase MB-Fraktion/
Gyermekgyógyászat 36, 515-519, 1985. /Ungarisch/

Autoren untersuchten in 13 Fällen die Aktivität der Kreatinkinase MB-Fraktion nach betasympathikomimetischer Behandlung im mütterlichem Serum, im Nabelschnurblut, sowie in, am ersten und fünften Lebenstag des Neugeborenen entnommenen Blutmustern. Die Bestimmung der Kreatinkinase MB-Fraktion wurde mit der SKI/CHEMIE Linz Eskachen CK'MB immunhemmenden Methode ausgeführt. EKG-Aufnahmen wurden unmittelbar nach der Geburt, sowie am ersten und fünften Lebenstag unternommen. Als Kontrollgruppe dienten 20 Frauen mit identischer Schwangerschaftslänge und deren Neugeborenen bei denen die gleichen Untersuchungen ausgeführt wurden. Es konnte keine signifikante Abweichung zwischen den zwei Gruppen festgestellt werden, weder mit Bezug auf die Kreatinkinase MB-Aktivität, noch bei Prüfung der EKG-Aufnahmen. Die Befunde wiesen nicht auf die fetale myokardiumschädigende Wirkung der betasympathikomimetischen tokolytischen Behandlung.

ILDIKÓ PETRI, ARANKA LÁSZLÓ, TIBOR BODROGI: An in vitro steroid sensitivity test: antibody-dependent cellular cytotoxicity /ADCC/ reaction of peripheral lymphocytes in children with nephrotic syndrome
Acta Paed.Hung. 26, 247-253, 1985. /English/

A steroid effect is described that can be measured in vitro;

this was determined by means of the antibody-dependent cellular cytotoxicity /ADCC/ method. Examinations on 15 children with nephrotic syndrome revealed a significant correlation between the steroid sensitivity measured in vitro and the clinical sensitivity to prednisolone. The in vitro measurement of steroid sensitivity yielded fast and reliable information on the effectivity of prednisolone treatment.

SZAMOSI TAMÁS, LÁSZLÓ ARANKA, SZOLLÁR JUDIT, SCHULER DEZSŐ:
Studies in chromosome instability syndromes: progeria, lipodystrophia, Cockayne syndrome, incontinentia pigmenti and Fanconi anaemia
Clinical Genetics 28, 1985. /English/

Spontaneous and Mitomycine /MCC/ induced chromosome breakage and sister chromatid exchange /SCE/ frequency were studied in two sibs with progeria, in one patient with lipodystrophia, in two brothers with Cockayne syndrome, in one case with incontinentia pigmenti and nine patients with Fanconi anaemia. Serum total cholesterol-, total triglyceride and high density lipoprotein cholesterol /HDL-C/ levels were measured in both progeria and Cockayne syndrome. Spontaneous and induced chromosoma aberrations proved to be increased only in Fanconi anaemia. Spontaneous SCE elevation was observed in lipodystrophia and Cockayne syndrome. A high frequency of induced SCE rate was found in incontinentia pigmenti, lipodystrophia and Cockayne syndrome. Serum HDL-C level was very low in both progeria and Cockayne syndrome.

SZTRIHA LÁSZLÓ, HAVASS ZOLTÁN: A kalcium-anyagcsere változása antiepileptikumokkal kezelt gyermekekben: fokozott renalis kalcium-reabsorptio

Change of calcium metabolism in children treated with antiepileptics: increased renal calcium reabsorption

Orv.Hetil. 126, 709-713, 1985. /Hungarian/

Calcium metabolism has been studied in children treated with antiepileptics as ambulant patients. Calcium level of serum did not show changes, alkaline phosphatase activity was higher in treated patients than in the controls. The parathormone level of the serum did not change in children treated with antiepileptics, however, the renal calcium reabsorption increased. Significance of the increased calcium reabsorption is discussed and the recent results concerning the effect exerted by antiepileptics on calcium metabolism are summarized.

LÁSZLÓ SZTRIHA, FERENC JOÓ, PÉTER SZERDAHELYI: Accumulation of calcium in the rat hippocampus during kainic acid seizures

Brain Research 360, 51-57, 1985. /English/

The change in the total calcium content of the rat hippocampus was investigated quantitatively and the sites of the accumulated calcium in the CA_1 region were demonstrated cytochemically by the oxalate-pyroantimonate technique 4 h following intraperi-

toneal kainic acid administration. Kainic acid was found to induce a significant increase in the total calcium content of the hippocampus /from 4.75 ± 0.39 to 6.64 ± 0.60 μmol/g dry weight/. Calcium accumulated mainly in the mitochondria of the neuronal somata, the dendrites and the synaptic terminals. Consequently, the degenerative alterations caused by kainic acid are associated with intracellular calcium accumulation, which can overload the capacity of the mitochondria for calcium sequestration, and may have a role, besides other factors, in the development of neuronal damage.

LÁSZLÓ SZTRIHA, FERENC JOÓ, PÉTER SZERDAHELYI, ZOLTÁN LELKES, GÉZA ÁDÁM: Kainic acid neurotoxicity: characterization of blood--brain barrier damage

Neuroscience Letters 55, 233-237, 1985. /English/

The alterations in the water, sodium /Na/ and potassium /K/ contents of the frontoparietal cortex, hippocampus and thalamus as well as the protein permeability of the blood-brain barrier were investigated in rats 4 h after systemic kainic acid administration. Increases in the water and Na contents and a decrease in the K content were observed together with Evans blue extravasation in the thalamus area indicating the development of vasogenic brain edema. Changes observed in the ion contents of the frontoparietal cortex and hippocampus may be due to a general cell membrane permeability damage but are not caused by a primary disturbance of the blood-brain barrier.

SZTRIHA LÁSZLÓ, NÉMETH ILONA: Az enzimindukció vizsgálata antiepileptikumokkal kezelt gyermekeken

Study of enzyme induction in children treated with antiepileptics

Orv.Hetil. 126, 317-320, 1985. /Hungarian/

To determine the characteristics of enzyme induction the authors have studied the discharge of d-saccharic acid, activity of serum gamma-glutamil transpeptidase and the half-life of antipyrin in children treated with antiepileptics. Enzyme induction is verified by significant increase of d-saccharic acid and gamma-glutamil transpeptidase activity, furthermore by decrease of the half-life of antipyrin. On the effect of antiepileptics the ability of non-specific drug metabolism of the liver is enhanced in childhood, influencing the therapeutic effect of antiepileptics and other drugs given in combined form. The authors review the childhood characteristics of drug metabolism, the significance of the environmental factors and genetically determined enzyme polymorphism, emphasizing the necessity of the individual dosage.

SZTRIHA LÁSZLÓ, SALGÓ LÁSZLÓ: A réz, a coeruloplasmin és a cink szérum-szintjének változása antiepileptikumokkal kezelt gyermekekben

Changes of copper-, ceruloplasmin-, and zinc level of the serum in children treated with antiepileptics

Orv.Hetil. 126 835-836, 1985. /Hungarian/

The authors studied the copper-, ceruloplasmin-, gamma-glutamyl-transferase-, glutamic acid-oxaloacetic acid-transaminase-, glutamic acid pyruvic acid-transaminase-, and zinc serum level in children treated with different antiepileptics of enzyme inductor effect. In the course of antiepileptic treatment the serum level of zinc, ceruloplasmin, gamma-glutamyl-transferase and copper rose. The elevation of ceruloplasmin and gamma-glutamyl--transferase may be the consequence of enzyme induction.

SZTRIHA LÁSZLÓ, TORNYOS SZABOLCS, FÜZESI KRISTÓF, HARMAT GYÖRGY, VRANEK IBOLYA: Tapasztalatok tartós liquor-elvezetéssel agykamrai vérzésben szenvedő koraszülötteken

Experiences with continuous liquor drainage in premature infants suffering from ventricular bleeding

Orv.Hetil. 126, 969-972, 1985. /Hungarian/

The authors report on their experiences gained with continuous liquor drainage in premature infants suffering from ventricular bleeding. Drainage of the liquor was started at the appearance of progressing hydrocephalic symptoms at the age of 25-60 days and mantained for 8-42 days. Of six patients valve implantation was unnecessary in 1 case, ventriculoatrial valve had to be implanted in 3 patients, 2 patients died of infection. One patient showed normal psychosomatic development, the development slowed up seriously in the second one and at a medium degree in the

third patient and severe impairment of the nervous system was found in the fourth infant. The catheter placed in the subcutaneous tunnel ensures for a long time safe drainage of the liquor. Continuous liquor drainage often appears to be only possibility of transitory treatment of posthemorrhagic hydrocephalus of premature infants being usually in serious state.

SZÜTS PÉTER, SZABÓ IDA, ILYÉS MÁRIA: Schwachman-Diamond-szindróma két esete

Two cases of Schwachman-Diamond syndrome
Gyermekgyógyászat 36, 303-306, 1985. /Hungarian/

The Schwachman-Diamond syndrome was observed in two patients. Malabsorption symptoms, neutropenia and decreased chemotactic responsiveness are based on the functional disturbance of the exocrine pancreas. The clinical picture is similar to that of mucoviscidosis, the electrolyte content of sweat is however normal. Numerous other alterations can be observed, e.g. ossification disorders, suppurative and mycotic infections of the skin and mucosa. The patients require continuous care.

TOLDI ZOLTÁN, GYURKOVITS KÁLMÁN: Corinfar hatása a hisztaminnal, illetve acetilkolinnal kiváltott hörgőgörcsre

Effect of Ca^{++} channel blocking agent /Corinfar/ on the histamine or acetylcholine induced bronchospasm
Orv.Hetil. 126, 1277-1279, 1985. /Hungarian/

Before and after administration of the Ca^{++} channel blocker Corinfar /nifedipine/, bronchial provocation tests were performed in asthmatic children displaying an enhanced respiratory sensitivity to histamine and acetylcholine aerosols. The capnographic results revealed full protection against the effect of histamine aerosol from a single oral dose of Corinfar in 4 out of 17 cases, and partial protection in 10 out of 17 cases. The corresponding data for acetylcholine were 5 and 7 out of 17 cases, respectively. Thus, Corinfar exerts a significant protective effect against both types of provocation. The lower sensitivity of spirometry than that of capnography meant that, altough moderate protective effects could be demonstrated, these were not mathematically significant. The Ca^{++} channel blockers may be useful ancillary agents in the complex treatment of patients with bronchial hyperreactivity, partly because they decrease the bronchial smooth muscle spasm, partly because they inhibit the release of active mediators.

TURI SÁNDOR, BELCH J.J.F., BEATTIE T.J.: Szérum prostaglandin metabolitok változása Schönlein-Henoch purpurában

Changes of serum prostaglandin metabolites in Henoch Schonlein vasculitis

Orv.Hetil. 126, 1901-1904, 1985. /Hungarian/

The ability of plasma to support PGI_2-like activity from human umbilical arterial rings /PSA/ was studied in 17 children with

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Henoch Schonlein Vasculitis /HSV/ and 17 age and sex matched controls. Plasma from 13 out of 17 HSV patients showed a diminished or absent ability to support PGI_2-like activity in vitro. Six HSV patients who had very low or absent levels of PSA showed evidence of inhibitory activity. Plasma from three of these patients also failed to preserve the effect of the stable PGI_2 analogue /ZK 36-374/. The plasma concentration of prostacyclin metabolite /PGI_2m/ and the serum level of thromboxane A_2 metabolite /TxB_2/ were measured simultaneously. The concentration of plasma PGI_2m in 10 out of 14 HSV patients was decreased and a positive correlation was found between PSA and PGI_2m values. There was no significant difference in serum TxB_2 concentrations between the HSV patients and controls. These data suggest that abnormalities of vascular prostaglandin metabolism are involved in HSV.

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