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The serial report contains abstracts in scientific disciplines regarding China.
JPRS 69016
28 April 1977

PEOPLE’S REPUBLIC OF CHINA SCIENTIFIC ABSTRACTS
No. 167

This serial publication contains abstracts of articles published in selected scientific and technical journals. JPRS is unable to honor requests for original source materials or information as to the availability of full translations of these articles.

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CHEMISTRY BULLETIN

AUTHOR: None

ORG: Honan I-yang Hsien Planning Committee's Humate Fertilizer Office and Peking Normal University's Department of Chemistry

TITLE: "Production of Ammonium Humate Fertilizer by the Use of Carboxylate Aqueous Ammonia Under Dry Condition"


ABSTRACT: This article reports a research on the production of ammonium humate fertilizer by dry carboxylation and ammoniation of weathered coal. The process involves compound reactions between carbonate ions in aminating agents and calcium and magnesium humate in weathered coal to form sparingly soluble calcium and magnesium salts, which in turn liberate humic acid to react with ammonia to form soluble ammonium humate fertilizer. The construction and performance of two amination furnaces, advantages of the process, and specifications of the product are also introduced and discussed.

AUTHOR: None

ORG: Hunan Shao-yang District Agricultural Institute

TITLE: "Blue Film for Seedling Cultivation"


ABSTRACT: This article reports a three year comparative study on the effect of red, green, blue and colorless film cover on seedling growth. It was found that while all colored films give better result than colorless film, blue film is superior to all other colored film on account of its affording faster rise in temperature, better heat retention, and less temperature variations, which are all factors beneficial to stronger and better quality seedling formation and growth. The average increase in yield for blue film is found to be 3.5 - 5.4%.
AUTHOR: None

ORG: Cracking Catalyst Research Group, Institute of Petroleum Refining and Petrochemicals' Second Laboratory

TITLE: "Successful Development of New Types of Zeolite Fluid Cracking Catalysts for Heavy Oil Conversion"


ABSTRACT: This article reports successful development in China of some new types of rare earths zeolite fluid cracking catalysts for heavy oil conversion process, which are superior in activity, stability, selectivity and anti-abrasion properties in compared to those of amorphous silica-alumina catalysts. Three tables are included to show their properties, stability, and a comparison of their industrial operating results against those using amorphous silica-alumina catalysts.

This paper was received for publication on 17 May 1976.

AUTHOR: None

ORG: Tsinghai Institute of Saline Lake's Fifth Laboratory, Chinese Academy of Sciences

TITLE: "Recovery of Iodine from Brine by Chlorine Water Oxidation and Ion-exchange Resin"


ABSTRACT: This article reports a study on the recovery of iodine from brine by chlorine water oxidation and ion-exchange resin. It was found that the weaker, low concentration chlorine water oxidation of iodine-containing acidulous or alkalescence brine in liquid phase will avoid local peroxidation of iodic ion into iodate instead of free iodine, and that a maximum 85% oxidized free iodine can be obtained if the oxidation potential is controlled within 500-540 mV. It is reported that the technique is now being applied in the recovery of iodine from brine, oil field water and gas field water.

This paper was received for publication on 16 December 1975.
AUTHOR: None

ORG: Laboratory of Structure of Matter and Catalysts, Department of Chemistry, Kirin University

TITLE: "Investigation of Catalysts for the Production of Acetaldehyde by Heterogeneous Phase Chlorization of Ethylene"


ABSTRACT: This article reports a study on the catalyst Pd(0.05%)-V_2O_5(20%)-Ti(2.4%) for applications in the production of acetaldehyde by heterogeneous catalytic oxidation of ethylene. The results tabulated in 3 tables show that the catalyst has very high activity in the reaction, is structurally stable and non-corrosive, requires very little noble palladium, and is simple to prepare and regenerate. A comparison is also made on the properties and results of this catalyst and that produced by Union Carbide of USA.

This paper was received for publication on 14 May 1976.

AUTHOR: None

ORG: Institute of Chemistry, Chinese Academy of Sciences

TITLE: "Silicon Moulding Compounds for Semiconductor Devices' Encapsulation"


ABSTRACT: This article reports successful development of an organosilicon thermosetting plastic moulding compound for the encapsulation of semiconductor devices. The compound is composed mainly of organosilicon resin, filler, coloring agent, catalyst, and calcium stearate as demoulding agent. The parameters of the resin are: R/Si = 1.10-1.50, Ph/R = 30%, hydroxy content = 3.5-5%, and monomer: toluene: water = 1:2:4. The principal physical properties and advantages of the plastic are also given. The plastic compound is now being adopted in various chemical plants concerned with satisfactory results.

This paper was received for publication on 4 May 1976.
AUTHOR: None

ORG: Kiangsi Tzu-ch'i Hsien Pesticide Plant

TITLE: "Orthene - A New Pesticide"


ABSTRACT: This article reports successful development of a simple and economical process to synthesize a new pesticide called "Orthene" or "Acephate" abroad. The process includes the synthesis of 0, 0-dimethyl N-acetothiophosphamide from 0, 0-dimethylthiophosphamide, an intermediate product from methylphospham production, using acetic anhydride as the acylating agent, sulfuric acid as the catalyst, and carbon tetrachloride as the solvent. The product is then inverted under the catalysis of dimethyl sulfate into its isomer, or 0, S-dimethyl N-acetophosphamide, or orthene. The process has been applied to industrial scale production with satisfactory result since the completion of its development in 1975.

This paper was received for publication on 10 May 1976.

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AUTHOR: None

ORG: Specialty of Automatic Process Control for Chemical Engineering, Shanghai Institute of Chemical Engineering

TITLE: "Data Processing of Chromatographic Analysis by Electronic Digital Computer"


ABSTRACT: This article reports a development of the data processing technique by electronic digital computers for chromatographic analysis in chemical and petroleum industries. Model JS-10A industrial control machine made by Shanghai Regulator Plant was used in the development, which will automatically process the data of the chromatographic analysis, calculated the percentage of each component, and expressed the percentage on direct reading device. An industrial control machine can control many chromatographic analysis simultaneously. The principles of such data processing, programming, and checking of results are introduced in detail.

This paper was received for publication on 12 March 1976.
AUTHOR: None

ORG: Shanghai Chia-ting Hsien Ma-lu Chemical Plant and Shanghai Normal University's Department of Chemistry's Pesticide Research Group

TITLE: "Trial Production of Ethyl Chlorophenamidine Insecticide"


ABSTRACT: This article reports a trial production of ethyl chlorophenamidine insecticide, in an effort to replace the current chlorophenamidine, since the raw material p-nitroethylbenzene for the former, a byproduct of chloromycin production can readily be supplied by the Sixth Shanghai Pharmaceutical Plant. The process involves reduction of p-nitroethylbenzene into p-ethylphenylamine, the condensation of p-ethylphenylamine with dimethylformamide into an intermediate, and the chlorization of the intermediate into ethyl chlorophenamidine. The preparation, specification and effectiveness of the product are also described. The product is supplied in 25-27% aqueous solution form.

This paper was received for publication on 3 March 1976.

AUTHOR: CHANG Chu-chun [4545 4554 0689]

ORG: Department of Chemistry, Northwestern University

TITLE: "Application of Chemiluminescence Analysis in Air Pollution Research"


ABSTRACT: Following an introduction to the principles of chemiluminescence, and the advantages of applying the technique to monitor air pollution, the author reviews some application of chemiluminescence to the monitoring of air pollution, which includes: 1) analysis of ozone by chemiluminescence reaction with rhodamine B-nutgall acid and by gaseous chemiluminescence reaction with ethylene; 2) analysis of nitrogen oxide by gaseous chemiluminescence reaction with ozone, and by flame chemiluminescence reactions; and 3) analysis of nitrogen dioxide and hydrogen sulfide by flame chemiluminescence. The basic principles, procedure and apparatus for each case are described and illustrated.
AUTHOR:  NANG K'ai-hua [0589 0418 5478]

ORG:  Department of Chemistry, Nan-k'ai University


ABSTRACT: The author discusses the problems of "reversible and irreversible cycle", "dissipation and aggregation of energy" and others in the Second Law of Thermodynamics from the standpoint of the Law of the Unity of Opposites, and concludes that Clausius in his theory of "Heat Death of the Universe" failed to recognise the truth of the "unity of opposites" by wrongly considering or interpreting all the terms concerned as being absolute.

AUTHOR:  HSIUNG Han-chin [3574 3352 4897]

ORG:  Kiangsi Chemical Fiber Plant's May 7th School

TITLE:  "Correct Evaluation of the Second Law of Thermodynamics"


ABSTRACT: The author argues that despite the failure of the second law of thermodynamics to explain the spontaneous decrease of entropy, the variability of heat and other movements, and the reversibility of entropy and other spontaneous processes, one should not ignore the contributions of the second law of thermodynamics to human progress, and the lack of scientific knowledge in many respects at the time of its founding. In conclusion, the importance of applying the law of the unity of opposites to correctly evaluate and interpret the second law of thermodynamics is stressed.
AUTHORS: SHEN Chih-yuan [3088 5268 6678]  
CHIANG Kuo-p'ing [1203 0948 1627]  

ORG: Both of Chekiang University  

TITLE: "What's Wrong with the Theory of 'Heat Death of the Universe'? - With a Comment on the Second Law of Thermodynamics"  


ABSTRACT: The authors point out that although the idealistic theory of "Heat Death of the Universe" was based basically on the "energy degradation" of the second law of thermodynamics, it is a mistake that critics of the theory have simultaneously criticized and discredited the substance of the second law of dynamics. It is stressed that the law, similar to all other laws, has its limitations and specific range of applications, and that one cannot on account of their limitations ignore and discredit its definite positive contribution to human progress.  

AUTHOR: Miscellaneous  

ORG: This Journal  

TITLE: "Comments on Papers Criticizing "Heat Death" and Discussing the Second Law of Thermodynamics"  

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese No 4, 23 Jul 76 p 47  

ABSTRACT: This article publishes 3 letters to the editor from readers suggesting: 1) clearer clarification of the relationship between the theory of "death heat of the universe" and the second law of thermodynamics; 2) more publications of short, brief, clear-cut and sharp articles on the discussion; 3) discussion be more comprehensive and conclusive; and 4) discussions be concentrated on concrete examples for easier understanding aiming at helping the correct teaching of the second law of thermodynamics.
AUTHOR: CH'EN Ju-yu [7115 5423 3768]

ORG: Institute of Elemental Organic Chemistry, Nan-k'ai University

TITLE: "Recent Progress in Research of Herbicides"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese
No 4, 23 Jul 76 pp 48-56, 27

ABSTRACT: The author reviews recent advances in herbicides under the
categories of diphenyl ketone derivatives, dinitrophenylamine derivatives,
substituted ureas, heterocyclics, amino formates, amino thioformates,
organophosphates, amides and diaryl ethers. A discussion is finally
made on the mechanism of herbicidic actions in inducing abnormal plant
growth and inhibiting photosynthesis, as well as some existing problems,
and trend of future development.

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AUTHOR: None

ORG: Lanchow Institute of Chemistry and Physics, Chinese Academy of
Sciences

TITLE: "Micro-catalytic Reactor-gas Chromatographic Setup for the
Investigation of the Catalytic Oxidative Dehydrogenation of Butylene"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese
No 4, 23 Jul 76 pp 57-59, 27

ABSTRACT: This article reports successful development of a set of appara-
tus and technique for a combined micro-catalytic reactor-gas continuous
flow/pulse chromatographic analysis of butylene catalytic oxidative
dehydrogenation, using industrial P-Mo-Bi/SiO₂ as the catalyst. The
technique is characterized by premixing of air and butylene at the
molar ratio of 8.8-1, control of moisture butylene ratio by a moisture
saturator at definite temperature, and the use of six-way valves for
simultaneous pulse experiments. The reproducible results show that the
apparatus and technique are both reliable. The flow diagram, procedure
and experimental results are described and summarized in 5 diagrams and
2 tables.
AUTHOR: YANG Ch'un-jung [2799 2504 2837]

ORG: Shanghai Chemical May 27th Workmen University

TITLE: "Boron Nitride - A New Type of Inorganic Synthetic Material"


ABSTRACT: This article introduces the general knowledge concerned with the preparation, properties, processing and applications of hexagonal boron nitride, cubic boron nitride, and boron nitride fibers.

AUTHOR: HSING Jun-ch'uan [6717 3387 1557]

ORG: None

TITLE: "Some Records about Petroleum in Ancient China"


ABSTRACT: The author reviews 33 ancient Chinese recordings concerned with the discovery, properties and applications of petroleum, which indicated that petroleum was first recorded as early as the Han dynasty, that petroleum was discovered in Shensi, Kansu, Sinkiang, Szechwan, Kwangtung, Taiwan, Chekiang, Anhwei and Liaoning districts, and that petroleum was utilized and stored in Sung dynasty, and large scale drilling of petroleum occurred in Ming dynasty under government supervision.

The materials of this article was supplied by Yang Ken [2799 2704] and Kuo Meng-wu [6753 1125 2976] of Tsinghua University.
AUTHOR: None

ORG: This Journal

TITLE: "Open-door Scientific Research"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese No 4, 23 Jul 76 cover 2

ABSTRACT: This cover reproduces 5 photographs concerned with open-door scientific research, namely: 1) Ta-ch'ing Oil Field Scientific Research Design and Planning Institute developed a chemical dewax agent; 2) oriented detonation experiment on a new, cheap explosive developed by the Lanchow Institute of Chemistry and Physics (CAS); 3) 2732 Institute of Chinese Academy of Sciences developed a Black-white standard density plate as a photo-sensitivity measurement standard; 4) Institute of Chemistry of Chinese Academy of Sciences demonstrating how to repair tractor cylinders with adhesives; and 5) Hunan Hua-yung Hsien Agricultural Office analysing soil samples.

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CSO: 4009/51
CHEMISTRY BULLETIN

AUTHORS: LIU Ch'un-yun [0491 2504 5686]
          YIN Yu-ying [1438 3768 5391]

ORG: Inner Mongolia Engineering College Inorganic Chemistry Major

TITLE: "Extraction of Humic Acid by Means of Sodium Carbonate or Natural Alkali"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese
         No 5, 23 Sep 76 pp 12-14

ABSTRACT: The authors report a study on the use of sodium carbonate or natural alkali to replace sodium hydroxide in the extraction of humic acid from efflorescent coal. It is found that the rate of extraction of humic acid from three types of efflorescent coal and a mixture of wood and grass ash by sodium carbonate or natural alkali can be 15-20% higher than by sodium hydroxide with less ash, if the humic acid in the efflorescent coal or ash is present in the form of calcium humate instead of free humic acid. The chemical reactions involved in each case are explained and discussed. The results are illustrated in 4 graphs and 2 tables. This paper was received on 28 May 1976.

AUTHOR: None

ORG: Shansi Institute of Fertilizer and Pesticide

TITLE: "The Nitrification Inhibitor 2, 5-Dichloronitrobenzene"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese
         No 5, 23 Sep 76 p 15

ABSTRACT: This article reports successful development of 2, 5-dichloronitrobenzene, a new, economical nitrification inhibitor, after two years of laboratory and field experiments. The process involves simply the nitric acid nitrification of p-dichlorobenzene, a byproduct of pesticide industry, in the presence of sulfuric acid. Field demonstration proves that, when applied the inhibitor with chemical fertilizer at the ratio of 2-3% of the nitrogen content of nitrogen fertilizers, the crop yield has further increased by 10-20%.

This paper was received for publication on 17 November 1975.
AUTHOR: None

ORG: Peking Walking Tractor Plant

TITLE: "Applications of Engineering Plastics in Walking Tractor"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese No 5, 23 Sep 76 pp 15-17

ABSTRACT: This article reports the replacement of many metal parts in model Kungnung-12 walking tractors by engineering plastic materials, which includes: 1) polypropylene, butylbenzenenitrile, phenolformaldehyde etc. in such external structural parts as handles, filters, etc. where resistance to ageing is of more concern than strength; 2) glass fiber reinforced nylon, polyformaldehyde, polycarbonate and polysulfone in diesel engine internal parts for wearability; and 3) phenolformaldehyde and reinforced nylon 6 in certain diesel engine parts for resistance to high temperature. In addition, many other new related technology have also been developed and successfully applied.

AUTHOR: WEI Chen-wu [7614 2182 2976]

ORG: None

TITLE: "Hydrochemistry and Earthquake"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese No 5, 23 Sep 76 pp 18-21

ABSTRACT: This item is being translated in full by JPRS. (See CSO: 8111/0671, 15 Feb 77). The article deals with the relationship of changes in the physical phenomena and chemical composition in various types of ground water to earthquake as evidenced by the many earthquakes occurred in China in recent years. The methods for analysing the chemical composition in water are also introduced.
AUTHOR: None

ORG: Szechwan Institute of Chemical Technology

TITLE: "One-step Process of Preparing Sodium Sulfide by Reducing Sodium Sulfate with Natural Gas"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese No 5, 23 Sep 76 pp 22-23

ABSTRACT: This article reports successful development of an one-step process for the direct preparation of solid sodium sulfide by reducing Glauber salt with natural gas at 630°C to replace the current reduction with coal at 1000°C. The product so obtained has a sodium-sulfide content of 62-64%, Glauber salt utilization rate of 90-92%, and can be used in cultural paper manufacture. The lower temperature gaseous reduction thus provides a shorter and more economical process with simpler equipment for sodium sulfide manufacture, and may lead a new project for the production of caustic soda, sulfur and sulfuric acid. The experiments were conducted at the Kuang-han Nitrogen Fertilizer plant.

This paper was received for publication on 17 May 1976.

AUTHOR: None

ORG: Steroid Hormone Research Group, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences

TITLE: "Total Synthesis of the Oral Contraceptives D-Norgestrel and D-18-Methylnorgestrienone"


ABSTRACT: This article reports a total synthesis of the oral contraceptives D-norgestrel and D-18-methylnorgestrienone, which are being widely adopted in China since 1969. The synthesis involves an unsymmetrical reduction of an intermediate of D-norgestrel with Saccharomyces Cerevisiae Hansen, and then acylated with various acylating agents to obtain the products. The yield is found to range from 78.5% to 89.93% according to different acylation approach.
AUTHOR:  None

ORG:  Tientsin Synthetic-Resin Plant and Macromolecular Teaching and Research Laboratory, Department of Chemistry, Hopeh University

TITLE:  "Phenylphenal-formaldehyde Resin as a Moulding Adhesive"


ABSTRACT:  This article reports development of a phenylphenol-formaldehyde resin as a moulding adhesive to replace the furan I and furan II resins currently used in China. The process involves a preliminary polymerization of phenylphenol and formaldehyde at definite temperature and time, neutralization with hydrochloric acid to definite pH, addition of urea and formaldehyde to denaturize, further polymerization at boiling temperature, and final dehydration and alcohol dilution to obtain the product. The rate of setting, viscosity and others are found to be within specifications.

This paper was received for publication on 17 May 1976.

AUTHOR:  None

ORG:  Hupeh Institute of Chemistry

TITLE:  "High Efficiency Catalyst in the Synthesis of Epichlorohydrin Elastomer"

SOURCE:  Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese No 5, 23 Sep 76 pp 27-29

ABSTRACT:  This article reports a joint research conducted by the Hupeh Institute of Chemistry, Wuhan Institute of Synthetic materials, and 17th Plastic Plant on high-efficiency catalysts for epichlorohydrin elastomer synthesis. It was found that a three component catalyst composed of N-cyclohexanyl-2-benzotheasulfinylamide, tri-isobutylaluminum and 100% normal phosphoric acid at definite ratios, and polymerized at about 70°C for 4 hours gave a yield of more than 95%, which is 8 times more efficient than the other current catalysts. The quality of the elastomer so catalyzed was also found to be superior to those using other catalysts.
AUTHOR: None

ORG: Szechwan Institute of Yung-ch'uan Natural Gas and Chemical Engineering

TITLE: "Pilot Plant Experimentation for Production of Hydrocyanic Acid by Flame Method"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese No 5, 23 Sep 76 p 30

ABSTRACT: This article reports a pilot plant experiment for the production of hydrocyanic acid by the flame method. The optimal conditions were found to be: Methane: ammonia = 3, oxygen = 37.5%, reaction pressure = 0.65 kilogram/square centimeter, reaction temperature after quenching = about 600°C, and normal operation = 34 days. The yield was 55.72%. The tail gas was also being utilized to synthesize ammonia. The sewage was subjected to a basic chlorization treatment for toxic removal.

This paper was received for publication on 15 May 1976.

AUTHOR: None

ORG: First Synthetic Workshop of Peking Pharmaceutical Plant, and Department Of Pharmacology of Peking Medical College

TITLE: "Research on Manufacture of Hustazol -- Study on the Optimum Condition of Reduction Reaction"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese No 5, 23 Sep 76 pp 31-33, 42

ABSTRACT: This article reports a study on the optimal reduction conditions in the production of Hustazol. By tabulating the experimental results in an orthogonal table L_{16}(4^4 \times 2^3), the optimal conditions for the reduction reactions are: 1) temperature: 120-125°C; 2) reaction time: the longer the better; 3) zinc powder: 4-chloro-diphenyl ketone; 1: 1.4; and 4) addition of zinc powder starts from 110°C and finishes within one and half hour. Although experimentally, the Hustazol content was above 96%, and the yield above 94%, industrial scale production were much lower. The results of the experiments were tabulated in 6 tables and one diagram.

This paper was received for publication on 31 May 1976.
AUTHORS: LIU Chia-ming [0491 0163 6900]
LIN Hsiao-jung [2651 1420 2837]

ORG: Both of Department of Chemistry, Fukien Normal College

TITLE: "Utilization of Fluosilicic Acid Waste Liquor"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese
No 5, 23 Sep 76 p 34

ABSTRACT: The authors propose 5 propositions for the utilization of
fluosilicic acid-containing wastes from Hua-an Hsien's calcium super-
phosphate fertilizer production process, namely: 1) leading the flue
gas into a water pool, and precipitate calcium fluoride with lime for
further treatment to obtain chemical reagents; 2) treatment of sewage
with sodium hydroxide to obtain sodium fluosilicate; 3) treatment of
the precipitating pool with sodium hydroxide to obtain water glass;
4) utilization of sewage from nearby sulfuric acid plant and paper mills
for the above mentioned sulfuric acid and sodium hydroxide treatment;
and 5) allow the sodium fluosilicate byproduct to react with peat to
produce a hormone-insecticide compound for local farms.
This paper was received for publication on 20 January 1976.

AUTHOR: SHEN Hung-k'ang [3088 1347 1660]

ORG: Department of Chemistry, Hopeh University

TITLE: "Application of the Theory of Soft-hardness of Acids and Bases
in Organic Chemistry"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese
No 5, 23 Sep 76 pp 35-42

ABSTRACT: The author introduces some applications of the theory of
soft-hardness of acids and bases in organic chemistry, namely: 1)
interpretation of organic compounds as acid-base complexes; 2) explaina-
tion of the stability of organic compounds; 3) explanation of the
chemical activity of organic compounds; 4) estimation of the influence
of symbiotic effect on speed of reactions; and 5) some modern research
on various organic reactions. It is concluded that the theory still
remains to coordinate with thermodynamics, dynamics and quantum
mechanics to quantitatively calculate all the data obtained.
AUTHORS: TSOU Ai-min [6760 1947 3046]
CHANG Kuo-hsiung [1728 0948 7160]
WANG Hou-chi [3076 0624 1015]

ORG: All of Shanghai Institute of Metallurgy, Chinese Academy of Sciences

TITLE: "Preparation, Characteristics and Application of Silver Sulfide Pressed Pellet Membrane Electrode"


ABSTRACT: The authors report a preparation of Ag₃S pressed pellet ion-selective electrodes, a study on its response to Ag⁺ and S²⁻ ions and its pH range, and the lower limits of Ag⁺ and S²⁻, which were found to be 1 x 10⁻⁷M and 5 x 10⁻⁴M respectively; and its application to the continuous titration of I⁻, Br⁻ and Cl⁻, and the determination of Ag in pure Pb.

The authors express thanks to the Physic Laboratory for assistance.

This paper was received for publication on 25 November 1974.

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AUTHOR: TENG T'ung-chou [6772 0681 5297]

ORG: Shansi Ch'ang-chih Hung-hsing Machinery Plant

TITLE: "Two Graphs of Calculation"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese No 5, 23 Sep 76 pp 47-48

ABSTRACT: The author introduces two graphs for the easy conversion of hydrogen ion concentration to corresponding pH, and the preparation of buffer solutions to desired pH. Examples are given for the actual calculations and the use of the graphs.
AUTHOR: LUNG Yao-t'ing [7893 5069 1656]

ORG: Institute of Environmental Chemistry, Chinese Academy of Sciences

TITLE: "Combined Analytical Technique of Gas Chromatography with Infrared Spectrometry"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese No 5, 23 Sep 76 pp 49-54, 30

ABSTRACT: Following an introduction to the development and advantages of the combined gas chromatographical and infrared spectrometrical analytical technique in the determination of multiple unknown components, or compounds of very high purity, especially in the analysis of environmental samples, the author reviews recent advances in the combined GC/IR analytical technique on the basis of the so-called "on-the-fly" analytical technique, with regard to the construction and performance of gas chromatography and infrared spectrometry in combination, the technique of combined GC/IR operation, the technique of sample collection, examples of its application, and the trend of its future development.

AUTHOR: None

ORG: Inorganic Chemistry Section, Department of Chemistry, Nanking University

TITLE: "Electronic Theory and Soft-Hardness of Acids and Bases(I)"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese No 5, 23 Sep 76 pp55-60, 17

ABSTRACT: Following a review of the development of the various theories of acids and bases since the later 19th century, this section of the article introduces the principles of the electronic theory of acids and bases, which explains more satisfactorily than the other theories the ranges of acids and bases, the mechanism of the reactions between acids and bases, as well as their oxidation and reduction processes. The article is to be continued.
AUTHOR: None

ORG: This Journal

TITLE: "Answer to Questions on Earthquake"

SOURCE: Peking HUA-HSUEH T'UNG-PAO [CHEMISTRY BULLETIN] in Chinese No 5, 23 Sep 76 p 61

ABSTRACT: This article answers two questions on earthquake from readers, namely: 1) the changes of pre-earthquake ground water chemical composition include those of radon, oxygen, carbon dioxide, sulfate ions, bicarbonate ions, nitrate ions, nitrite ions, fluoride ions and soluble silicic acid levels, resulted mainly from terrestrial stress; and 2) the reasons why changes of radon level in ground water is an important pre-earthquake omen.

11,206
CSO: 4009/62
Title: "Clinical Observation of 414 Cases of Severe Burn Treated with Combined Traditional Chinese Medicine and Western Medicine"

Source: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 11, 15 Nov 76 pp 675-678

Abstract: From October 1969 to December 1975, 414 cases of severe burns were treated with combined Traditional Chinese and Western Medicine. Burn surfaces varied from 30% to 100%. The depth of burn was mainly superficial second degree in 139 cases and deep second degree to third degree in 275 cases. On admission 100 were already in shock. Early prevention and treatment of shock in 234 early admissions included: ingestion or injection of Chinese anti-shock herb medicine compound (composed of polygonum orientale, aralia edulis, paonia ruba, bark of paenon, cornus officinalis, kedusa chinensis, polygala tenuifolia, lothatherum grecile, alisma plantago, campanulae pilosula, rahmannia glutinosa, dendrobium moniliforme, ophiopogon japonicus, rhamnus soperiferus, astragalus hiroshimanus, honey suckle); use of pulse restoring injections (composed of jenseng, cyrus longus, ophiopogon japonicus, kedusa chinensis); oral ingestion of burn solution (composed of sodium chloride, sodium bicarbonate, barbital and glucose); external application of Chinese herb medicine. With this regimen, intravenous fluid replacement was not needed in 167 cases, including 44 cases with burn surfaces of over 51%. In 117 cases intravenous infusions were required which included colloids and crystalloids. Four patients died of shock.

General support was given to support the positive and remove noxious elements' and to control and prevent infection. It included early control of fluid exudation, increase body resistance with anabolic agents, gamma globulin, vitamins,
and repeated small fresh blood transfusions; mobilize internal body factors with herb medicine by dialectical analysis; proper use of antibiotics; proper managements of wound surfaces; adequate nursing care. In the whole group of 414 cases, 62 cases with fresh superficial second degree wounds healed in an average of 17.9 days; 125 cases with fresh deep second degree or third degree wounds healed in an average of 46.8 days. Septicemia occurred in 33 cases with 28 deaths.

The wound surface was treated generally by the following three methods: 1. Fresh second degree or small third degree burns: analgesia, drying, antibacterial agents, promote tissue growth and use of herb medicine ointment dressing. The herb medicine contained Borneo camphor, rhubarb, sanguisorba officinalis, gallae japonicus, calamina, cera flava. 2. Fresh third degree and massive second degree burns: drying, remove noxious elements, antibacterial agents, control of scab. Tr. scab control (ligustrum japonicum, Borneo camphor) or scab control powder (indigotin, sanguisorba officinalis, evodia glouca) were used to control the scab. 3. Infected wound surfaces: according to the necrotic and infectious conditions, use scab control ointment dressings and skin grafts. The advantage of scab control was that it prevented the usual scab destruction, protected the wound and allowed controlled excision and skin graft.
AUTHOR: None

ORG: Burn Research Section, Chinese People's Liberation Army, Peking

TITLE: "Proceed Along the Path of Combined Traditional Chinese and Western Medicine --- Practice and Apprehensions of Combined Traditional Chinese and Western Medicine in the Treatment of Burns"


ABSTRACT: Over 5,000 cases of burn have been treated in the past few years. Gradual improvements were made over the years. Burn medicine No. 1, No. 2, and No. 3 were created. No. 1 was used mainly on fresh wounds; No. 2 mainly on infected wounds, but also good for fresh wounds. The wound was first irrigated with 0.1% furacilin, sprayed with local anesthetics, and then sprayed with No. 1 or No. 2 burn medicine. The wound was left exposed. After about half an hour, a protective thin membrane was formed. Spraying was repeated every two hours. The protective membrane persisted until

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 11, 15 Nov 76 pp 679-683]

the scab dropped off. It was found that the membrane should not be removed. In one patient the membrane was removed and infection set in. In another critical case with pyocyanous infection, thorough cleansing and application of No. 2 medicine spray controlled the infection. At the beginning a few cases died because of renal failure. Proper antishock prevention and treatment plus diuresis with herb medicines improved the renal failure problem. Use of topical anesthesia 10 minutes before spraying with burn medicine helped relieve the pain. Local and general treatment were coordinated; use of Chinese herb medicine and antibiotics were supplementary; scab protection, scab removal and skin graft were coordinated. In close to 400 cases of over 30% surface burns thus treated, the cure rate was 96%, in 12 cases of over 80% burn surface the cure rate was 66.7%.

The advantages of this combined Traditional Chinese and Western Medicine in the treatment of burns were discussed. The method was simple and could be carried out under simple
conditions. The antibacterial effects of the medicines were strong, thus shortening the course. The dry membrane also helped in the prevention of infection. The healing process was excellent, there was no scar formation in second degree and deep second degree burns. Expenses were minimal. The medicines were inexpensive. There was no need of frequent changes of dressings, no need of large amounts of dressing material.

Dialectical materialism was used to direct treatment. Fluid replacement was used to combat shock. But it was found that the thin membrane formed after spraying with burn medicine prevented further loss of body fluid. It was also found that this method was effective in the prevention of infection. Invading bacteria used to thrive on the wound exudate. Elimination of this exudate prevented bacteria to grow on the surface. The problem of operative scab removal and skin graft was also evaluated. Since infection usually did not occur under the protective scab formation, it was advocated to preserve the scab rather than to remove it. Thus skin graft could be gradually performed after all second degree burn surfaces have healed. However, it was also pointed out when there were necrotic tissues, they were thoroughly removed. With severe burns of the respiratory tract, not only prevention of respiratory infection but also the cardiac condition should be attended to. Fluid replacement was determined by the B.P., pulse, urinary output and general condition. General support with Chinese herb medicine and antibiotics were all important factors.
AUTHOR: KU Yun-wu [7357 0061 0063]  
HSIAO Kuan-ch'ien [5135 0385 6511]  
WEI Wei-k'an [7279 1218 0170]  
HUANG Hsueh-ch'eng [7806 1331 2052]

ORG: KU of Kwang-si Chuang-tsu Autonomous Area People's Hospital; HSIAO of Liu-chow Cement Factory Staff Hospital;  
WEI, HUANG of Yu-lin Town People's Hospital

TITLE: "Dynamic Studies and Clinical Results In the Use of Bamboo Plates as External Fixation for Fractures"


ABSTRACT: Bamboo plates were made into different sizes and shapes for the immobilization of different parts of the limbs. Testing of the elasticity and resilience of the plates showed them to be satisfactory for immobilization. The process of preparation included cutting, boiling, desiccation and smoothening. Clinical use on 738 cases of fresh simple fractures showed satisfactory results. There were no pressure necrosis, ischemic contracture or severe displacement of fracture fragments.

AUTHOR: None

ORG: Orthopedics and Physics Teaching and Research Section,  
First Affiliated Hospital, Wu-han Medical School; Construction Engineering Section, Hu-peh Industrial Construction School

TITLE: "Use of Pine Bark as Small Splints in the Treatment of Bone and Joint Injuries"


ABSTRACT: Pine bark was used as small splints in the immobilization of bone and joint injuries. Dynamic studies of the characteristics of the bark showed it to be satisfactory for the use of immobilization. Pine bark is readily available in all parts of South China. The bark can be easily obtained and molded into splints with a pen-knife or a pair of scissors. Two main splints and a number of small supplementary splints were usually used. They were molded into the shape of the injured limb, padded with cotton and wrapped with bandages. Clinical results were satisfactory.
AUTHOR:  None

ORG:  Traumatology Research Institute, Shanghai;  Traumatology and Orthopedics Department, Affiliated Rui-chin Hospital, Shanghai Second Medical School

TITLE:  "Preparation and Use of Plastic Splints"

SOURCE:  Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 11, 15 Nov 76 pp 687

ABSTRACT:  Plastic splints were made mainly with polyvinyl chlororesinate, adding substances to increase the firmness. The plastic plates may be cut and sawed into the desired size and shape, softened in 70°C water, molded into the desired form and fixed in cold water. The greatest advantages of these splints are that they can be molded into any desired length and shape. They are light, easily handled, strong and do not change shape under 45°C. They are also easily penetrated by X-ray beams. Over the past more than two years, they have been used clinically in 638 fracture sites with satisfactory results.

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AUTHOR:  None

ORG:  Orthopedics Department, Affiliated Hospital, Liao-ning Traditional Chinese Medical School

TITLE:  "Conclusions in the Use of Cardboard Splints for the Treatment of Fractures"


ABSTRACT:  The use of cardboards to immobilize fractures is simple, inexpensive and effective. It must fulfill the requirement of prevention of angulation, lateral displacement, rotations and shortening of the fractured fragments. It must also not limit the movement of the joints above or below the fracture site, and not impair on circulation. To fulfill these requirements, traction and paper pads may be used together with cardboard splints. The cardboards at present in use are 0.1 and 0.2 cm. thick industrial cardboard sold in the market. They are light, elastic and water absorbing.
Cardboard with plastic coatings are not suitable. The fracture site is first covered with herb ointment that may move the blood and remove congestion and reduce swelling. Paper pads to correct or maintain positions may be applied and a light dressing used. Then the cut-in-shape splints may be applied and fixed with tapes. X-ray examinations are made 2-3 days after immobilization and corrections made if necessary. Fixation is maintained until complete fracture healing.

AUTHOR: None

ORG: Cardiac Disease Section, Department of Internal Medicine, Hua-shan Hospital, Shanghai First Medical School; Shanghai Traditional Chinese Medicine Research Institute; Bio-physics Teaching and Research Section, Shanghai First Medical School; Isotope Section and Neuropathology Laboratory, Hua-shan Hospital, Shanghai First Medical School

TITLE: "Soutellaria Indica in the Treatment of Coronary Disease and A Preliminary Study on Its 'Move the Blood and Remove Congestion' Action"


ABSTRACT: Over the recent four years, 62 cases of acute myocardial infarction were treated with combined Traditional Chinese and Western Medicine. The mortality dropped from a previous 39.2% to 12.9%. The use of soutellaria indica was considered most significant. Observations clinically showed clinical improvement in 97% and EKG improvement in 53%. The
effects of soutellaria indica on the coronary flow index of normal persons and patients with coronary heart disease were studied. In 65 patients with coronary heart disease, positive exercise tests and residual myocardial infarction, the coronary flow index was lower than normal controls before injection of soutellaria indica. After injection all showed different degrees of increase. Studies on the effects of soutellaria indica on the hemorrheology in coronary heart disease were also carried out. Whole blood viscosity, plasma viscosity, RBC electrophoresis time and rate, hematocrit and plasma fibrinogen were determined. In 81 patients with coronary heart disease, hemorrheology studies showed 5 types of changes: all determinations abnormal 8 cases; high hematocrit type 2 cases; increased plasma viscosity 11 cases, decreased electron carrying type 21 cases; near normal 39 cases. In 42 cases after treatment with soutellaria indica, the hemorrheology studies were repeated. The whole blood viscosity showed decreased values, RBC electrophoresis time became shorter, other studies showed no changes.

The above studies showed that soutellaria indica increased the coronary flow index in coronary disease patients. Clinically after injection of soutellaria indica, many patients showed clinical improvement of symptoms. Some showed EKG improvements. These indicated that decreased coronary flow and ischemia was the cause of angina. Hemorrheology studies in 81 coronary disease patients showed abnormal changes in over 50%. These changes caused RBC congregation in an increased plasma viscosity, resulting in stagnation or thrombosis. The use of soutellaria indica resulted in decreased blood viscosity and decreased RBC electrophoresis time, all of which favored improvement of blood flow.
From 1973, 110 cases of hyperlipemia were treated with alisma plantago cake tablets. Alisma plantago was made into cakes, dried and made into sugar coated tablets, each tablet containing 3 g. of raw medicine. The 110 patients all had marked increase of serum cholesterol or triglycerides. There were 8 cases of coronary heart disease, 14 cases of hypertension, 30 cases of chronic hepatitis and 28 cases of hyperlipemia of unknown origin. The tablets were taken 3 tablets 3X per day. After one month, the 44 cases with high cholesterol dropped from an average of 258.4 mg. % to 235.2 mg. %; the 103 cases with high triglycerides dropped from an average of 337.1 mg. % to 258.0 mg. %.

All types of hyperlipemia IIa, IIb, IV, V (WHO classification) showed improvement after treatment with alisma plantago cake tablets. Follow-up studies after over 3 months showed that hyperlipemia continued to improve on continuation of medication, the average serum cholesterol was 200.0 mg. % and the triglycerides 216.4 mg. %. Except for slight gastrointestinal upset and loose stools, there were no serious side reactions. Animal experiments showed that alisma plantago has the effect of diuresis, lower B.P., lower serum cholesterol and sugar concentration, and prevention of experimental atherosclerosis in rabbits. Alisma plantago may also improve the metabolism of liver lipids, prevent liver liposis caused by food ingestion or carbon tetrachloride. In 30 cases of chronic hepatitis complicating or secondary to hypertriglyceridemia, treatment with alisma plantago showed good results, with concurrent drop of serum triglycerides.
AUTHOR: FAN Yung-ch'en [5400 3057 3819]
        CHEN Su-ch'iuin [7115 4790 3830]

ORG: Tsientsin Children's Hospital

TITLE: "Treatment of Bronchial Gland Tuberculosis with
        Supplementary Use of Chinese Herb Medicines and Steroids"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
        Journal] No 11, 15 Nov 76 pp 695-696

ABSTRACT: Supplementary use of Chinese herb medicines and
        steroids were used in children suffering from bronchial
        gland tuberculosis in whom routine anti-tuberculosis treatment
        for two months failed to show improvement. In 6 cases
        Chinese herb medicines were used. The herb medicines included
        aralia edulis, curcumin, paeonia albiflora, honey suckle,
        cyprus longus, bupleurum falcatum, herba brunellae, laminaria
        japonica, sergassum enerve, kadsura chinensis, scoleopenora.
        All six cases showed marked improvement. Two illustrative cases
        were given. In 21 cases prednisone was given for 8 weeks
        in addition to anti-tuberculosis treatment. After one week
        most patients showed subsidence of fever and improvement

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 11, 15 Nov
    76 pp 695-696]

of appetite. After completion of prednisone treatment,
X-ray examinations of the chest showed marked absorption,
which continued to show improvement on subsequent examina-
tions. The different actions of the Chinese herb medicines
were briefly discussed in the treatment of bronchial gland
inflammation. The anti-inflammatory and anti-histamine
actions of steroids were also mentioned.
AUTHOR: None

ORG: Pharmacology Teaching and Research Section, Hsu-chow Medical School

TITLE: "Research on the Anti-catecholamine Action of Stramonium Alkaloid"


ABSTRACT: The actions of stramonium alkaloid (active ingredients scopolamine and atropine) on catecholamines were studied to determine its anti-shock mode of action. In rabbits and dogs it was shown that both atropine and scopolamine were able to counteract the arrhythmia caused by catecholamines, but could not counteract the tachycardia caused by adrenalin or noradrenalin. Experiments on the isolated ear of rabbits showed that injection of atropine or scopolamine both showed a slight but insignificant increase of blood flow; injection of noradrenalin showed a marked vascular contraction effect with a 98% decrease of blood flow; injection of atropine before injection of noradrenalin showed that the decrease of blood flow was only 14%, indicating atropine could counteract the vascular contraction effect of noradrenalin; injection of scopolamine could also counteract the vascular contraction effect of noradrenalin, but to a lesser degree than atropine. Experiments on rabbits showed that injection of atropine or scopolamine caused a slight lowering of B.P. When adrenalin or noradrenalin was given the B.P. showed marked elevation, but when adrenalin or noradrenalin was given together with atropine or scopolamine the B.P. showed marked lowering. These showed that both atropine and scopolamine could counteract the hypertensive action of adrenalin or noradrenalin, but the dosage needed was much higher with scopolamine than atropine.

The experiments showed that atropine and scopolamine both may counteract the arrhythmia caused by catecholamines, but could not counteract the tachycardia. These may be due to the blocking of cholin receptors by atropine and scopolamine, quite different from the blocking of B-adrenergic
receptors. The actions of these drugs on counteracting the vascular contraction effect of catecholamines may be due to a specific action. It was suggested that the counteracting effect of atropine and scopolamine to the hypertension caused by catecholamine may be due to blocking of the α-adrenergic receptors. Since there is a marked increase of catecholamine in the blood and urine of patients in shock, the use of stramonium alkaloids to counteract the vascular contraction effect of catecholamine may improve the circulation and be valuable in the treatment of shock.

AUTHOR: CHIANG Chen-yü [3068 2182 5940]  
HSU Kuan-sun [5073 0385 5549]  
CHIANG Chih-hua [5592 5347 5478]  

ORG: Shanghai Physiology Research Institute  

TITLE: "The Intraspinal Afferent Pathway of the Analgesic Effect of Acupuncture"  


ABSTRACT: Experiments were carried out on cats to determine the intraspinal afferent pathway of the analgesic effects of acupuncture. In a group of 8 animals, traumatic stimulation resulted in marked elevation of B.P. Electric stimulation of acupuncture points or the common peroneal nerve area suppressed this hypertensive reaction, indicating that the electric stimulations had analgesic effects. Bilateral severance of the dorsal cord did not change this effect. In another group of 13 animals the above experiment was repeated with bilateral severance of the lateral cord.
Electric stimulation of the acupuncture points and common peroneal nerve area now failed to suppress the hypertensive reaction. In a third group of 4 animals the experiment was repeated with bilateral severance of the spinal cervical cord. There was no effect on the suppression of hypertensive reaction. The authors concluded that the intraspinal afferent pathway of the analgesic effect of acupuncture is in the lateral cord.

AUTHOR: None

ORG: Women and Children Health Station and Ch'eng-kuan Commune Sanitation Station, Kwang-si Huan-chiang County

TITLE: "Treatment of Uterine Prolapse with Urena Lobata and Eucommia Ulmoides Decoction and Acupuncture"


ABSTRACT: During Nov. 1972 to Oct. 1973, 234 cases of uterine prolapse were treated with Urena lobata and eucommia ulmoides decoction and acupuncture. The decoction was taken twice daily. Acupuncture points used were wei-pao, yang-ling-ch'i-han, and san-yin-chiao. Analysis of 137 cases showed 89 cured (65.0%). Follow-up studies of 106 cases after 1½-2½ years showed a stabilized state was maintained in 86.8%. The treatment method was considered inexpensive, simple and effective. Prolonged treatment and adequate rest were stressed.
AUTHOR: None

ORG: Tang-shan City Prevention of Infectious Disease Station; Tang-shan City Ma-chia-kou Antiflame Material Factory

TITLE: "Dust Prevention Methods and Observation of Effects in a Silicon Brick Production Workshop"


ABSTRACT: Preventive methods were carried out in the silicon brick production workshop to decrease dust. They included pasting cement over the floor and walls and digging sewers on the floor, using dust absorbing machines over brick pressing machines, remodelling the drying tunnel door to prevent escape of silicon dust, establishing platforms in the half processed storeroom to facilitate watering dust on the floor, establishing the system of watering the floor twice during each shift. Determination of the silicon dioxide in silicon dust, the degree of silicon dust distribution and the concentration of silicon dust both before

[continuation of CHUNG-HUA I-HSUEH TSA-CHIH No 11, 15 Nov 76 pp 707-708]

and after these preventive measures showed marked improvement after carrying out the preventive measures. The silicon dust concentration was within the required standard in 86%, the average silicon dust concentration was lowered to 1.5 mg. per M³ (national standard is 2 mg. per M³).
AUTHOR: None

ORG: Shanghai Labor Sanitation Vocational Disease Prevention and Treatment Institute

TITLE: "Determination of the Ke-hsi- ping [0344 8928 1627] Value in Blood"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 11, 15 Nov 76 pp 709-710

ABSTRACT: Ke-hsi- ping is a drug effective in the prevention and treatment of silicosis. Determination of ke-hsi- ping value in the blood is important for treatment. At present it is determined by the characteristic of the drug that can absorb ultraviolet beam waves at 262 millimicron. The method is complicated and is affected by serum albumin. A modified method was used to simplify the procedure. The serum containing ke-hsi- ping was heated to coagulate the albumin, sodium chloride was added, and the albumin and lipid were separated from the ke-hsi- ping with chloroform methyl alcohol. Determination of the ke-hsi- ping level was then carried out with ultraviolet beam waves at 262 millimicron. Details of the procedure were given. It was found that the volume of sodium chloride used may affect the results. The most suitable volume was 2.5 ml. 0.5 N solution. It was also found that adding silicon gel to the serum containing ke-hsi- ping improved the accuracy of the determination.
AUTHOR: None

ORG: Department of Surgery, Jih-t'an Hospital, Chinese Medical Scientific Institute

TITLE: "Diagnosis and Treatment of Esophageal Leiomyoma"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 11, 15 Nov 76 pp 711-713

ABSTRACT: During 1962-1973, 20 cases of leiomyoma were operated upon and the diagnoses pathologically confirmed. The age varied from 29 to 59 years old. The preoperative diagnoses were correct in 18 cases. The tumor was enucleated in 19 cases, and partial resection of the esophagus with the tumor was performed in one. Follow-up studies 1 month to 12 years showed no recurrences. Leiomyoma is the most common benign tumor of the esophagus, in this group it represented 87% (20/23) of the benign tumors. It may be found in any part of the esophagus and is usually located in the muscular layer below the mucosa and submucosa. There were no malignant changes in this group. The disease may

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be symptomless. The most prominent symptoms were dysphagia and chest pain. Diagnoses were made by X-ray studies and esophagoscopy. X-rays usually showed a smooth filling defect without obstruction. There may be a 'cascade' sign or 'circular' sign. Large tumors may show a shadow protruding into the lung fields or mediastinum. X-ray differential diagnoses with carcinoma of the esophagus and extra esophageal mediastinal masses were discussed. Esophagoscopy usually showed a mass under a smooth mucosa. Operative excision is the treatment of choice. Most tumors can be enucleated, resection is only needed occasionally. There were no deaths in this group.
AUTHOR: CHANG Jui-an [1728 3843 1344]
        HUANG Yu-chen [7606 1635 3791]

ORG: Ultrasound Section, Department of Internal Medicine,
      Affiliated First Hospital, Wu-han Medical School

TITLE: "Determination of Left Ventricular Stroke Volume
        by Ultrasound Cardiography in 80 Normal Persons"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical
         Journal] No 11, 15 Nov 76 pp 714-715

ABSTRACT: Ultrasound cardiography was performed on 80 healthy
staff members and students. They included 32 males and 42
females. The method of examination and the formula for
calculation were given. The results showed that in the
same sex, the age group of 31-50 years old showed a higher
value than the age group of 15-30 years old. In different
sexes, the male group of 15-30 years old showed a higher
value than the female group of the same age; there was no
difference between the two sexes in the age group of 31-50
years old. In comparing the body area surface and left
ventricular stroke volume: the 1.65-1.85 M² group

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showed a slightly lower stroke volume index in the female
than the male, the other 2 groups (1.251-1.450 M², 1.451-
1.650 M²) showed no difference in the two sexes. It was
also shown that the stroke volume index in the largest body
surface area in females also had a lower value than the other
groups. In 8 cases with congenital heart diseases, compa-
raison of this method with the Ficks method was made, it
was found that the value obtained by this method was lower
on an average of 9.8% than the Ficks method. It was con-
cluded that this method is simple, safe and atraumatic.
AUTHOR: None

ORG: None

TITLE: "Traditional Chinese Medicine Seminar --- Prevention and Treatment of Chronic Diarrhea"


ABSTRACT: The causes of chronic diarrhea were discussed. They included improper food ingestion, exposure to cold, and fatigue which caused disturbance of the spleen and gastric systems. Dialectical analysis and treatment was discussed in detail. Support the spleen and strengthen the stomach were the main procedures in treatment. Improvement of digestion was also stressed. General support and symptomatic treatment with herb medicines were also discussed. Experiences with the use of herb medicines were given. Some suggested the use of 'warm' supportive herb medicines in addition to 'clear the fever and neutralize poison' medicines. Others suggested using both 'warm' and 'cold' medicines, basing on dialectical analysis. Some suggested symptomatic treatment at the onset of disease, and basic treatment of the cause later on. Treatment of alternating diarrhea and constipation was discussed. It was agreed that catharsis should not be practiced in such cases. Treatment with acupuncture and moxa were also discussed. Prevention included attention to the weather, food ingestion and mental state.
AUTHOR: None

ORG: Kwang-si Pai-se Area People's Hospital; Kwang-si Chuang-tsu Autonomous Area Prevention of Infectious Disease Station; Kwang-si Pai-se Area Prevention of Infectious Disease Station; Kun-ming Medical Biological Research Institute; Kwang-si Pai-se County Pai-se Town Prevention of Infectious Disease Station

TITLE: "Clinical Observation and Study of the Etiology of Infantile Epidemic Diarrhea Complicated with Nephrotic Disease"


ABSTRACT: In the winter of 1973, 135 cases of infantile epidemic diarrhea were admitted for treatment, 18 developed renal damage. There were 6 cases with acute renal failure, 2 died; 2 cases of ordinary nephrosis; 10 cases of simple hematuria and albuminuria. In 126 cases intestinal tract pathogens were isolated from the stools. They suggested that ECHO-2 and ECHO-3 viruses might have been the cause of diarrhea in these cases. The following facts were considered in the etiology of renal complications: The possibility of post-streptococcal infection was rather small; the urinalysis in these cases did not support the diagnosis of acute glomerulonephritis; dehydration was not the main cause of renal damage in these cases; the possibility of myocarditis as the cause in these cases were small; none of these patients had taken medications that might have caused renal damage; some ECHO viruses may cause renal damage by immunity reactions. It was concluded that the etiology of the renal complications in these cases might have been due to ECHO virus infection.
AUTHOR: KAO Shou-cheng [7559 1108 1767]  
YANG Hshih-ch'iu [2799 7185 4426]  
LI Hsiang-hu [2621 3276 5706]  
JEN Shih-kuang [0117 0013 0342]  
WONG Wei-ch'eng [3769 1696 4430]  
HAO Chien-k'o [6787 1696 4430]

ORG: Kuang-shan Company Hospital, Capital Steel Company

TITLE: "Etiology and Principle of Treatment for Subdural Effusion"


ABSTRACT: During 1970-1974, 63 cases of cerebral meningitis in infants less than 2 years of age were admitted, 9 developed subdural effusion. The etiology in these cases were epidemic meningitis 2, suppurative meningitis 3, tuberculous meningitis 3, and cryptococcus meningitis 1. The cause of subdural effusion was considered due to direct invasion of the causative organisms. Treatment therefore should be 

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based on treatment against the causative organisms. In cases where the causative organisms were not certain, repeated aspiration failed to improve the condition. After the causative organisms were established, specific treatment produced positive results. In the 9 cases, 2 died. Follow-up studies of the 7 cured cases for 1-3 years showed no residual effects.
AUTHOR: CHANG I-ch'eng [1728 4135 6134] 
CHOU Mu-hstiung [0719 2606 1927]

ORG: Pediatrics Department, Hu-peh Em-shih Area Hospital

TITLE: "Report Case of Aorta Trunk Anomaly"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 11, 15 Nov 76 pp 622

ABSTRACT: A 5-month-old male was admitted in emergency with respiratory distress and cyanosis. He has been cyanotic since birth. Emergency treatment failed and the child died soon after admission. Autopsy revealed a patent foreman ovale, a high intraventricular septal defect, the aorta trunk overriding the intraventricular septal defect, absence of pulmonary arteries, three branches on the aortic arch, a small artery on the aorta branched to the lungs. The pathological diagnoses were: aorta trunk anomaly; bronchial pneumonia. The different types of aorta trunk anomalies were briefly discussed. Operative treatment consists of early palliative surgery and delayed definitive surgery.

AUTHOR: HSÜ T'ung-chu [1776 0681 2701]

ORG: Radiology Department, Ju-tung County People's Hospital, Kiang-su

TITLE: "Report Case of Esophageal Neurofibroma"


ABSTRACT: A 51-year-old female was admitted because of difficulty in swallowing for 5 months. Barium meal X-ray studies revealed an egg size filling defect on the lower esophagus. Esophagoscope revealed a 0.5X0.5 cm. protrusion from the wall into the lumen. The mucosa was edematous. On operation an esophageal mass about 6X8 cm. was found protruding into the right posterior mediastinum. The mass was excised and an esophageal gastric anastomosis performed. Pathological diagnosis was esophageal neurofibroma.
AUTHOR: WONG Pao-fa [3769 0202 3127]

ORG: Department of Internal Medicine, Affiliated Second Hospital, Ho-pei New Medical College

TITIE: "Diffuse Intravascular Coagulation and Pulmonary Cardiac Disease"


ABSTRACT: Platelet count, prothrombin time, rapid fibrin determination, plasma protamine coagulation test and ethyl alcohol gel test were performed on 32 patients with pulmonary cardiac disease. If 3 of the tests were positive and clinically there were bleeding manifestations, the classification was positive diffuse intravascular coagulation (DIC); if less than 3 of the tests were positive and clinically there were no bleeding manifestations, the classification was suspicious DIC. In the 32 cases, 5 had simple pulmonary cardiac disease, the tests showed 3 suspicious DIC; 27 cases had pulmonary cardiac disease complicated with pulmonary cerebral disease, the tests showed 4 DIC and 16 suspicious DIC. In the 27 with pulmonary cerebral disease, 5 had upper gastrointestinal tract bleeding. One case showed a positive DIC and the stool occult blood was ++, when the DIC turned negative the stool occult blood was also negative. This indicated that DIC may be related to upper gastrointestinal tract bleeding. In 22 cases with pulmonary cerebral disease but without gastrointestinal bleeding, the tests showed 1 DIC and 14 suspicious DIC. This indicated that pulmonary cerebral disease may possibly have DIC changes. Pulmonary cardiac disease with DIC may be caused by anoxia, acidosis, shock, etc. Complicating gastrointestinal tract bleeding and pulmonary cerebral disease may be caused by many causes, of which DIC is one possibility.
AUTHOR: None

ORG: None

TITLE: "Clinical Observation of 10% vinegar Nose Drop in the Prevention of Influenza"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 11, 15 Nov 76 pp 694

ABSTRACT: In a factory, the workers in one workshop were given 10% vinegar nose drops for the prevention of influenza, workers in another workshop were used as controls. The nose drops were given for 3 consecutive days and then discontinued for 4 days. Observation time was one month. The results showed that in the control group of 452 workers, 61 (13.5%) had influenza; in the nose drop group of 550 workers, 22 (4%) had influenza. The method is simple and can easily be carried out in factories, on the farms, in organizations and in schools.

AUTHOR: None

ORG: None

TITLE: "The Active Ingredient of Peony Leaves in Its Anti-dysentery Action"


ABSTRACT: Peony leaves were used in the treatment of 29 cases of bacterial dysentery. The cure rate was 96%. Extraction and analysis revealed at least 5 types of phenol compounds. There was also a white needle crystal with a melting point of 258-259°C, which constituted about 1% of the peony leaf. Anti-dysentery tests showed that this was the main anti-dysentery ingredient. Analysis showed that this crystal was gallic acid.
AUTHOR: None

ORG: None

TITLE: "Marsilia Quadrifolia in the Treatment of Conjunctivitis"


ABSTRACT: Marsilia quadrifolia 2-4 oz. was washed and cleaned and decocted into a 300 ml. decoction. It was divided into 3 doses and taken orally every day. Marsilia quadrifolia solution was also used as eye wash. In 113 cases of conjunctivitis, 109 were cured in 3-6 days. There were no side reactions.

AUTHOR: None

ORG: None

TITLE: "Scallion, Ginger, Salt, Wine Mixture External Rub for the Treatment of Influenza"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [Chinese Medical Journal] No 11, 15 Nov 76 pp 710

ABSTRACT: Scallion 1 oz., ginger 1 oz., salt 2 dr. were mixed into a paste, a pot of white wine was added and mixed. This was wrapped in gauze and used to rub on the chest, back, palms, ventral foot, popliteal spaces and elbow fossa of patients suffering from influenza. The patient was then allowed to lie down and rest. About half an hour later there will be sweating. The fever gradually subsides and subjective symptoms become alleviated. This method was used in 33 cases with cure attained in 1-2 days.
CHINESE MEDICAL JOURNAL

AUTHOR: CHANG Tzu-ching [1728 2737 5427]  
WANG Chih-liang [3769 0037 2733]  
HAN Hsiu-lan [7281 4423 5695]

ORG: All of Institute of Pediatrics, Chinese Academy of Medical Sciences

TITLE: "Pathogenetic and Clinical Study of Bronchiolitis"


ABSTRACT: In the two winter-spring seasons of 1974-1975 and 1975-1976, 71 cases, diagnosed to be bronchiolitis were analyzed in terms of pathogenesis, clinical symptoms, and treatment effects of integrated Chinese traditional and Western medicine. Most of these cases are children; 61.9% under 6 months of age; 26.8% 6 months to 1 year. The youngest was only 39 days old and the oldest was 1 year and 8 months of age. Results of virological analyses, serological studies, throat culture, x-ray, EKG, and blood gas analyses are reported. Treatment with Chinese traditional medicine, mainly a decoctum containing Belamcanda chinensis Lem., and Ephedra sinica Stapf, tranquilizers of Western medicine, oxygen, fluid infusion, etc. is described. For 7 of the 22 cases suffering from metabolic acidosis, 25% sodium hydrogen carbonate was applied and found to be more effective for relieving asthma than Wintertime-2. Timely application of a respirator is essential to prevent respiratory failure which occurs easily among the very young of this disease.

AUTHOR: None

ORG: Department of Pediatrics, the 202 Hospital, Chinese People's Liberation Army

TITLE: "4,060 Cases of Infant Pneumonia Treated Primarily With Technique of Injection in Acupuncture Points"


ABSTRACT: Since the cultural revolution, all hospitalized cases of infant pneumonia at the Department of Pediatrics have been treated with an integrated Chinese traditional and Western medical technique, consisting primarily of injection of Chinese traditional herb preparation and penicillin alternately in selected acupuncture points. By June 1976, more than 5 thousand cases had been thus treated. Clinical data and treatment techniques for the 4,060 cases treated in the 6 years between November 1969 and November 1975 are reported. The cure rate of the group was 93.3% and the fatality rate was 0.6%. On the average the fever was reduced in 4.0 days and the duration of treatment was 8.4 days.
AUTHOR: FANG Yung-lo [2455 3057 2867]

ORG: Medical Service Office, the Second Engineering Team, Shanghai Municipal Housing Construction Company

TITLE: "Treatment of Influenza and Common Cold With Chlofenamic Acid"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CIIH [CHINESE MEDICAL JOURNAL] in Chinese No 12, 15 Dec 76 p 737

ABSTRACT: Satisfactory results were obtained with chlofenamic acid for the treatment of 31 cases of influenza and 10 cases of common cold. The body temperature of the influenza cases was 38-39.7°C, and symptoms included headache, chill, general soreness and weakness, cough, bloodshot eyes and throat, etc. with a white cell count of 4,000 - 6,000. The common cold cases manifested general symptoms of sneezing, coughing, congested nasal passage, throat itch, etc. Chlofenamic acid was administered orally to all of the group within 1-2 days after the onset of the symptoms, 0.4 g, 3 times daily, for 3 days. Fever reduction and obvious improvement of respiratory symptoms were observed on the first day in all cases. This non-hormone type antiinflammatory and pain-relieving drug was created in China. Judging from the conditions of these 2 groups of patients, there was no recurrence of fever or excessive perspiration while the effectiveness appeared to be obvious. The mechanism of its action awaits further study.

AUTHOR: None

ORG: Tientsin Municipal Children's Hospital

TITLE: "Observation of Clinical Effects on 344 Cases of Pneumonia of the Newborn Treated With Integrated Chinese Traditional and Western Medicine"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CIIH [CHINESE MEDICAL JOURNAL] in Chinese No 12, 15 Dec 76 pp 738-739

ABSTRACT: From December 1974 to March 1976, a total of 344 cases of pneumonia of the newborn were treated, 137 with Chinese traditional drugs only and 207 with Chinese traditional drugs as well as Western drugs. This group of 344 does not include those cases there were extremely critical when they were admitted with no time to apply Chinese traditional drugs before death. Treatment included oral, muscular, and intravenous administration of Chinese herbal drug preparations and/or antibiotics. There were 5 fatalities in the group. The Chinese herbal preparations are described.
AUTHOR: None

ORG: Peking Region Unit Magnetism Treatment Group; Scientific Research Cooperative Group of Department of Magnetism Therapy, Hunan Province

TITLE: "Preliminary Report of Magnetic Field Therapy Technique"


ABSTRACT: The magnetic field therapy technique, simply called magnetism therapy, is a method of using the action of permanent or low frequency magnetic field on the body for the treatment of diseases. This technique has been developed under the direction of Chairman Mao's revolutionary line since the cultural revolution on the bases of the meridian [Ching-lo] theory and the treatment of diseases with loadstone of Chinese traditional medicine. Based upon data received from Pao-t'ou, Hsu-chou, Canton, and Wuhan, this technique has produced satisfactory results in tens of thousands of cases, suffering from high blood pressure, rheumatoid arthritis, bronchitis, functional diarrhea, nervous headache, etc. While the treatment effect on acute sprain is reported to be especially obvious. The types of magnets, a rotary magnetic therapy instrument, electric magnets, and the methods of applying to selected acupuncture points are described. The mechanism of magnetic therapy is currently being investigated.

AUTHOR: None

ORG: Residual Effects of Infantile Paralysis Team, Shanghai Institute of Chinese Traditional Medicine

TITLE: "Observation of Acupuncture Point Ligation Technique for the Treatment of Knock-knee Deformity Following Poliomyelitis"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 12, 15 Dec 76 p 744

ABSTRACT: Knock-knee deformity following poliomyelitis is generally the result of muscular paralysis, loosening of ligaments of the hips and the knees, and the load of the weight of the body. It affects the patient's ability to stand straight and to walk. In 1972, the team experimented with the technique of tying selected acupuncture points with sheep gut in 58 cases, 16 of those bilateral. The ligation was applied to 2 points, once a month. Short term follow-ups (within half a year) revealed that in 11 sides the deformity was reduced more than 10 degrees and in 20 sides it was reduced more than 5 degrees. Although the rate of effectiveness appeared to be only about 50%, the technique remained promising. Its investigation is being continued.
AUTHOR: None

ORG: Department of Ophthalmology, Jui-chin Hospital, Shanghai Second College of Medicine; Laser Laboratory, Shanghai Second College of Medicine


ABSTRACT: This paper briefly introduces the structure of the argon laser ophthalmological photocoagulation instrument and understandings in its clinical application. Due to the fact that this instrument is equipped with a slit-lamp, it is bright and can be accurately aim. Again due to the fact that argon laser can be absorbed by hemoglobin very well, the instrument can be used to treat retinal fissura as well as vascular disorders of the eye with very good results. The instrument described in the paper was made by the authors with the cooperation of Shanghai Surgical Instrument Second Plant, Shanghai Light Bulb First Plant, and the Shanghai Optical Instrument for Medical Use Plant. It was finished in May 1973. After its initial experimental uses in animals, its clinical application began in August 1973.

AUTHOR: None

ORG: Shanghai Municipal Children's Hospital

TITLE: "Observation of Effects in 38 Cases of Jaundice of the Newborn Treated Primarily With the Chinese Traditional Three-Huang Decoction"


ABSTRACT: The Three-Huang Decoction contains 3 ch'ien of Artemisia capillaris Thumb., 1 ch'ien of Gardenia jasminoides Ellis, 5 fen of Rheum tanguticum Maxim. ex Regel., 5 fen of Coptis chinensis Franch., 1½ ch'ien of Phellodendron amurense Rupr., and 1½ ch'ien of Scutellaria baicalensis Georgi. The 38 cases include 18 cases of hemolysis of the newborn (17 cases of ABO 1 case of Rh), 2 cases of infection, and 1 of each of cranial hematoma, hemorrhage of digestive tract, and suffocation. Their age varied from 1 to 15 days. Following the treatment, the jaundice condition disappeared in 1 to 14 days.
AUTHOR: SHANG K'o-chung [1424 0344 0022]

ORG: Department of Radiology, Shanghai Municipal Sixth People's Hospital

TITLE: "Technique of Using Small X-Ray Machine for Gastro-enteric Examination in Rural Villages"


ABSTRACT: In recent years, small x-ray machines of 15 or 30 milliamperere have been used for gastro-enteric examination more than 400 times in rural villages. Some simple and practical techniques and accessories have been discovered and created to cause the photographs to be nearly as clear as those of medium sized x-ray machines. The rate of revealing disorders has been made to be greatly higher than simple viewing or photographing with the old techniques. This new procedure is described at length, with photo-illustrations on page 60 of this issue of the journal.

AUTHOR: TING Chia-an [0002 0857 1344]
HSIEH T'ing-huai [6200 1656 2849] 
TSOU Hsueh-ch'ao [6760 1331 6389]

ORG: All of Department of Chest Surgery, Shanghai Municipal First Tuberculosis Hospital

TITLE: "Repeated Pulmonary Resection of the Same Side in Tuberculosis of the Lung"


ABSTRACT: From May 1961 to December 1972, a second pneumectomy was performed for 43 patients, 31 for recurrence of tuberculosis of the lung of the same side, and 12 for the formation of bronchial-pleural fistulae. In all the cases, the opposite side of the lung had no or very little symptom of tuberculosis. This paper reviews the clinical data, the surgical procedure, and the results of the treatment. Factors related to the occurrence of tuberculosis after the first resection are discussed and technical improvements to prevent recurrence suggested.
AUTHOR: LO Heng-t'ieh [5012 0077 6993]
ORG: None

TITLE: "Kidney Closure Combined With Chinese Traditional Drugs for Expelling Stones of the Urinary Tract"
SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 12, 15 Dec 76 p 756

ABSTRACT: The author and colleagues have used 60-100 ml of 2% procaine to enclose the kidney in 15 cases to treat lithiasis of the urinary tract. Procaine is injected into the kidney, and immediately afterwards Chinese traditional stone expelling drugs are administered, consisting of 3 liang each of Desmodium styracifolium (Osb.) Merr. and Plantago major L. The two herbs are added to 6 chin of water to cook into a decoctum. After it is cooled and filtered, 3 liang of honey is added to form the expellant. Immediately following the procaine injection, 500-800 ml should be administered, then 300-500 ml every half an hour until it has been 8 hours after the injection. Then, the expellant should be used as tea continuously for 3 days. Of the 15 cases reported, this technique was ineffective for one case only. In order to avoid damaging kidney tissues, the injection should be performed with extreme caution.

AUTHOR: None
ORG: Physiology Group, Tsun-i College of Medicine, Kweichow Province

TITLE: "Hypertensive Effect of Stimulating the "Raphe of the Upper Lip" in Animals and Investigation in Its Nervous Pathway"

ABSTRACT: In practice Chinese traditional medicine has recognized, long ago, many effects of acupuncture stimulation of the point 'Jen-chung' [Center of Man = the raphe of the upper lip,] one of which is as emergency rescue for coma. In the past decade, the authors and other research units have proved, through experiments, that puncturing Jen-chung has anti-shock action and can obviously prolong the survival time of animals as well as raise the blood pressure after it has already dropped. After applying acupuncture and other stimulations to 'Jen-chung' of animals, the authors have observed that a hypertensive effect can also be obtained even if the animals' blood pressure has been normal. The result of the experiment is reported in detail and the nervous pathway of the hypertensive effect discussed. It is suggested that the effect may have a definite relationship with an increase of cerebral activity resulting from the stimulation of the Jen-chung point.
AUTHOR: CHANG Yu-chun [1728 5038]  
        YEN Chung-hao [0917 6511]  

ORG: CHANG of T'ai-p'ing-hsien People's Hospital, Anhwei Province; YEN of Medical Service Office, Shanghai Hsien-feng Optical Instrument Plant  

TITLE: "One Method of Inspecting Sinusal Portion of the Stomach With Small X-ray Machines"  

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 12, 15 Dec 76 p 760  

ABSTRACT: At present, the public health centers of rural villages and factories and mines in China have all basically been equipped with medium or small x-ray machines. Those machines below 50 milliamphere do not come with an examination bed and there is no way to observe the patient at the laying down position. The authors experimented with the technique of asking the patient to bend 45-60° to his right with his right hand supporting his right leg and his left hand supporting his left waist. In this manner, due to gravitation, the barium meal is quickly concentrated in the sinusal portion of the stomach to cause the viewing or the photograph to be very clear. An x-ray photograph is given on page 60 to illustrate the quality of the photograph taken in that position.

AUTHOR: CHANG Po-hsun [1728 3134 8113]  
        LU Shih-pi [4151 0013 3880]  
        CH'EN Ching-yun [7115 2529 0061]  

ORG: All of Bone Department, Chinese People's Liberation Army General Hospital  

TITLE: "Bent Big Toe Deformity Caused by Injury of the Leg"  


ABSTRACT: In the past few years, the authors have treated 12 cases of deformity of a bent toe. In most of these cases, deformity occurred 1-3 months after an injury to the leg, bone fracture in 8 of the cases and crushed soft tissue in 4 cases. It is very painful for these patients to walk. After examination, 3 reasons were found to be the cause of the deformity: tendon adhesion at the fracture, tendinitis traumatica, and blood deficiency spasm. Results of surgical correction for this group are satisfactory.
AUTHOR: None

ORG: Gynecology and Obstetric Hospital, Shanghai First College of Medicine

TITLE: "Application of Fluorescent Examination Technique in Early Diagnosis of Cervical Cancer"


ABSTRACT: The authors use the two fluorescent agents of fluorescein and sodium fluorescein. Animal experiments proved them to be harmless to the body. The agent is administered orally or intravenously. Its content in blood rises gradually afterwards to reach a climax half an hour later and begins to drop in 3-4 hours. These agents can be combined with protein and have a definite affinity with the DNA and RNA of the cells. For this reason, the cancer tissues will absorb more than normal tissues. Clinical data of 5,241 cervical examinations aided by the application of the two fluorescent agents are reported and analyzed.

AUTHOR: None

ORG: Pediatric Department, First Hospital, Peking College of Medicine

TITLE: "Analysis of 72 Cases of Infant Pneumonia Treated With Chinese Traditional Medicine (An Abstract)"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 12, 15 Dec 76 p 766

ABSTRACT: In the winter of 1976, 72 cases of not extremely severe type infant pneumonia were treated with Chinese traditional drugs. A portion of these cases were also administered with cardiac stimulants, tranquilizers, and fluid infusion of Western medicine. Of the 63 cases with complete records, the fever disappeared in 2.3 days on the average, asthma stopped in 2.4 days, the yellow coating on the tongue gradually changed to white, and the noise in the lungs indicating congestion also disappeared. The various prescriptions of Chinese medicinal herbs used in the treatment are described.
AUTHOR: None

ORG: Department of Ear, Nose, and Throat, First Hospital, Hunan College of Medicine

TITLE: "Clinical Analysis of 105 Cases of Otoogenous Infection of Lateral Sinus"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 12, 15 Dec 76 pp 767-768

ABSTRACT: From March 1963 to May 1976, a total of 105 cases of otoogenous infection of the lateral sinus were treated, amounting to 10.9% of all the mastoid surgeries. Of the group, 50.9% suffered from otoogenous intracranial disorders at the same time. The pathogens are generally Streptococcus, with occasional cases of Bacillus coli, Bacillus proteus, and the like. In fifteen of the cultures, there was no bacterial growth. This situation may be related to massive application of antibiotics before the patients were hospitalized while the condition of the disease remained uncontrolled. Although antibiotics can limit the area of the disorder, prevent concurrent diseases, reducing the chance of spreading, etc., the major treatment for this ailment is still surgery. There were nine fatalities in the group. The total cure rate was 90.4%.

AUTHOR: None

ORG: Environmental Health Research Office, Institute of Public Health, Chinese Academy of Medical Sciences; Chinghai Provincial Public Health and Epidemic Prevention Station

TITLE: "Study on the Method of Inspecting Strains of Bacillus Coli in Water"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 12, 15 Dec 76 pp 769771

ABSTRACT: When the water is polluted by night soil, violent outbreaks of infectious diseases of the intestinal tract often occur. Bacillus coli is generally used as the index for night soil pollution of drinking water and has now been made one of the important indices of health inspection of the drinking water. Following many years of practice, the authors have made some improvements in the inspection technique. The improved procedure is described.
AUTHOR: None

ORG: Pulmonary Department, First Hospital, Chungching College of Medicine; Chungching Municipal Silicosis Diagnosis Group

TITLE: "Analytical Investigation of Early Diagnosis of I Stage Silicosis"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH CHINESE MEDICAL JOURNAL in Chinese No 12, 15 Dec 76 pp 772-773

ABSTRACT: Five-year continuous chest x-rays of 44 cases of I-stage silicosis, 52 cases of suspected (0-I stage) silicosis, and 52 cases of senile bronchitis with no history of contact with mineral dust are compared and analyzed to prove the author’s contention that nodules should be the major basis for diagnosis of silicosis. The remaining indices listed in the 1963 Silicosis Diagnosis Standard announced by the state are only secondary. Due to the fact that in factory and mining regions the air pollution factor often causes a higher than normal incidence of chronic bronchitis, in which case fibrillation and scar tissue formation may also be revealed in x-ray resulting in a mistaken diagnosis of silicosis.

AUTHOR: None

ORG: None

TITLE: "External Application With Garlic for the Treatment of Simple Diarrhea in Infants"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH CHINESE MEDICAL JOURNAL in Chinese No 12, 15 Dec 76 p 773

ABSTRACT: Barefoot doctor MEI Shih-lin [2734 1102 2651] of Hsin-hsin Brigade, Hsin-min Commune, Ch'ung-ming-hsien, Shanghai Municipality reported the technique of using garlic for external application to treat simple diarrhea in infants. Bake one or two cloves of garlic until cooked before crushing into a paste. Apply the paste while warm onto the navel of the infant patient and cover it with gauze. If there is no improvement in 24 hours, the application may be repeated with one ch'ien of powdered ginger administered orally (less than one ch'ien for the very young infants) in boiled and cooled water twice daily. Fluid infusion should be applied if the infant is suffering from dehydration. All 10 infants treated with this technique were cured with one or two applications.
AUTHOR: LO Chu-liu [5012 2691 3177]  
HUANG Ch'i-chin [7806 0366 2533]

ORG: LO of Department of Internal Medicine, Ch'ing-p'o-hsien People's Hospital, Shanghai Municipality; HUANG Emergency Rescue Team, Ch'ing-p'o-hsien Schistosomiasis Prevention and Treatment Station, Shanghai Municipality

TITLE: "Treatment of Ventricular Arrhythmias Caused by Antimony Agent With Intravenous Injection of Lidocaine"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese  
No 12, 15 Dec 76 pp 774-776

ABSTRACT: Antimony agents remain the first choice for the treatment of schistosomiasis, but they can cause myocardial toxication and arrhythmias. In serious cases, ventricular arrhythmias may develop to lead to acute cardigenic blood deficiency of the brain (Adams-Stokes syndrome.) For emergency rescue, atropine has been found to be useful but it cannot control recurrence even with dangerously high dosage. Since 1970, the authors have adopted the technique of intravenous injection of lidocaine which directly controls myocardial rhythm. The results have been much more satisfactory. Clinical data of 20 cases thus treated are included.

AUTHOR: None

ORG: None

TITLE: "New Asthma-Relieving Drug -- Clorprenaline Hydrochloride"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese  
No 12, 15 Dec 76 p 776

ABSTRACT: Clorprenaline hydrochloride, also called Ch'uan-t'ung in Chinese is an adrenalin receptor stimulant. It is very good in relieving bronchial spasm caused by histamine etc. Its oral absorption is good and will provide an effective density in the blood for 6 hours. Its influence on the cardiovascular system is minor, only about 1/10 to 1/3 of that of isoprenaline. Experimental application in 111 cases of senile chronic bronchitis proved it to be definitely effective for controlling asthma and cough, with a total effective rate of about 80%. Side effects are negligible. Determination of pulmonary function before and after treatment indicated various degrees of improvement.
AUTHOR: None

ORG: Chinese Traditional Anesthesia Research Group, Su-chou College of Medicine

TITLE: "Study on Muscle Relaxing Action of Bromizated Dimethyltetradrinum and Its Clinical Observation (An Abstract)"


ABSTRACT: When bromizated dimethyltetradrinum [tetradrinum is one of the alkaloids extracted from the Chinese traditional medicinal herb, Stephania tetrandra S. Moore] is used with other agents for Chinese traditional anesthesia, the effective rate of relaxation of abdominal muscles is 98%. Under normal dosage, its respiratory suppressing action is not serious; therefore, it is superior to tubocurarine. Besides, there is an abundant supply of it in China. There remain the defects of its action of reducing blood pressure and its stimulation of the central nervous system, however. Improvement through changing its chemical structure is being attempted. This paper reports experiments in rabbits to analyze the location and principle of its action, its toxicity, its action on cardiovascular system and the smooth muscles, its metabolism in the body, etc. Clinical tests in 439 cases of surgeries under acupuncture or Datura metel L. anesthesia with dimethyltetradrinum as the muscle relaxant are observed and reported also.

AUTHOR: None

ORG: The 424 Hospital, Chinese People's Liberation Army

TITLE: "Report of Three Cases of Subacute Thyroiditis"


ABSTRACT: Case histories of three incidences of subacute thyroiditis are given separately. Treatment with multiple antibiotics brought no effect in the first two cases. The effect of cortison was not obvious in the second. Perhaps the application was too late and the dosage was too small. Due to the fact that this is a self-limiting disease, surgery is not necessary. Thyroidectomy was performed for the third case, however, because cancer of the thyroid glands was suspected.
AUTHOR: None

ORG: Department of Pediatrics, Peking Hospital of Chinese Traditional Medicine; Bacteriology Laboratory, Peking Municipal Children's Hospital; Yen-ch'ing-hsien Public Health and Epidemic Prevention Station, Peking Municipality

TITLE: "Preliminary Observation of Air Disinfecting Effects of Fumigants Made of Chinese Traditional Medicinal Herbs"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 12, 15 Dec 76 p 780

ABSTRACT: Bacteria analyses of the air in a hospital room were made after five different fumigants containing primarily five different Chinese traditional medicinal herbs were burnt in the room for 4-5 hours. The fumigant containing Centipedal minima (L.) A. Br. et Asch. was found to produce the best disinfecting result. When the fumigant was used in nurseries of a certain street it was discovered that in the room where the fumigant was used only one out of the 37 children was sick with influenza. In the room with no fumigant, there were 6 cases of influenza out of the 26 children. The fumigant appears to have a definite action in preventing respiratory infections.

AUTHOR: None

ORG: None

TITLE: "Brief Report of Symposium on the Problem of Prevention and Treatment of Infant Pneumonia"


ABSTRACT: For the purpose of exchanging the experience in the prevention and treatment of infant pneumonia accumulated in the last few years, two symposiums were held most recently by some pediatricians of the Peking area. Since then, pediatricians and related workers of 15 provinces and municipalities met once again in Peking to hold a national symposium on the subject. The experience in the treatment of infant pneumonia with the integrated Chinese traditional and Western medicine was the emphasized point of discussion. This paper provides a review of the opinions, suggestions, and discussions at the 3 symposiums, followed by an appendix on the symptomatic classification of childhood pneumonia according to the principle of integrated Chinese traditional and Western medicine.
AUTHOR: None

ORG: Department of Pediatrics, Peking Hospital of Chinese Traditional Medicine; Chinese Traditional Pharmacology Research Laboratory, Peking Institute of Chinese Traditional Medicine

TITLE: "Analysis of 211 Cases of Childhood Pneumonia Treated With Integrated Chinese Traditional and Western Medicine (An Abstract)"


ABSTRACT: Three different preparations of Chinese traditional medicinal herbs, which are in abundant supply from the suburbs of Peking, were used, from January 1974 to December 1975 to treat 211 cases of childhood pneumonia (89 cases of bacterial pneumonia and 122 cases of viral pneumonia.) The treatment effects of the 3 groups are analyzed. The bacteriostatic action of one of the three herbs, Thymus serpillum L. var. vulgaris, Benth. was also tested in vitro. Injection 100% Thymus (made of whole plants) was judged to be definitely effective for bacterial pneumonia. Vitro experiment of a compound containing Marchantiales proved it to have action against influenza virus. Preliminary clinical observation also indicates that it is definitely active in reducing the fever and other symptoms of childhood viral pneumonia.

AUTHOR: None

ORG: T'ang-shan Municipal Huai-chu Smallpox Treatment Team

TITLE: "Report of One Case of Huai-chu Smallpox [Variola Inserta] Treated With Integrated Chinese Traditional and Western Medicine"


ABSTRACT: Huai-chu smallpox is also called progressive smallpox. It is a rare but serious abnormal reaction to smallpox vaccination, occurring to those whose immum mechanism is deficient. The fatality rate of Huai-chu smallpox [Variola inserta] is very high. In 1974, the team cured one case of a 14 months old baby girl with integrated Chinese traditional and Western medicine. The case history is reported.
AUTHOR: None

ORG: Hao-hsien Public Health and Epidemic Prevention Station, Anhwei Province

TITLE: "Brief Introduction of a Manual Well With an Inserted Pipe"


ABSTRACT: The manual well with an inserted pipe was first introduced in Hao-hsien in 1964. Due to acts of interference and destruction by LIU Shao-ch'i counter-revolutionary revisionism, the production of the mechanical part of the well was discontinued so that there was no way to extend this improved well. Through cultural revolution and the movement to criticize LIN Piao and Confucius, a mass movement to extend the well began once again. Currently, Hao-hsien has more than one thousand such wells. A drawing depicting the structure of the well with its hand-operated pump is included with a detailed description of the technique of constructing it.