

BRITISH MEDICAL JOURNAL

U. S. DEPT. OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY
10101
1971

PROCUREMENT SECTION
CURRENT SERIAL RECORDS

SATURDAY 8 MAY 1971

LEADING ARTICLES

General Medical Council page 291 Clioquinol and Neurological Disease page 291 Progress
in Myeloma page 292 New Research on Cannabis page 293 Streamlined Athlete page 294
Blue Valve Syndrome page 294 Ocular Bobbing page 295 Dermatitis Herpetiformis
page 295 Hooligans and Vandals page 296

PAPERS AND ORIGINALS

Rheumatoid Arthritis and Personality: A Controlled Study DERMOT J. WARD 297
Congenital Perceptive Deafness: Role of Intrauterine Rubella SHIRLEY M. GUMPEL, KATHLEEN HAYES, J. A. DUDGEON 300
Immunization with Irradiated Tumour Cells and Specific Lymphocyte Cytotoxicity in Malignant Melanoma
G. A. CURRIE, F. LEJEUNE, G. HAMILTON FAIRLEY 305
Recommended Method for the Determination of Plasma Corticosteroids M.R.C. WORKING PARTY 310
Spontaneous and Persisting Decrease in Maximal Acid Output H. G. DESAI, M. J. ZAVERI, F. P. ANTIA 313
Termination of Pregnancy by the Intrauterine Insertion of Utus Paste S. V. SOOD 315
Heparin-treated Haemolytic—Uraemic Syndrome Simulating Fabry's Disease
G. H. HALL, R. A. CALDWELL, C. SHALDON, P. G. BISSON 317

MEDICAL PRACTICE

Myeloma Workshop: Contributions by

J. F. HEREMANS; MICHAEL POTTER; H. H. FUDENBERG, A. C. WANG, J. R. L. PINK, A. S. LEVIN; J. L. FAHEY; SYDNEY E. SALMON;
M. SELIGMANN, FRANCOISE DANON, J. P. CLAUVEL; G. VIRELLA; H. WACHTER, K. GRASSMAYR, W. GUTTER, A. HAUSEN, G. SALLABERGER,
F. GABL; D. A. G. GALTON; R. PETO; J. R. HOBBS; D. E. BERGSAGEL; AAGE VIDEBAEK; ELLIOTT F. OSSERMAN; E. WILTSHAW; BO JOHANSSON 319
Venereal Disease in Women—I C. S. NICOL 328
Clinical Problems
Cigarette Dependence: I—Nature and Classification M. A. H. RUSSELL 330
Any Questions? 332
Personal View M. D. COULTER 333

CORRESPONDENCE 334

OBITUARY NOTICES 343

BOOK REVIEWS 345

SUPPLEMENT

NEWS AND NOTES

Epidemiology—*Salmonella agona*; Abortions 347
Parliament—Prescription Charges 348
Medical News 349

Annual Report of Council 1970-71 41
General Medical Services Committee 93
Overseas Committee 95
Conference of Honorary Secretaries 96
Distribution of Distinction Awards 96
Fees for Part-time Medical Services 96
B.M.A. Nuffield Library 97

CORRESPONDENCE

Correspondents are asked to be brief

Sniffing Syndrome

C. T. Dollery, F.R.C.P.; J. Cragg, M.R.C.PATH. 334

Decline of the Necropsy

H. H. Pilling, M.B.; A. J. N. Warrack, M.D., F.R.C.PATH. 334

Atheroma: A New Hypothesis

I. Gordon, M.D.; A. Elkeles, M.D., F.F.R. 335

Logical Foundations of Medicine

L. J. Opit, F.R.C.S. 336

Enlightened Attitude to Cancer

M. Sutton, F.R.C.S.ED. 336

Shut Away

W. E. Crossbie, D.P.H.; M. Quinn, D.P.M. 336

New-style Cold Abscesses

W. St. C. Symmers, F.R.C.P. 337

Access and Attitudes to Smoking

D. D. Hilton, D.P.H. 337

"You"

D. C. Lambert, M.B.; H. M. White, M.B. 337

General Practitioners' Telephones

B. Lee, M.R.C.S.; A. A. McInnes, M.B.; R. B. Prowse, M.B.; R. A. Gould, M.B.; N. B. Stewart, M.B.; A. G. Grossett, M.B. 338

Fibrin Deposition and Hypertension

J. Sophian, F.R.C.O.G. 339

A Case of Confidence

J. W. MacLeod, M.B.; E. Townsend, M.D. 339

Pathogenesis of Myasthenia Gravis

E. R. Trethewie, M.D. 340

Jejunal pH and Folic Acid

L. Elsborg, M.D. 340

Screened Fibrinogen for Prophylaxis of Venous Thrombosis

N. C. Allan, M.R.C.PATH., and others 340

Nocturia during Steroid Therapy

L. Doyle, M.R.C.P.I. 340

Ulcerative Colitis

R. G. R. West, M.D. 340

Estimation of Cholesterol

A. L. Latner, F.R.C.P. 341

E.E.G. and Anticonvulsants

Colleen Darby and D. Fung, M.R.C.P. 341

Migrating to Saskatchewan

E. H. Baergen, M.D. 341

Medical Postgraduate Study Tour

J. T. Aldren, M.B. 341

Family Doctor Booklets

W. K. Sutton, F.R.C.O.G. 341

Rickettsial Antibodies in Multiple Sclerosis

P. le Gac, M.D. 341

Superannuation and Substandard Lives

P. H. Sutton, M.D. 342

N.H.S. Superannuation

J. C. Hodgson, M.D. 342

G.M.C. Changes

P. J. Waddington, M.B. 342

G.M.C. Annual Retention Fee

G. I. Cameron, M.B. 342

Sniffing Syndrome

SIR,—Your leading article on the "Sniffing Syndrome" (24 April, p. 183) referred to deaths among American teenagers who had deliberately inhaled fluorinated hydrocarbon aerosol propellants and quoted a paper¹ in which it was claimed that these propellants caused bradycardia, atrioventricular block, and T-wave abnormalities in asphyxiated mice. There is no reason to doubt that deliberate inhalation of large volumes of fluorinated hydrocarbons is hazardous, but the mouse experiments you quoted were poorly designed and later work² has shown that the results were due to hypoxia alone and not to any other toxic property of the propellant gas.

The problem that has caused concern is the ability of fluorinated hydrocarbons to sensitize the heart to the arrhythmia provoking action of adrenaline.³ Conscious dogs inhaling a 1% mixture of fluorocarbon-11 in air for five minutes developed ventricular tachycardia or fibrillation when challenged with intravenous bolus doses of 5 to 8 µg/kg of adrenaline. Unpublished work by Swan at I.C.I. has shown that the plasma concentrations of fluorocarbon-11 that sensitize the dog heart must exceed 10 µg/ml. These are about 12 times higher than those which I and my colleagues⁴ observed in man following the use of placebo isoprenoline inhalers. Another safety factor is that little of the inhaled isoprenoline is absorbed to exert an effect upon the heart,⁵ and that isoprenoline is much less potent in provoking arrhythmias in sensitized dog hearts than adrenaline. The position with regard to patients with asthma using normal doses of inhalers appears very reassuring though further work is in progress.

In the case of domestic aerosol packs there appears to be less cause for concern, apart from deliberate and flagrant abuse such as

took place in the U.S.A. when teenagers inhaled large volumes in a single breath from a plastic bag which had been filled from the cannister. Even if the whole contents of a cannister such as a hair spray were emptied into a small, poorly ventilated bathroom the dilution factor would be so great that the concentration would not approach the levels found in patients who use inhalers to relieve asthma. There is a mouth deodorant aerosol spray sold by a door-to-door cosmetic firm, but it has a metering valve like those on the asthma inhalers and would be most unlikely to give rise to any problem in normal use.—I am, etc.,

C. T. DOLLERY

Department of Medicine,
Royal Postgraduate Medical School,
London W.12

¹ Taylor, G. J., and Harris, W. S., *Journal of the American Medical Association*, 1970, 214, 81.

² Azar, A., Zapp, J. A., Reinhardt, C. F., and Stopps, G. J., *Journal of the American Medical Association*, 1971, 215, 1501.

³ Reinhardt, C. F., Azar, A., Maxfield, M. E., Smith, P. E., jun., and Mullin, L. S., *Archives of Environmental Health*, 1971, 22, 265.

⁴ Dollery, C. T., Davies, D. S., Draffan, G. H., Williams, F. M., and Conolly, M. E., *Lancet*, 1970, 2, 1164.

⁵ Blackwell, E. W., Conolly, M. E., Davies, D. S., and Dollery, C. T., *British Journal of Pharmacology*, 1970, 39, 194F.

SIR,—Your leading article on the "Sniffing Syndrome" (24 April, p. 183) is timely. Trichloroethylene sniffing not only results in damage to health but can also cause death.¹

A 19-year-old youth died after swimming two lengths of a local pool. Before entering the water he had sniffed industrial trichloroethylene for half an hour; he was a regular sniffer of the solvent. At necropsy very little was found apart from a small right coronary artery and moderate aortic hypo-

plasia. Death was sudden and thought to be due to a cardiac arrhythmia, particularly ventricular fibrillation. The toxic effect of the trichloroethylene might well have been potentiated by the effort required to swim; this boy held his breath while swimming.

This experience agrees closely with the American finding of sudden death in teenagers following physical effort and sniffing.²

The dangers of sniffing and its consequences should be stressed to young people and industrial workers.—I am, etc.,

JOHN CRAGG

General Hospital,
Jersey, C.I.

¹ Cragg, J., and Castledine, S.A., *Medicine, Science and the Law*, 1970, 10, 112.

² Bass, M., *Journal of the American Medical Association*, 1970, 212, 2075.

Decline of the Necropsy

SIR,—In your leading article (24 April, p. 181) "Decline of the Necropsy" you say that the coroner system has condemned hospital pathologists to neglect more important hospital duties by carrying out large numbers of necropsies on perfectly natural deaths occurring without any suspicion of foul play.

May I make two comments on this mischievous assertion? In the first place those cases were examined by general practitioners prior to the inception of the National Health Service and the pressure exerted upon coroners, through the Home Office, to employ trained pathologists for this work originated among the pathologists themselves. They are not therefore "condemned" to do this work; they are very well paid for these "hack operations," as you call them, and the majority are only too pleased to have this additional remuneration.

Secondly, they are only known to be