2.5 kg ($P<0.01$). With increasing birth weight there was a decrease in the proportion of infants with infection. In each birth-weight group the mean gain in weight (from birth to 1 year old), and the mean thickness of the subcutaneous fat (from 1 month to 1 year old) was greater in infants with infection than in those without infection. This was most noticeable in infants of low birth weight.

Infants whose weight exceeded the mean weight for height and sex by 20% or more had a significant increase in lower respiratory infections compared with those of near normal weight ($P<0.001$). Infants whose mean thickness of subcutaneous fat was increased had a significant increase in lower respiratory infections ($P<0.05$). The coefficient of correlation between the thickness of the subcutaneous fat and length was significant ($r=-0.5$). At the same mean thickness of fat infants whose length was below the 25th percentile had more infection than those whose length exceeded the 97th percentile. Infants who were fully breast-fed had fewer lower respiratory infections than those who were not fully breast-fed ($P<0.05$). Infants whose solids were introduced under 9 weeks old had a significant increase in lower respiratory infection. ($P<0.05$).

Forty-one (20%) infants were started on solids under 4 weeks old, some infants started solids in the first week of life; one may speculate if those concerned with the health of the community have ensured that mothers are aware of the dangers of over-feeding their infants. Personally, I cannot see any advantage to the mother or the infant in starting solids early.—I am, etc.,

BARBARA H. HUTCHINSON-SMITH

Bakewell, Derbyshire

¹ Hutchinson-Smith, B., *Medical Officer*, 1970, 123, 257.

Primary Coliform Peritonitis

SIR,—By coincidence we had in the ward a patient with peritonitis without intraperitoneal cause at the time of Mr. B. T. Jackson's report (26 December, p. 786).

A 72-year-old woman was admitted with swelling of the leg thought to be due to a femoral vein thrombosis. Three days later she became confused and febrile and complained that she could not see. The lower abdomen was extremely tender and a mass could be felt in the pelvis, which seemed to be a distended bladder. Because of rapid deterioration in her general condition and what was thought to be peritonitis, laparotomy was undertaken by Mr. P. Gilroy Bevan. Generalized peritonitis with pockets of pus was indeed present, but a careful search failed to reveal a perforated viscus nor any inflammatory focus in the peritoneal cavity. The main findings of significance were enlarged, hard, and fixed kidneys, indicating severe acute pyelonephritis, and a bladder containing a litre of blood-stained pus so viscous that firm manual pressure was needed to express it. The abdomen was closed and treatment commenced with gentamycin sulphate and hydrocortisone. The patient made an uninterrupted recovery.

Proteus mirabilis was cultured from specimens of blood and urine, and the peritonitis might have been a blood-borne infection, part of the Gram-negative septicæmia consequent on a urinary tract infection. Direct spread from the genitourinary tract could not be ruled out, however; and the patient described by Mr. Jackson was treated before her death with antibiotics, which could have eradicated a focus of infection.—We are, etc.,

S. JAIN

M. J. LEE

V. MELIKIAN

Dudley Road Hospital, Birmingham

The Smoking Disease

SIR,—Your leading article on this subject (9 January, p. 61) exposes our dismal failure as a profession to influence the smoking habits of the public. A short snippet from the leader has appeared in the popular press and on television news, the shares of the leading manufacturers have lost a penny or two for a few days, a handful of the stronger minded have given up temporarily, fewer permanently, and in a few weeks all will be forgotten and "normal" smoking habits will return. A new generation of even younger addicts will be taking over.

Complacent we have been and satisfied to find that many have given up, especially doctors, and to say further that "information is not enough" while our hooked patients tell us daily "you have to die of something" or "it's the only pleasure I have."

Surely it is time for the profession and the B.M.A. as leaders of it to take the initiative in this important matter of health education and to press for action at Westminster in view of this latest report. Or must this carnage continue uninhibited for a further 20 years, producing a further million deaths, until the publication of *Smoking and Health* (No. 3)—I am, etc.,

G. H. WILLIAMSON

Cheltenham, Glos

Relative Hazards in Smoking

SIR,—By its publication of *Smoking and Health Now*¹ the Royal College of Physicians has rendered valuable service. Once again the College has drawn the community's attention to the increasing toll of suffering and premature death (not to speak of economic loss) from lung cancer, diseases of the heart and circulatory system, bronchitis, and emphysema attributable to smoking. Most of the College's recommendations will be found to be acceptable by the man in the street. Many of them have been advocated for years past by the National Society of Non-Smokers.

With due deference to its distinguished authors, I have two main criticisms to make of the report. Firstly, from comments in the national press resulting from variations in the report in figures, estimates, and forecasts, there has been a tendency to minimize the mortality attributable to smoking. To cite an example: an article in a leading Sunday newspaper reads: "There is something faintly indecent about wondering whether the country can afford to get rid of a drug which kills 27,500 people a year."² There are grounds for believing that the annual toll of deaths in England and Wales, mostly attributable to smoking, from lung cancer, heart and circulatory diseases, bronchitis, and emphysema may soon pass the 100,000 mark.

Secondly, in many personal contacts, it is obvious that the average reader has been left with the impression that health hazards from pipe and cigar smoking are negligible. This impression, sad to say, was reinforced by a reply to a question put on 2 February by Sir Brandon Rhys Williams to Sir Keith Joseph who said: "The Royal College of Physicians' report came down categorically on the side of the view that cigar and pipe smoking is less dangerous than cigarette

smoking." The Secretary of State corrected this a few moments later in a reply to Sir Gerald Nabarro by saying, in part: "I must record that Swiss and German research shows cigar and pipe smoking is as dangerous as cigarette smoking."³ The report actually said: "But in Swiss and German retrospective surveys, the risk of lung cancer appeared to be greater among pipe and cigar smokers than among cigarette smokers." The italics are mine.

Much more research is needed on this particular aspect of the smoking problem before an opinion can be reached as regards relative dangers. What is certain, and this is mentioned in the report, is that condensates from cigar and pipe smoke contain more polycyclic hydrocarbons and produce cancer more readily on animal skin than condensates from an equal amount of smoke from cigarette tobacco. Furthermore, not only do some pipe and cigar smokers inhale smoke, but all absorb nicotine with consequential harmful effects on circulatory and nervous systems. A heartening statement in the report is that approximately 80% of doctors no longer smoke.

Parents, school teachers, and religious leaders share with doctors a heavy burden of responsibility (by example rather than by precept) in cooperating to the full with Government, local authorities, and voluntary agencies in the antismoking campaign, particularly where children and teenagers are concerned.—I am, etc.,

SELWYN SELWYN-CLARKE

Past President,
National Society of Non-Smokers

London N.W.6

¹ Royal College of Physicians of London, *Smoking and Health Now*. London, Pitman, 1971.

² *The Observer*, 10 January, 1971, p. 11.

³ *Hansard*, 2 February 1971, p. 1435.

Y-Fluorescence of Interphase Nuclei

SIR,—In our paper (16 January, p. 138), because of the complexity of the tables, we purposely omitted reference to numbers of cells counted in the normal controls and the individual cases, though, in our conclusions, we made recommendations as to the numbers that should be studied for discrimination. As the omission might be irksome to some, and detailed specification a burden to both editor and reader, may we state that in no instance did we analyse fewer than 50 cells, and generally scored at least 100 cells per slide.

We also take the opportunity of advising a change in the staining technique described in the paper. In order to increase the bench life of quinacrine mustard solution, it is now dissolved in absolute methanol (or ethanol) at 0.5 mg/ml. The stain solution is mixed immediately before use with an equal volume of double strength SSC solution (35 g/litre sodium chloride, 17.6 g/litre sodium citrate). This solution is also used as the initial wash, rinse, and mountant as described previously. This increases the contrast of the brightly fluorescing areas of the interphase nuclei and enhances the bands of metaphase chromosomes.—We are, etc.,

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