tain "gravel," as sixteenth- and seventeenth-century medical texts show. We⁸ felt compelled to exclude haematuria because after passing red urine (which incidentally Mayerne called *urina cruenta*—just as Thudichum⁹ (1867) called haematoporphyrin "Cruentine") James passed, "a few hours later," a specimen which was "white as water" and "clear as if filtered" (see plate⁹). Had the red colour been due to bleeding from the urinary tract it is unlikely that it would have disappeared so abruptly without leaving a trace of discoloration or smokiness—the very circumstance which mystified Mayerne. But that such rapid changes in colour do occur in porphyria and in what circumstances we have already touched on in our previous letter (24 February, p. 509).

Dr. Dean does not accept James's skin lesions as "characteristic"—they ought to be "water-blisters." A glance at our paper⁸ would have shown him that this is exactly what they were—namely, "vesicular"—and what is more they broke out "in the blazing sun," and, more typical still, were severest on the forehead and only healed at the end of September. Lastly, Dr. Dean doubts our statement that James had one congenitally malformed, non-functioning kidney, which like the other healthy one could not have been the seat of repeated calculus formation. Our evidence for it is contained in a contemporary necropsy report by a physician¹⁰ which runs: "The right kidney was found with difficulty, buried in much fat, very small and hardly exceeding an inch in length. It was not contracted from any disease but in shape it was formed naturally."

The existence of the X porphyrins, porphyrin-peptide conjugates, has only recently been discovered by one of us (C. R.) and their chemistry elucidated (Rimington, Lockwood and Belcher, *Clinical Science*, in press) by work over the past three years. The method for their determination, which demands considerable skill, has been passed on request to a few colleagues, and in our opinion the figure we quote for patient B is above normal.

However, Dr. Dean's overall objection to all our findings is that "this inherited disorder of metabolism, as far as we know from family studies [our italics], caused no significant symptoms, except light-sensitive skin, until the introduction of modern drugs." It has repeatedly been stated in your columns that severe symptoms do occur independent of drug intake, as by Professor A. Goldberg,³ Professor A. L. Cochrane,¹¹ and by those workers whom we quote in our previous letter (24 February, p. 509). This is therefore no valid ground on which to reject their appearance in the past. His dictum that porphyria caused no symptoms but skin sensitivity in the past is based on his own study where he traced the genealogy of living porphyrics in South Africa to an immigrant in 1688. His information was derived almost exclusively from verbal tradition or entries in family Bibles or church registers where in some, but not all, cases skin sensitivity was noted as a family peculiarity, called the "van Rooyen's skin." One would naturally not expect clinical observations or description of disease to be forthcoming from such sources. Dr. Dean cannot seriously argue that because he found no mention of clinical symptoms in his cases none occurred and therefore cannot have occurred in any porphyric. Would he maintain that because he saw no record of, say, smallpox his patients' families were exempt from it or that smallpox did not then exist? It was the advantage of finding detailed medical records—such as only exist for

historic figures—which gave us the opportunity of detecting evidence of symptoms of porphyria centuries before it was recognized as a clinical entity.—We are, etc.,

IDA MACALPINE.

R. HUNTER.

C. RIMINGTON.

London W.C.1.

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Steroids and Nephrotic Syndrome

SIR,—In your leading article on steroid treatment for nephrotic children (2 March, p. 530) you mention that there is no means of identifying those likely to relapse.

For over a decade I have used a regimen that has successfully achieved this. On discharge from hospital after the initial admission the mother is taught how to test her child's urine with Esbach's reagent each day and she is instructed to match the daily dose of prednisolone with the reading obtained. Thus if albumin is present amounting to four parts per thousand she gives four tablets of prednisolone in the following 24 hours, if 10 parts she would give 10 tablets, etc. It is surprising how great are the fluctuations recorded in her daily notebook. With colds and other infections a rapid rise to 12 parts is common, but the prompt administration of an adequate dose of steroid prevents the formation of significant oedema. As the child improves less frequent Esbach readings are taken. Experience has shown that the mothers successfully prevent relapses with this regimen, and, since steroids are only given when required, growth inhibition is kept to an absolute minimum.—I am, etc.,

Stock, Essex.

IAN G. WICKES.

Dental Anaesthesia

SIR,—A recent press report¹ concerning an inquest on a patient who died following anaesthesia for conservative dental treatment has prompted us to write this letter.

We wish to make it clear that we strongly deprecate the present practice employing the use of intravenous anaesthetic agents (for example, methohexitone) by single-handed practitioners for the purpose of carrying on any form of dental treatment. In our respective dental practices we do make use of general anaesthesia for conservative dental treatment. However, our incidence of general anaesthesia for these procedures is small and we each average about one to two patients per month (this is a lot less than the 5% figure quoted in the *Sunday Times*). Also the patient's airway is safeguarded by an endotracheal tube and packing.

During the preparation of a cavity in a tooth with the air turbine drill considerable water is used as coolant. Much of this water can be aspirated by the highly efficient aspirator used in most dental practices. This aspirator is many times more efficient than the best suction apparatus found in operating-theatres. However, it is still not possible to recover all this coolant, and the top of the pack is invariably wet if a large number of cavities have been prepared. Also, during the packing, condensation, and subsequent carving of the amalgam restoration, it is possible to dislodge small pieces of material into the mouth, which presents a further hazard. How can the operator-anaesthetist working on posterior teeth safeguard his patient's airway at all times? The answer is he cannot, and recent events prove the point.

Local analgesia with efficient premedication is the logical alternative. For the completely unmanageable patient, the subnormal or very nervous patient, an endotracheal anaesthetic. In conclusion let us remember that treatment shall not be more dangerous than the disease.—We are, etc.,

JOHN E. DE B. NORMAN.

R. C. TURNER.

H. FLASHER.

Leeds

REFERENCE

- Sunday Times*, 25 February, 1968.

Coal Gas and the Brain

SIR,—In the opening sentence of your leading article (17 February, p. 398) you state: "The common methods of attempting suicide in Britain are inhalation of carbon monoxide and the ingestion of barbiturates and aspirin." This may have been true in the distant past but it has not been the recent experience in Edinburgh, and there is no reason to think that the methods used here differ from elsewhere in the country. Kessel¹ reported that in 1962–3 9% of 522 patients who poisoned themselves used coal gas, while 55% ingested barbiturates. To equate the frequency of carbon monoxide with barbiturates as a means of attempting suicide is clearly misleading. This is further supported by a provisional analysis of the poison used by 974 patients admitted to this unit in 1967:

Method of Poisoning	No.	%
Barbiturates	286	29
Salicylate	141	14
"Mandrax"	107	11
Benzodiazepines	86	9
Carbon monoxide	46	5
Tricyclic compounds	46	5
Phenothiazines	35	4
Others	227	23

The admission rate to the Regional Poisoning Treatment Centre has doubled in the past five years, but the annual numbers of those who have ingested barbiturates or inhaled carbon monoxide have remained remarkably constant. The increased admission rate can be attributed to poisoning with Mandrax, benzodiazepines, tricyclic antidepressant drugs, and phenothiazines. The Registrar General reports that in 1959 in England and