Danger in Corticosteroid Therapy in Asthma

6 November 1965

Q.—Why should a few young patients with asthma and bronchitis who have been receiving long-term corticosteroids die suddenly when the steroid is reduced to a lower but what is nevertheless considered to be an adequate dose?

A.—One of the recognized harmful effects of long-term corticosteroids is the suppression of the patient's own suprarenal glands. Under these circumstances patients may be entirely dependent on the corticosteroids prescribed. This may happen in patients of any age, but the degree of suppression varies from one person to another and also depends on the daily dose of corticosteroid administered.

In the event of infection, severe emotional stress, or a severe attack of asthma there is a demand by the body for additional steroid—say, three to four times the basal output. This additional supply must be made up by increasing the dose of steroid, or death from Addisonian crisis may occur.

In some cases the patient may have omitted to take his daily dose of corticosteroid with consequent development of an Addisonian crisis. Sudden death in asthmatics even if they are not taking steroids may occur as the result of a very severe and acute attack of asthma. Coroner's pathologists have for long been familiar with this cause of sudden death.

Definition of Notifiable Disease

Q.—There seems to be some difficulty in interpreting the term "infectious disease" under the 1936 and the 1961 Public Health Acts. Can the 1936 act be held to apply to diseases made notifiable by special regulation thereafter, especially tuberculosis? Does the term in the 1961 act include these additional diseases, especially tuberculosis?

A.—The Public Health Acts of 1936 and 1961 make no attempt to define the term "infectious disease" but certain diseases are specified as "notifiable" in the 1936 Act, which gives the Minister of Health power to make other diseases the subject of regulations and authorizes local authorities, in certain circumstances, to declare further diseases to be notifiable. Tuberculosis is notifiable to the district medical officer of health under the Public Health (Tuberculosis) Regulations, 1952. These regulations rescinded the earlier Public Health (Tuberculosis) Regulations of 1930.

A disease made notifiable by regulation is, in law, a notifiable disease as much as if it had been specified as such in the Act itself. Part III of the 1961 Act is to be construed with Part V of the 1936 Act, and the answer to both questions is therefore "yes."

It is of interest that Ministry of Health Circular 33/51 (dated 14 August 1951)—dealing with a composite form of notification "... which can be used for any case notifiable under the Public Health Act, 1936 (or the Public Health (London) Act, 1936), or in accordance with Regulations, or under Section 17 of the Food and Drugs Act, 1938."—states in its penultimate paragraph: "The Minister also wishes to urge that on the cover of the pads of forms the following note should be printed regarding tuberculosis,

in order to assist doctors and to secure more uniformity of practice in notifying this disease:

"Tuberculosis is required to be notified in order to check the spread of infection and to bring about the proper management of the individual case and its immediate contacts. A person who should be notified as 'suffering from tuberculosis,' therefore, is a person who, because of tuberculous infection, may infect others or a person who is suffering from an active tuberculous lesion which calls for medical treatment or for some modification of the patient's normal course of living."

Surveillance of Patients on Oral Contraceptives

Q.—What routine examinations, if any, should be carried out in the surveillance of women taking oral contraceptives?

A.—Before prescribing an oral contraceptive a careful history should be taken of the menstrual cycle pattern, of previous gynaecological complaints, and of any previous disorders which might be aggravated by oral contraceptives (including migraine and other allergic troubles, recent liver disorder, thromboembolic phenomena, oedema, etc.). Bimanual vaginal examination and inspection by speculum should be carried out to exclude any pelvic lesion, and a cervical smear should be taken when facilities for its interpretation are available. The breasts should be examined to exclude a pre-existing carcinoma. The weight should be taken.

A similar examination is recommended at yearly intervals. However, occasional supervision of patients on oral contraceptives is required to ensure that a suitable product has been chosen, that side-effects are minimal, and that any pre-existing menstrual complaints have been relieved and good cycle control established. For this purpose the doctor should probably see the patient after the first three months of medication and then, if everything is straightforward, six-monthly thereafter.

Acroparaesthesiae in Pregnancy

Q.—What is the cause and treatment of the numbness and tingling of the hands and arms that occurs in many pregnant women?

A.—Acroparaesthesiae are probably caused by compression of nerve roots or the nerves themselves during their course to the peri-The compression may be due to cervical spondylosis, cervical ribs, drooping of the shoulders causing compression of the brachial plexus and/or the subclavian artery between the clavicle and the first rib, or to compression of the median nerves as they pass beneath the transverse carpal ligaments. The carpal tunnel syndrome is now regarded as the commonest cause of acroparaesthesiae in pregnancy. The symptoms may not be confined to the hands and fingers, they may also radiate up to the elbows. Pregnancy probably predisposes to compression of nerves because of the associated water retention causing oedema either of fibrous bands such as the transverse carpal ligaments or of the nerve sheaths, and in many women acro-

paraesthesiae are accompanied by obvious swelling of the fingers.

Many patients will need no treatment other than simple reassurance that the symptoms are of no consequence and will pass after delivery. Acroparaesthesiae are often relieved by intermittent courses of a diuretic such as chlorothiazide 0.5 g. once or twice daily for five days. Alternatively the carpal tunnel syndrome may be relieved by providing the patient with a splint to wear at night to keep the wrist in a neutral position. More resistant cases may respond to a local injection of 25 mg. hydrocortisone beneath the transverse carpal ligament.1 Surgical division of the ligament should not be carried out until at least three months after delivery, since the majority of patients are spontaneously cured in the puerperium. If acroparaesthesiae are caused by postural defects of the shoulder girdle the patient should be advised to avoid sleeping on the affected arm, which may be elevated either in a sling or by resting it on a pillow. Symptoms caused by cervical spondylosis may be alleviated by immobilizing the neck in a felt collar.

REFERENCE

¹ Crow, R. S., Brit. med. J., 1960, 1, 1611.

Genito-urinary Tuberculosis and Intercourse

Q.—Is there any risk of a man who has had a tuberculous kidney removed and who had tubercle bacilli in the urine after operation infecting his wife with pelvic tuberculosis if they have marital relations?

A.—There is no risk. There are examples on record of men who have had tubercle bacilli in the ejaculate fluid for years without causing any signs of genital tuberculosis in their wives. Pelvic tuberculosis in the female is undoubtedly blood-borne, not an ascending infection from the vulva.

Measles in Older Age

Q.—A man aged 57 appears to be suffering from a typical attack of measles. Is this so unusual as to make the diagnosis doubtful?

A.—Measles is mainly a disease of children in Britain, but no age is exempt. In "virgin" populations it attacks all ages indiscriminately. Epidemics occurred in Fiji, the Faroes, and in Tierra del Fuego. In Britain a man aged 57 covered with a morbilliform rash is more likely to be suffering from a drug rash than from measles, but if the attack really is typical, and includes Koplik's spots in the clinical features, the condition is measles and none other.

Notes and Comments

Correction.—In our report of the meeting of the European Dialysis and Transplant Association (16 October, p. 935) we incorrectly reported Dr. G. M. Berlyne as saying that the Giovannetti diet did not affect survival in renal failure. In fact, Dr. Berlyne said that the benefit of the diet on both survival and comfort of the patient was considerable.