colonies with a yeasty odour. Fungus did not grow from hair which was cleared of all crusts. Slide cultures using corn-meal agar showed a great number of chlamydospores. The organism fermented glucose and maltose with the formation of acid and gas, and lactose with the formation of acid only; it did not ferment sucrose.

Histological Examination.—Macroscopic examination showed a nodular papilloma with cornification of the surface. Microscopically the surface consisted of laminated wavy cornified material, and cells were found immediately under this cornifying surface. The Malpighian layer was thickened and was seen to pass down in large blunt growths. Normal-looking hairs and hair follicles were seen passing through. Areas of necrosis were present, mostly round hair follicles. The Hotchkiss-MacManus stain revealed a great many mycelia throughout the section (Fig. 3).

FIG. 1.—Photograph showing anterior two-thirds of scalp covered with crusts.

FIG. 2.—Section showing poorly refractile hyphae and large circular bodies, obviously chlamydospores. Potassium hydroxide preparation.

FIG. 3.—Section of the crust, showing an abundance of mycelia.

Pathogenicity.—A saline suspension of the organism was injected into the ear vein of a rabbit. The animal died after six days, and at necropsy the kidneys were swollen and studded with abscesses, from which organisms were recovered. It was therefore concluded that the eruption was due to infection by *C. albicans*. These findings were confirmed by Dr. R. W. Riddell, Institute of Dermatology, London, and Dr. J. Walker, Mycology Reference Laboratory, London.

Comment

Monilial granuloma caused by *C. albicans* is a rare specific entity. The case reported by Hauser and Rothman (1950) was strikingly similar to the present case. Their review of all available earlier literature on the

subject referred to only 13 other related cases. Another case of generalized moniliasis was reported at a meeting of the Minnesota Dermatological Society (1953). Analysis of all these 16 cases showed that

the age of onset was always in early childhood. In six cases the eruption appeared during the first year of life, in the remainder before the fifth year. The sexes were equally susceptible to infection. Of the earlier 15 patients, 14 were white and one a negro. The primary site of infection was the oral mucous membrane in seven cases, the scalp or face in six. In two cases the original site was not reported. In the case under review it was evident that the infection started in the mouth.

In all biopsies of the granuloma it was found that there was a tremendous proliferation of the organism in the infected site, in contrast to the common types of moniliasis, in which it was often difficult to demonstrate the organism in direct preparations.

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STENOSING TENOSYNOVITIS OF THE COMMON PERONEAL TENDON SHEATH

BY

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In view of the rarity of stenosing tenosynovitis of the common peroneal tendon sheath it is thought worth while to record the following case. Two previous cases were reported by Parvin and Ford (1956).

Case Report

The patient, a female Eurasian aged 45, was employed as a nurse. She complained of pain and swelling of the left ankle which had persisted for three months. The pain was felt only when she was walking; she could still stand without discomfort. The onset had been gradual and no injury had occurred.

On examination her general condition was good. She had a tender swelling below and behind the external malleolus of the left ankle in the line of the peroneal tendons. There was a full range of movement at the ankle and mid-tarsal joints, and pain was produced only on maximum inversion; the location of the pain was just behind the tip of the external malleolus.

Investigations.—White blood cells, 7,800 per c.mm. (polymorphs 69%, lymphocytes 26%, neutrophils 2%, eosinophils 3%); haemoglobin, 85%; total red cells, 4,200,000. Urine, nothing abnormal on routine examination. E.S.R., 9 mm. in first hour. Chest x-ray film was within normal limits and ankle film was normal.

It was considered clinically that the condition closely resembled the common stenosing tenosynovitis at the wrist and it was decided to make an exploration.

Operation.—This was performed on January 11, 1957, under general anaesthesia, and a tourniquet was used. An incision 3 in. (7.5 cm.) long was made in the line of the peroneal tendons from behind the external malleolus to below and just in front of it. It was immediately obvious that the inferior peroneal retinaculum was grossly thickened. A little further investigation showed a marked swelling of the tendon of peroneus brevis, just proximal to the retinaculum; the tendon sheath was thickened and lined with a velvety brown tissue (Fig. 1). The tendon of peroneus

longus appeared to be normal. A large piece of the thickened inferior retinaculum was excised, and this immediately allowed the tendon to move more easily (Fig. 2). No abnormality of the tendons, as is often seen in tendovaginitis at the wrist, was present. The skin was

FIG. 1.—Showing swelling of peroneus brevis and thickening of retinaculum.

FIG. 2.—After excision of thickened area of retinaculum.

sutured and a firm dressing applied. The biopsy report stated: "Chronic inflammatory tissue with no evidence of tuberculosis."

The operation gave complete relief of pain, and the swelling subsided.

Comment

Diagnosis of this condition is not difficult to make if the possibility of its occurrence is remembered.

The operation produced as satisfactory a result in the ankle as it does in the wrist.

REFERENCE

Parvin, R. W., and Ford, L. T. (1956). *J. Bone Jt Surg.*, **38A**, 1352.

In the preface to the eleventh edition of his *Clinical Examination of the Nervous System* Professor G. H. Monrad-Krohn writes that it will probably be the last from his hand. He retired recently from the chair of neurology in the University of Oslo, and the present edition of this well-known textbook has been revised with the assistance of Professor S. Revsum. Although some account of electroencephalographic, radiographic, and other technical methods of diagnosis is included, the main emphasis of the book is on clinical examination, which the author regards as one of the chief pillars of neurology. The book is published by H. K. Lewis and Co. Ltd., London (pp. 466 +xx; illustrated. 1958. 40s.).

NITROUS OXIDE ANAESTHESIA FOR BRONCHOSCOPY

A METHOD SUITABLE FOR OUT-PATIENTS

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This paper is based on our experience in giving general anaesthesia for over 700 bronchoscopic examinations, mainly on out-patients.

Bronchoscopy is a challenge for the anaesthetist. Whatever method of anaesthesia is used there is a danger of asphyxia. There are several reasons for this. The patients are often in poor general health, and in particular may suffer from a diminished pulmonary reserve, excessive sputum, hyperinflation, and obstructive airway disease, or cardiovascular insufficiency. The area of lung available for gas exchange may be reduced by occlusion or kinking of some of the more proximal air passages when the bronchoscope is passed deep into the bronchial tree. Severe bleeding after bronchial biopsy sometimes floods the airway. The anaesthetist has to share the whole airway with the bronchoscopist, who often prefers to work in a darkened room.

Most anaesthetic agents present difficulties. If anaesthesia is maintained by drugs given intravenously the effects outlast the examination. Explosive volatile agents are not safe. Chloroform, halothane, and trichlorethylene, apart from other factors, are objectionable to the operator unless the proximal end of the bronchoscope is closed (Herron, 1950; Mathewson *et al.*, 1956; Kovacs, 1957). We use nitrous oxide as our principal agent, adding a small dose of thiopentone for adults to provide a more comfortable and speedy induction. As in other published methods, muscle relaxation is obtained with suxamethonium (Churchill-Davidson, 1953; Kelsall, 1954; Cheatle and Chambers, 1955; Buck, 1955; Green and Coleman, 1955; Pinkerton, 1957).

Preliminary Assessment of Patient

The case histories and chest radiographs are examined. Superior vena caval obstruction is regarded as an absolute contraindication because the action of drugs given intravenously is apt to be delayed, and abolition of the negative inspiratory intrathoracic pressure increases the venous congestion. Cardiovascular disease is a relative contraindication: each patient is assessed individually. We have preferred topical analgesia for two patients with coronary artery insufficiency and for three patients who had cerebral vascular disease. Including five patients with mediastinal venous obstruction, our rejection rate for this type of general anaesthesia has been about 2%.

A simple explanation of the procedure is given to each patient. They are told that they will be in a semiconscious, dream-like state for the examination, which they will not find unpleasant. They are not told that they will go right off to sleep. The majority