with fever. She was then coughing up purulent sputum containing *Staph. pyogenes* resistant only to penicillin. She slowly improved with chloramphenicol and later tetracycline. Repeated aspiration of a left pleural effusion was necessary.

Case 4.—A woman aged 70 was admitted to Addenbrooke's Hospital, Cambridge, with a fracture of the neck of the right femur. She was treated by the insertion of a nail into the fractured bone. Seven days after operation she had an attack of dyspnoea; several further attacks occurred during the next week. At the end of this time she became pyrexial—temperature 104° F. (40° C.)—and rapidly deteriorated, dying in 48 hours. Necropsy revealed thrombi in the veins of the injured leg and in the pulmonary artery and its branches. Several infarcts were present in the lungs. The largest, in the right lower lobe, occupied about one-third of the lobe and had a soft grey-red central area, which on histological examination proved to be an abscess within an area of infarction. Bacteriological examination revealed *Staph. pyogenes*, type 75, sensitive only to chloramphenicol and erythromycin.

Discussion

Patients with pulmonary infarcts are very susceptible to staphylococcal invasion (Gresham, 1958). When the sputum in such a case changes from blood-stained mucus to haemorrhagic pus, staphylococci are almost always present. Infection probably reached the lung by the bronchial tree, and the haemorrhagic infarct provides an ideal site for bacterial growth.

Hospital staphylococcal infection can be prevented only by rigid aseptic technique, isolation of infected cases, and careful epidemiological study (Ministry of Health, 1959). Particular care is needed to protect ill patients from exposure to infection. When staphylococcal invasion does occur, antibiotic treatment must be energetic and appropriate for resistant hospital strains.

Summary

Patients with pulmonary infarcts are particularly liable to contract secondary staphylococcal infection. Four recent cases are described.

We are grateful to the physicians and surgeons of the Central Middlesex Hospital and Addenbrooke's Hospital for permission to report these cases.

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The Queen's Institute of District Nursing has announced the approval by the Minister of Health of its courses of district-nurse training. The syllabuses of training now available incorporate the recommendations laid down in the Report of the Minister's Advisory Committee on the Training of District Nurses. Centres training under the auspices of the Institute will adopt either the four-months or the six-months course. Students taking either course will, on successfully passing the examination, qualify for the national certificate to be issued by the Ministry of Health as well as for appointment to the Queen's Roll. To achieve a national standard of district nursing was one of the reasons for the foundation of the Institute in 1887, and the Institute regards it as a great step towards the realization of this objective that district-nurse training has now been recognized by the Ministry of Health and that a national certificate will be awarded. Details may be obtained from the Institute at 57, Lower Belgrave Street, London, S.W.1.

DUMB-BELL-SHAPED DERMOID CYSTS OF THE ORBIT

BY

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Harvey Jackson (1951) states that the incidence of dermoid cysts in proved orbital new formations is 6.3%. The majority appear in the upper half of the orbit, more commonly the upper temporal quadrant. The cyst slowly increases in size, eventually to erode the roof of the orbit, to become closely stuck to the bone, and to be in contact with the dura, but rarely adherent to it or invading it. Some orbital dermoid cysts extend into the anterior and middle cranial fossae, into the nasal cavity, and may be attached to the optic-nerve sheath in the apex of the orbit.

When the dermoid has eroded bone the radiographic changes are diagnostic; a well-defined translucent area is surrounded by bone of increased density. In some cases there is broadening of the fronto-malar process (external angular process).

Case 1

Two clinical facts of particular interest about the patient, a young male, are: (1) the recurrence of the dermoid cyst in the upper temporal quadrant of the right orbit after three previous operations to excise it, and (2) the anatomical difficulty in obtaining any typical radiographic evidence of its extension through a 5-mm. defect in the lateral wall of the orbit.

Operation.—The eyelids were stitched together. Fig. 1 shows the incision made through skin and orbicularis muscle along the upper margin of the eyebrow and carried down about 1 cm. posterior to the fronto-malar process, then in a curved sweep over the temporalis fascia and muscle, to end in the crease level with the lateral canthus and along the upper margin of the zygomatic arch. (The upper part of this incision is placed a little lower than that recommended by Dickson Wright (1948) for combined lateral and trans-frontal orbitotomy.) The orbicularis muscle was undermined on both sides of the incision and the flaps thus made were retracted by silk sutures passed through the orbicularis muscle (Fig. 2). The periosteum was incised about 3 mm. from the supraorbital and lateral margins of the orbit and was reflected by a small rugine round the orbital margin,

FIG. 1.—Incision.

where it was closely attached. From this point the orbital periosteum was readily separated from the bone with a flat lacrimal dissector (Stallard's).

The temporalis fascia was incised along the posterior edge of the fronto-malar process and the malar bone, and the temporalis muscle was cut antero-posteriorly for about 1.5 cm. at the anterior part of its origin to facilitate its reflection posteriorly. The dermoid cyst in the orbit was dissected and found to communicate through a defect of 5-mm. diameter in the lateral orbital wall with an extension

FIG. 2.—Exposure of dumb-bell dermoid cyst of the right orbit and temporal fossa. Partial resection of the lateral orbital wall to show the waist of the dumb-bell, which passed through a 5-mm. diameter erosion in the lateral orbital wall.

of the dermoid cyst in the temporal fossa, deep to the temporalis muscle. The opening in the lateral orbital wall was on a level with the temporal fossa; because of its site and its small size it must have escaped detection at the three previous operations. It was through this aperture that the cyst recurred in the orbit.

A wedge-shaped piece of the lateral orbital margin was removed down to the bony aperture and the full extent of the hour-glass dermoid was exposed (Fig. 2). There was no evidence of extension into the middle cranial fossa or through the roof of the orbit. The cyst was excised completely. The wedge of excised bone was replaced and secured by two 20-day chromic-catgut sutures passed through small drill-holes in either side of each bone-cut.

The skin-muscle incision was closed in two layers. There has been no recurrence 10 years after operation.

FIG. 3.—Dermoid cyst of the left orbit. Erosion of roof of orbit, lateral part of supraorbital margin, and extension through lateral orbital wall into temporal fossa.

Case 2

Fig. 3 shows a dermoid cyst in a woman, aged 33, which eroded the roof of the orbit, destroyed the supraorbital margin, making a gap 18 by 10 mm., and extended into the temporal fossa through a defect 10 by 5 mm. in the lateral orbital wall beneath the fronto-malar process (external angular process). Three small flakes of bone remnants of the orbital roof were present on the anterior and upper surface of the dermoid cyst. The cyst was in contact with dura but not adherent to it. The remarkable fact in this case was the destruction of the thick supraorbital margin by the insidious pressure of the growing cyst.

Literature

Harvey Jackson (1951) mentions a patient with a dermoid cyst in the temporal fossa and a circular defect in the lateral orbital wall.

Carey (1958) has described the case of a woman aged 51 with a sinus below the lateral canthus. There were a small circular opening in the lateral orbital wall, a dumb-bell-shaped dermoid cyst, and some erosion of the roof of the orbit and temporal fossa exposing intact dura covering the frontal and temporal lobes of the brain. Carey packed the wound with ribbon gauze soaked in 1:80 carbolic acid and allowed it to granulate.

Summary

The features of particular interest in these two cases of dermoid cyst of the orbit are, in Case 1, the recurrence of the cyst due to its extension through a small opening in the lateral orbital wall into the temporal fossa being overlooked, and, in Case 2, the insidious erosive power of these cysts, which are capable of destroying bone as thick as the supraorbital margin.

I thank Dr. W. Darley and the late Mr. Martin Jones for their kindness in referring these patients to me.

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"It is reasonably certain that coronary atherosclerosis has not increased during this century in England at the same rapid rate as has coronary thrombosis, which was certainly rare 50 years ago. Sir William Osler wrote in 1910 that he did not see a case of angina pectoris until after he had been admitted to the Fellowship of the Royal College of Physicians, and he saw no case during ten years of practice in the Montreal Central Hospital. In our country and North America ischaemic heart disease is now the commonest single cause of death, and there are possibly about half a million patients in this country now. My own interest in coronary heart disease dates from a quarter of a century ago when, as a medical student, I was intrigued by the failure of medical science to do much to prolong the lives of middle-aged men. Their expectation of life in England and Wales was only some three years less a century ago than now, despite the great advances in medical science. In the U.S.A. also the expectation of life 60 years ago was only four years less than now. But the diseases that now kill middle-aged men are quite different from those of a century ago when tuberculosis and pneumonia were common, and chronic degenerative diseases such as cardiovascular disease and cancer were rare. I believed that the only environmental factor causing this increase in chronic degenerative disease must be diet, and I was keen to obtain evidence for the dietary factor which seemed likely to be an alteration in trace elements or particular fats. . . ." ("Nutrition and Cardiovascular Disease": address to the Royal Society of Health by Dr. H. M. Sinclair (reader in human nutrition, Oxford University).)