be necessary. An important matter in the after-care of these cases is warmth and free ventilation. If I quote the notes of two cases I think it may be sufficient.

CASE I.

I was sent for on July 1st to see Mrs. F., aged 82. She complained of pain in the left eyeball and along the superior maxilla, and almost complete blindness of the left eye. There was ptosis of the lid, and the eyeball could only be moved slightly outward and downwards; the pupil was contracted. I referred her to Mr. Potts, who reported well marked optic neuritis, central scotoma, paralysis of the third nerve, and slight proptosis; he suggested that I might find some nasal trouble. She gave a history of an influenzal cold in her head some few weeks previously. Examination showed swelling of the middle turbinate with mucopurulent discharge in the middle anterior part of the space, and in the post-nasal space over the Eustachian cartilage; the maxillary antrum was dim. I advised operation as a possible cure. She consented, and three days later, under general anaesthesia, I completely exenterated the anterior cells up to the soft tissues of the orbit. There was ecchymosis of both eyelids. Six weeks later she had completely recovered her sight, and movement of the eyeball and ptosis and proptosis had disappeared.

CASE II.

F. C., a gardener, aged 22, was admitted to the eye department of the hospital on October 11th, 1924. Receding optic neuritis of the left eye was diagnosed. He complained of severe supraorbital headache and occasional occipital pain, that he felt giddy, was sleepy at times, and of nausea. On examination I found slight mucopurulent discharge coming from under the anterior end of the middle turbinate bone. In the post-nasal space pus was seen winding round the left Eustachian cartilage; there was a similar condition on the right side, but less marked. The report as to vision was: R.V. = 6/5 (part), L.V. = 6/36. There was slight hyperaemia of the left disc, physiological pit filled in, and lamina not visible.

On October 12th left vision = 6/60. The following day, under general anaesthesia, the anterior ethmoidal cells were opened, right and left, gently curetted, both maxillary antra burred, and pus evacuated from the left.

On October 16th left vision = 6/36 and on October 27th 6/18; on April 29th of this year it was 6/12. There is no active optic neuritis now present, and vision is practically normal. This case was shown at the laryngological meeting in May, 1925.

ARTHRITIS DEFORMANS: OBSERVATIONS ON ITS ETIOLOGY AND TREATMENT.

(Preliminary Communication.)

BY

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UNDER the term "arthritis deformans" (Virchow) we have included all forms of non-specific hypertrophic or atrophic, active or inactive, arthritis which we have encountered in a routine investigation of upwards of fifty cases, seen in our wards and privately. This investigation has been conducted from several sides:

1. *Clinical*.—Daily observation has been made in the wards for as long, in some cases, as six months.

2. *Bacteriological*.—The joints have been opened (T. P. McM.) in a large proportion of cases, and from them an organism has been recovered (L. S. A.) which is identical in every case in its cultural and biochemical features. This organism does not correspond to any organism which has been previously described in association with this or any other disease, in so far as we have examined the literature. In only one case has it been recovered from the synovial fluid; in all the others it has been isolated from either the membrane or articular bone. No lesions have as yet been produced in animals; so far only the intravenous inoculation of rabbits has been attempted. Nothing constant has been isolated from foci of sepsis, faeces, urine, blood, or fasting stomach contents.

3. *Metabolic*.—Routine examinations have been made (L. C., H. S. P.) of gastric secretion, basal metabolism, acid-base ratio, renal and hepatic efficiency, and of glucose tolerance. The outstanding features, so far, appear to be: the large proportion of cases showing achlorhydria or hypochlorhydria, the practically universal diminution of carbohydrate tolerance, and the relative absence of acidosis, renal or liver defects, or of changes in the basal metabolic rate.

4. *Therapeutic*.—Apart from correction of deformities (T. P. McM.) and removal of focal sepsis wherever practicable, the only routine treatment employed has consisted in the use of large amounts of 0.4 per cent. hydrochloric acid and a carbohydrate-free diet extending over a period of months. Improvement—first by diminution of pain and then by increase of mobility—has been obtained in practically every case, even without the removal of focal sepsis.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

A CASE OF REVERSE PERISTALSIS.

A CONGENITALLY weak-minded boy, aged 13, recently had an attack of diphtheria, which was treated with antitoxin in ordinary doses. About ten days after his admission to hospital, and after all acute symptoms had passed off, he became very constipated and lost his appetite, his tongue becoming furred and dry. Ordinary aperients failing to produce an action of the bowels, a simple enema was administered. This was retained for about three-quarters of an hour, when it was returned unchanged; he vomited at the same time, and the matron noticed in the vomit several pieces of oval brown substance, rather less than the size of a small walnut. On examining these about an hour later I found them to be typical, formed faeces. The boy was then quite comfortable; he had had the bowels moved, though by the mouth, and his tongue had already cleaned. He has since made a perfect recovery, and his bowels have become normal after the use of aperients.

The enema appears to have set up a reverse peristalsis which carried the faeces from the colon to the stomach in something less than three-quarters of an hour.

Colwyn Bay.

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PROLONGED CHEYNE-STOKES RESPIRATION FOLLOWED BY RECOVERY.

THE following case seems of sufficient interest to be placed on record.

A male infant, 1 month old, was brought to the C.M.S. Hospital, Pakhoi, South China, at 11 a.m. on May 9th, 1924. The child was cyanosed; the temperature was 99° F., the pulse was very feeble (160), and the respirations very irregular (50 to 60). As there was some history of cough, it was, for the moment, thought to be a case of bronchopneumonia, but auscultation of the chest showed nothing abnormal, and suspicion fell on the alimentary system. The mother, who lived on a junk, said that as she had been short of milk she had, the previous day, given the child a quantity of "yeet." This concoction, very popular among the local Chinese, is made of flour, cane-sugar, and boiling water. Castor oil was given at once, and 3-minim doses of brandy, diluted, at intervals.

At 2 p.m. the temperature had fallen to 98° F. and the respirations had become markedly irregular, and finally, an hour later, assumed the Cheyne-Stokes type. The temperature rose to 100° F. At night the condition of the child was critical. The breathing cycle was of 7 to 9 respirations; the pulse was very feeble and difficult to count. An injection of digitalin gr. 1/1200 and strychnine gr. 1/1200 was given, and a rectal saline, containing 20 minims each of brandy and aromatic spirits of ammonia, administered. The latter was not retained; it was repeated at midnight and again at 4 p.m. On these occasions it was partially retained.

At 8 a.m. the next day the Cheyne-Stokes breathing was very definite; temperature 100° F. and pulse still running. The child could not swallow water.

At 10 a.m. 2 ounces of saline, with the addition of 1/2 minim liq. strychninae, was injected subcutaneously. This was followed by a very definite reaction, and at noon the temperature had risen to 103° F. The child was then able to swallow a little water. The injection was repeated at 4 and at 9 p.m., and though the cerebral control over the breathing was still inhibited the temperature remained at 103° F. during the day, and the length of the Cheyne-Stokes cycle increased to 16.

By the following morning the child was able to take the breast, which had been massaged and the milk flow improved. The temperature was now about 102° F. and the Cheyne-Stokes cycle about 30. The breathing gradually became normal, and by 4 p.m., after forty-four hours of Cheyne-Stokes respiration, had become quite regular. The temperature fell steadily, and five days after admission became normal.

Apart from flatulence, which was controlled by small doses of salol, the infant made an unevenful recovery, and on the tenth day after admission was discharged. It was then feeding and sleeping normally and the mother had a full supply of milk.