turbinal. The mucous membrane of the sinus is commonly in the same condition as that of the nose; latent or maxillary empyema is excluded by drainage; the consequent effect on the ethmoiditis is good.

Closed sphenoidal empyema gives rise to a series of indefinite symptoms of malaise and pain at the back of the head.

A woman was admitted to hospital for relief of nasal obstruction and removal of septic tonsils. For some years she had had malaise, debility, and catarrhal laryngitis. A radiogram of the chest indicated absence of phthisis, and that of the head showed opacity in the right ethmoid region. No pus was observed on nasal and post-nasal examination. At the operation both middle turbinals were removed. The middle ethmoidal cells were well developed, but did not contain fluid. The septic tonsils were also removed. Three days later the patient developed fever, and a haemolytic streptococcus was isolated from the inflamed pharynx. Anti-scarlet fever serum, colloidal manganese, and hypertonic saline were given, and apparently complete recovery took place. Two weeks later a similar attack of fever recurred. Meningitis supervened, and she died four days after this relapse.

In this case neither maxillary sinus nor sphenoidal sinus was opened at the time of operation, as no pus was seen, and it seemed advisable not to expose a feeble individual to further manipulation. The presence of haemolytic streptococci seemed to contraindicate any further intervention in the absence of definite symptoms in the second phase. Yet if the sinus had been opened, her life would have been saved.

A NOTE ON THE TREATMENT OF ERYSIPELAS BY X RAYS

WITH AN ACCOUNT OF THREE CASES

BY

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The value of x -ray therapy as an agent capable of cutting short the acute stage of erysipelas does not appear to be well known in this country, although it was advocated in America some years ago by Platau, Schlitz, and Collins.¹ An account of the following three cases which recently occurred consecutively in the private practice of one of us (R. H. J.) may therefore prove of interest. The first is quoted as exemplifying the use of local applications and serum, but no x rays.

CASE I

A man, aged 63, received a gnat bite on the ear. On May 28th the ear swelled to about three times its usual size; the inflammatory swelling spread slowly over the face, scalp, and forehead. Nothing stopped it, but continuous application of a saturated solution of Epsom salts gave most relief. Ichthyol was disappointing, and once, after its application, the temperature ran up, and the patient had a rigor. Anti-streptococcus serum gave no definite result. Ultimately the temperature dropped after fifteen days of a trying illness—trying to both doctor and patient.

Distressing though the attack was, the temperature did not rise at any time above 101.6° F.; whereas in the two cases next described the temperature reached 103° before x rays were applied. Note that the temperature in the first case shows a fall by lysis; in the other two a fall by crisis, immediately following the first application of the x rays.

¹ *Journ. Amer. Med. Assoc.*, 1927, lxxxix, 1135.

Opening the Sphenoidal Sinus

In opening the sphenoidal sinus I usually employ the method introduced by P. Watson-Williams; it is applicable whether the field is obscured by blood or not.

The anaesthetized patient lies on the left side, or sits up. The left forefinger is introduced through the mouth into the post-nasal space, defining the top of the septum nasi. A steel probe introduced through the nostrils touches the forefinger, and is advanced about 1/4 inch anterior and about 1/4 inch from the middle bone. Careful and controlled pressure on the thin bone in front of the dense vomerine ridge perforates the bone or osteum and admits the steel probe into the cavity of the sphenoid. This opening is further enlarged by a narrow gouge, and finally by punch forceps or raspator. The posterior ethmoid is cautiously opened if necessary. If the middle turbinal has been removed, the enlarged opening of the sphenoid can be observed with a nasal speculum. I have found that Rouge's method gives a better view than lateral rhinotomy when direct manipulation is advisable.

I would suggest that sinus radiography should be carried out in all cases of ethmoiditis, and that the basis of operation should be removal of the middle turbinal, drainage of the sphenoidal sinuses and maxillary antrum; and of the frontal sinuses, if the radiographic examination indicates such a course. This treatment, followed later by removal of polypi under local anaesthesia, and possibly the opening of cells from below the attachment of the middle turbinal, is advised.

CASE II

The patient was a man, aged 40. The attack in this instance started sharply, without apparent cause, such as insect bite or an irritated pimple. It soon involved the whole face and scalp, and began to spread down the neck on the right side. The application of Epsom salts solution locally made the patient feel more comfortable. Serum was administered on the morning of the third day, and repeated the two following days. Twelve hours after the last injection of serum the temperature rose to 103°. On the evening of the seventh day of the attack it was still 102.6°. The patient felt very ill, and was very despondent. It was at this point that it was decided to try x rays. A portable set was employed, working on the electric light mains. The temperature showed a drop in less than twelve hours to 99.4°, rose to 99.6° the same evening, but the following morning (ninth day) it was normal. X rays were omitted on the twelfth day, as the temperature remained normal; but a rise to 99.2° on the thirteenth day seemed to call for a further x -ray exposure. After this there was no more fever.

The improvement in this patient's general and local condition after the x -ray application was most dramatic. The third case need not be gone into in detail, as it was of very short duration.

CASE III

A married woman, aged 62, suffered from an acute attack of facial erysipelas, following on tonsillitis. The patient was very debilitated, and could not be induced to take nourishment. On the fourth day her whole face and parts of the scalp were red and swollen, and some blisters were present. The disease was spreading. The first dose of x rays was administered at 9 p.m. Next morning the temperature was normal, and did not again rise above 98.8°. X -ray treatment was given on three successive days.

Comment

We feel that in x rays there is to hand a powerful weapon against the disease under discussion. The contrast between the first case, taking its slow and painful course despite all the usual remedies, and the other two, is very remarkable. The two latter were more severe

in type, and in the case of the debilitated elderly patient last described there was considerable risk of the issue terminating fatally if the spread of the infection had not been promptly checked. The remedy is easily applied, as the dosage is very small, and can be obtained from a light portable set, working on the house mains, or even from an accumulator outfit. The small quantity of x rays required makes it possible to expose the hair and eyes without risk, as the total dosage, even over several days, need not, on any one area, come near the epilation point, much less that of erythema production. Where an acute inflammation has lasted many days hair may subsequently fall out, and there may be paraesthesia or anaesthesia of portions of the skin. Unless the patient has been warned of this (and possibly even if he has) he will be apt to blame the x rays.

How these very small x -ray doses accomplish their purpose cannot be stated with any certainty. It can, however, be said that it is not by any direct destruction of the germs. What seems to happen is that local and general resistance is stimulated, so that antibodies are formed where they are most needed. It has been known for a long time that a small dose of x rays will often avert a boil, if applied before pus has actually formed. Radiotherapy has been used—again in America—in the acute stages of anterior poliomyelitis. There would appear to be a field for its experimental use in various acute infections. As regards erysipelas, it has passed the experimental stage, and can be confidently recommended in any case which causes anxiety to doctor and patient.

Consideration of space prevents the publication of charts accompanying this article.

Memoranda

MEDICAL, SURGICAL, OBSTETRICAL

ENTERIC INTUSSUSCEPTION

Enteric intussusception appears to be very uncommon, and some writers say that it only occurs occasionally as an ante-mortem phenomenon in some other diseased state.

A ploughman, aged 47, was admitted to my wards in the Dumfries and Galloway Royal Infirmary on June 8th, 1929, about midnight. Dr. MacMyn of Kirkcudbright reported that on the afternoon of the same day he had found the patient suffering from severe abdominal pain and in a state of collapse. The pain had come on suddenly about two hours previously. There was no history of any such previous attack. Dr. MacMyn expressed the opinion that there was an acute abdominal condition present, and that an immediate laparotomy was indicated.

I saw the patient shortly after admission; he did not then complain of pain, but rather of discomfort "in his inside." He looked tired, and his appearance, pulse, etc., indicated a degree of shock. The bowels had moved normally the same morning. He gave no history of sickness or vomiting, and there was no distension of the abdomen, no evident tumour, no tenderness on firm palpation, and nothing remarkable in the pulse rate and temperature. The heart, lungs, and urine were normal. I did not operate at once, but left word that I should be called if definite symptoms supervened. The patient was fairly comfortable till late the following morning, when he complained of intermittent griping pain, and when I saw him again it was evident that intestinal obstruction was present. There was now some slight distension of the abdomen; the abdominal wall was thin, and the outlines of distended coils of bowel could be seen. There had been no vomiting, and nothing passed from the bowels.

I operated at once, opening the abdomen internal to the outer border of the right rectus, displacing the muscle inwards. There was slight peritoneal effusion, which was unstained. Exploration with the hand revealed a tumour in the pelvis,

which on delivery I found to be an intussusception of the small intestine, apparently about the middle of the ileum. About twelve inches of gut were involved. The intussusception was fairly easily reduced, but there were several gangrenous areas towards the apex, which did not recover under copious lavage with warm saline solution. I therefore resected fully eighteen inches of the gut, and restored continuity by end-to-end suture. The patient made an uneventful recovery, except that, notwithstanding the exhibition of morphine, the bowels had to be moved with enemata the day following the operation on account of griping pains. Large scybalous masses were then passed, and doubtless these travelling along the bowel had excited irregular strong peristalsis and intussusception.

There was no indication of a cause of the intussusception in the resected piece of gut, which showed marked swelling of the mucosa.

Dumfries.

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MEASLES IN A MAN OF 71

In view of the fact that Dr. Arthur J. Hall recorded in the *British Medical Journal* of March 29th, 1930 (p. 586), a case of measles in a man in his sixth decade, the following summary of the notes of a case of measles in the eighth decade may be of general interest.

On November 17th, 1928, a man, aged 71, was admitted to the Broken Hill Hospital complaining of feverishness, running nose, and running eyes for two days. He vomited two days before admission, and had had a cough for a week or two. He had been in contact with a case of measles two weeks before, and on the morning of admission a rash had been discovered on the chest and back. On examination mild conjunctivitis was found, with a heavily furred tongue, scattered crepitations throughout both lungs, and typical measles rash all over the body. The temperature was 101° F., the pulse 104, and the respirations 32 per minute.

As in Dr. Hall's case the prognosis was difficult, the patient not being robust, and being in every respect an "old" man. In addition, his lungs gave every indication of a developing broncho-pneumonia. However, in two days his temperature had subsided, his cough decreased, and the signs in the lungs were less. Several days later the rash had quite faded, and the lungs cleared.

Convalescence was complicated by the conjunctivitis becoming hyperacute, and proving most intractable to treatment. It was four months from the time of admission before the patient could be discharged from hospital, and then it was with a left eye almost blind as a result of the scarring. The right eye showed no permanent damage.

I wish to thank Dr. Ross, surgeon-superintendent of the Broken Hill Hospital, for permission to place this case on record.

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BURSITIS AT THE ELBOW

The following notes on a case of bursitis appear worthy of record.

A girl, aged 17, had been employed at a steam laundry, where she worked on a machine, a lever of which she had to move frequently with the left forearm partially flexed and pronated. A cystic swelling developed between the origin of the flexors of the forearm and the bicipital tendon. The swelling was tense, somewhat movable, and when the elbow was flexed or extended gave a rather crepitant feel to the examining thumb. Treatment took the form of several manipulations by the thumb and the application of Scott's dressings. When last seen the swelling was very considerably reduced in size, and was lying between the flexor origin on the internal condyle and the brachial artery. It could easily be displaced internally over the muscle.

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