SOCIETIES' PROCEEDINGS

ROYAL SOCIETY OF MEDICINE—SECTION OF LARYNGOLOGY

May 3rd, 1935, continued

President—W. M. MOLLISON, M.Chir.

CASES

Four Cases of Orbital Cellulitis Secondary to Nasal Disease Treated by Simple Incision.—T. B. LAYTON.

I.—M. D., female, aged 20, developed a headache on *January 31st*, 1933, followed on *February 8th*, by swelling in the region of the right eye, with nasal discharge, and on this day there was a faint rash upon the trunk. On admission to the North-Eastern Fever Hospital on *February 8th* there were the remnants of a punctate rash, a peeled tongue and desquamation of the neck and trunk. There was bilateral cervical adenitis and a purulent nasal discharge with tenderness on the right side of the nose.

She complained of severe pain in the right eye, there was swelling of the lids, with chemosis which made it hard to estimate whether there was any proptosis, but this was thought to be present. There was limitation of the movements of the eye causing diplopia on looking to the right. The optic discs appeared normal. Her temperature was 101·4 F., and her pulse 120. She was treated with 20 c.cm. of antiscarlatinal serum intramuscularly with fluids *ad lib.*, inhalations of menthol, and fomentations to the eye.

A week later (*February 15th*) the temperature had settled, the nasal discharge was diminishing, and there was less swelling in the region of the right eye. I advised that the expectant treatment should be continued until localization occurred, when a small incision should be made. This was done three days later (*February 18th*) under general anæsthesia, by Dr. Linford, who obtained a little thick pus (hæmolytic streptococcus on cultivation) from a tender area near the inner canthus by an incision into which a small drainage tube was inserted.

On *February 22nd* a skiagram was taken on which Dr. Mitman reported that the right frontal and ethmoidal sinuses and the maxillary antrum showed a uniform opacity. On that day I made a further incision under tutocaine anæsthesia at the inner margin of the orbit, and raised up the periosteum, but found no pus beneath.

https://doi.org/10.1017/S0022215100041980 Published online by Cambridge University Press

I am confident that I did no good by this further operative procedure; at the same time I washed out the antrum but found no pus. From the washings a pure culture of the hæmolytic streptococcus was grown. Thereafter the inflammatory signs slowly and rather irregularly subsided; the nasal discharge continued but was less in amount. The hæmolytic streptococcus was still present in this on *March 13th*. The discharge ceased on *March 30th*. On leaving hospital on *April 8th* no hæmolytic streptococcus could be cutivated from the nose. The patient has been well since.

II.—A similar case of a small boy, aged 9, who, during an attack of scarlet fever had a swelling which was watched for three weeks. When it pointed at the inner part of the orbit Dr. Banks made a small incision into it. The sinusitis was well by the time the boy had recovered from the scarlet fever. He has had no trouble since (two years). The scar is almost invisible.

I have to thank the M.O.H. to the L.C.C. for permission to show these two cases.

III.—Nurse A. had been nursing a student who was dying from hæmolytic streptococcal septicæmia secondary to a prick on his finger. She developed pain on the right side of the face with blockage of the nose on that side, followed by swelling of the eyelids. The chemosis was so marked that the eye could not be seen, and the whole of the side of the face was swollen. The mucous membrane on the right side of the nose was so swollen that all the neighbouring parts were in contact. There was no true pus. The left side was normal.

It was feared that she already had cavernous sinus thrombosis. She was treated with fluids in large quantities, and menthol inhalations, while the swelling was carefully watched. On the fifth day it was localized in the cheek beneath the inner canthus of the eye. An incision was made under local anæsthesia and a small amount of pus was evacuated. The antrum was washed out. This was painful to the patient and indefinite in its result as only a small amount of blood-stained mucus was recovered. It was probably valueless as a therapeutic measure at this stage. No hæmolytic streptococcus could be obtained from the washings. The staphylococcus that was grown was probably a contamination.

From this time her progress, though slow at first, was uninterrupted. At the end of a month she was sent home for three months' convalescence. It was intended at the end of that time to investigate the sinuses and to deal with any that were affected; but before this time had elapsed she was well. She has remained so in the subsequent three years, having completed her training at Guy's Hospital as a nurse.

IV.—A girl, aged 14, had pus in the nose and an orbital swelling. This pointed over the middle of the left eye. It was incised under

https://doi.org/10.1017/S0022215100041980 Published online by Cambridge University Press

local anæsthesia. It reformed and was incised again. A sinus remained. Under local anæsthesia the wound was reopened, the floor of the frontal sinus was removed and drainage secured into the nose as described by Harmer and Bedford Russell. The fronto-nasal duct was thus dilated by increasing sizes of rubber tubing. The patient is now well, but the case is a relatively recent one (six months since recovery).

Discussion.

Walter Howarth considered that these cases pointed the moral—which all should remember—that in acute cases the less surgical intervention which was carried out at the time, the better for the patients, and the less was the risk of setting up osteomyelitis. If just enough was done to evacuate the abscess and provide efficient drainage, the underlying sinusitis could be treated more satisfactorily at a later stage in the case. In many of the cases which showed œdema and apparent cellulitis of the orbit it was not, in his experience, even necessary to make an external incision; he had found that by plugging the nose with adrenaline and cocaine, or protargol or argyrol, one could get a large number of these cases, apparently needing an external incision, to settle down satisfactorily. For many years it had been the routine procedure, in his clinic, to give intranasal applications twice a day in these cases; after which in a large proportion the condition cleared up. That result obtained in ordinary acute frontal sinus cases as well as in cases having some œdema. To rush in and perform large operations in such cases was a practice to be deprecated. He was glad Mr. Layton had brought this series of cases forward, to show what could be done by simple incision, and the after-treatment, a few weeks later, of the underlying sinusitis.

E. D. D. Davis said he was very much puzzled by Mr. Layton's cases. They were not cases of orbital cellulitis such as he (the speaker) had seen. There were cases of nasal sinus suppuration with slight œdema of the upper eyelid which would clear up with conservative treatment; like acute suppuration of the mastoid it was a question of degree. But the cases of orbital cellulitis sent to him from an ophthalmic hospital were desperately ill. Temperature 104°; marked proptosis of the eyeball with extensive œdema of the eyelids and conjunctiva. Ninety per cent. of these cases were caused by suppuration of the frontal and ethmoidal sinuses. There was a figure-of-eight abscess, a collection of pus in the orbit between the orbital periosteum and the bone and another collection in the ethmoid or frontal sinuses. These cases might be expected to progress to a cavernous sinus thrombosis, pyæmia, meningitis or optic atrophy. They urgently needed adequate drainage of the orbit and nose by operation. He had seen a few cases—fortunately very few—treated by simple incision which was certainly insufficient. In one such case the patient, a boy, died of meningitis in spite of a further operation; the cerebrospinal fluid was found to be turbid before the second operation. In the milder cases with slight œdema it was often difficult to be sure whether pus was

https://doi.org/10.1017/S0022215100041980 Published online by Cambridge University Press

present in the orbit or not. In the severe cases, with an abscess in the orbit, drainage should be carried out as soon as possible. Simple incision would be inadequate and disastrous.

J. F. O'MALLEY said he could recall varying degrees of severity in children. Sometimes following an attack of scarlet fever there was œdema of the inner canthus, which he interpreted as an infection of the ethmoid cells which had extended into that region. If it was not very severe it subsided after the use of local vaso-constrictors. He was in favour of spraying with 1 : 5,000 adrenaline frequently during the day. He had had two cases in the same family. In one child there was suppuration under the middle turbinate and in the ethmoidal cells, with œdema of both lids. That had subsided perfectly under local treatment. Another child had developed a swelling in the floor of the frontal sinus—a definite external swelling, indicating that there was bone erosion. Simple incision permitted the escape of the discharge, and no need existed later to do anything to the nose. Unless the symptoms were very grave and called for further intervention, the simpler the treatment the better. Much help to drainage was afforded by local aëration of the cavities.

T. B. LAYTON (in reply) said that five years ago he might have spoken to the same effect as Mr. Davis had now done, but to-day he stood before the Section as a "reformed character". Formerly he did heroic operations for these conditions, and if the patient got well he said, "See what a good boy am I," while if he happened to die his comment was, "Well, at any rate, I have done my best." The case that made him change his mind was that of a girl whom he had shown to the Section years ago. She had an abscess in her orbit, and pus was pouring down the middle meatus, and she was so ill that the medical officer would not even carry out the speaker's advice to aspirate the swelling. She was well without anything being done to her by the time she had recovered from her scarlet fever.

He had taken a long time to learn his lesson. His conclusion was that the more desperately ill the patient was, unless there was incipient meningitis, the more was it necessary to leave him alone operatively. He did not think patients were saved from cavernous sinus thrombosis by operating on the acutely inflamed area; indeed, if it was a question of touch-and-go whether the patient would have cavernous sinus thrombosis or not, it was possible to tip the case over to the unfavourable side by operating.

He wished to advocate the method of dilating the fronto-nasal duct after the frontal sinus operation used in Case IV. When Mr. Harmer and Mr. Bedford Russell first described it, he (the speaker) did not believe in it; he asked at that time how pressure of a rubber tube through mucous membrane could cause a bony tube to become bigger. That showed the fallacy of arguing on the ground that a thing could not occur without trying. By putting in increasingly large tubes he did not doubt there was a gradual dilatation of the fronto-nasal duct.

Mr. Davis was wrong when he spoke of a figure-of-eight abscess. Suppuration in the frontal sinus was not an abscess. One might almost as truly say that a common cold was an abscess. It was an

https://doi.org/10.1017/S0022215100041980 Published online by Cambridge University Press

inflammation of mucous membrane, the products of which were not escaping properly.

In his " unregenerate days " fifteen years ago, he showed a case after an heroic operation had been done, under the influence of Mr. Herbert Tilley, and he subsequently showed the patient as a warning against that procedure. In those days he had two or three cases in which there had been a sequestrum of the os planum of the ethmoid. Since he had followed the policy of " hanging on " this had not occurred.

He was not claiming that by doing this every case would be saved. Years ago he had the case of a boy who had these symptoms, and there was intense injection of the mucous membrane and nothing else. He died of cavernous sinus thrombosis. The inflammation had spread from the ethmoidal mucous membrane to the superior ophthalmic vein, which had become thrombosed. Within the thrombus pus had formed, and this had burst into the orbital fat. The only operation that could have helped in such a case would have been a ligature of the superior ophthalmic vein prior to any symptoms having arisen.

ROYAL SOCIETY OF MEDICINE—SECTION OF LARYNGOLOGY AND SECTION OF OTOLOGY

(COMBINED MEETING, HELD AT BRISTOL, ON JUNE 14TH AND 15TH, 1935)

June 14th, 1935

LARYNGOLOGICAL SECTION

Chairman—PATRICK WATSON-WILLIAMS, M.D.

CASES

Congenital Shortness of the Œsophagus.—A. J. WRIGHT. K. S., male, aged 6 years.

First seen *May 14th*, 1935, complaining of cough followed by vomiting ; worse at night. The child is undernourished.

Skiagrams show the existence of a portion of the stomach in the thorax.

Suggestions as to future treatment would be welcomed.

DISCUSSION.

W. STIRK ADAMS said that the boy was making good progress, in spite of his difficulty in swallowing, and it would be wise to leave him alone for the present, and to pass an œsophageal bougie later if he lost ground. At the Birmingham Meeting last year a much younger child, who had a similar condition had been shown ; gastrostomy was done, and after this he was able to swallow much better than before. It was hoped he would continue to improve, but in the winter he developed

https://doi.org/10.1017/S0022215100041980 Published online by Cambridge University Press