

externally and internally for some primary lesion of considerable size to account for such extension I could not discover one.

In the report in THE LANCET³ of a meeting of the Pathological Section of the Royal Academy of Medicine in Ireland Dr. J. T. Wigham showed a cancer of the breast and various internal organs secondarily affected, with sections. The cancer was of the scirrhous type, the interest of the case lying in the route by which the disease is said to have spread to the internal organs. Cancer nodules could be discovered in the liver and under the pleura, the pericardium, and the endocardium, and the sections showed the growth pushing through the heart fibres between the last two. Similar growths were also found in both ovaries and along the course of the Fallopian tubes. Many other similar cases have been recorded. From the above facts it is plainly evident that treatment of a so-called accessible primary lesion (which oftentimes may be only a secondary growth) alone after the malignant virus has become active is tantamount to treating a syphilitic chancre, gouty, rheumatic, or tuberculous deposit locally, while permitting the secondary lesions to form. I hold, therefore, that as the origin of cancer is in the blood numbers of so-called primary lesions or growths may manifest themselves simultaneously in different parts of the body, which may be internal or external, inaccessible or accessible. That from the moment the malignant virus becomes active, proliferation and degeneration of the tissue and cells in the region attacked commence, and secondary infection and deposits occur. That the only method of arresting these pathological conditions is to charge the blood with some antidote to the malignant virus which it contains capable of rendering both the virus and the infected migrating cells in the blood and lymph channels inert, at the same time removing or attacking directly the primary lesions when accessible at the earliest possible moment.

(To be continued.)

AN UNUSUAL CASE OF CEREBRAL ABSCESS; BILATERAL TEMPOROSPHENOIDAL ABSCESS; OPERATIONS; RECOVERY.

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SUCCESSFUL operations upon abscess in the temporo-sphenoidal lobes of the cerebrum secondary to disease in the temporal bone are now comparatively frequent, so that isolated cases are rarely published. Many cases also are known in which operations have been performed upon two or more abscesses on the same side of the cerebrum, but after a careful search no record has been found of a case in which the temporal lobes on both sides have been destroyed by abscess secondary to ear disease. Such a condition must necessarily be very rare and recovery after operation, if not unique, is sufficiently remarkable to justify publication.

On May 9th, 1901, I was asked by Dr. C. Oldfield of Leeds to see a young woman, aged 20 years, who was then comatose and had a purulent discharge from both ears. The history, as supplied by her friends and the medical attendant, was that she had suffered from an intermittent discharge from both ears for six years but was otherwise very healthy. About the middle of March she had had severe pain in the left ear which lasted a few days, and subsequently, although not feeling very ill, she had not been able to resume her usual work. For three weeks there had been constipation and almost constant headache on the left side and during the same period she frequently complained of dizziness. Three days before I saw her she complained of diplopia but no distinct strabismus could be detected. For two days periods of mental dulness had been noticed and there had been marked drowsiness, gradually passing into complete unconsciousness on the last day. Vomiting had only occurred twice, once seven days and once two

days before coming under my care, each time after food. No paralysis of any of the limbs had been noticed before May 9th and no pain, swelling, or tenderness over the mastoid region. The temperature had been normal or slightly subnormal.

The patient was removed to the General Infirmary for operation. On admission she was found to be profoundly unconscious and could not be roused. The limbs were motionless but there were some rigidity of the right arm and occasional involuntary contractions of the pectoral muscles on the same side. The knee-jerks were present and brisk. Both eyes deviated outwards, the right deviating more than the left. The pupils were equal and reacted slightly to light. They were for the most part very small but at fairly regular intervals of from 20 to 30 seconds they suddenly dilated almost to the fullest extent possible. Synchronous with this the breathing for four or five respirations was deeper and there were slight movements of the arms and legs; the breathing then suddenly became feeble and the pupils contracted at once. There were no gradual rise and fall in the amplitude of the respirations, as in the usual form of Cheyne-Stokes breathing. The respiration-rate was from 18 to 22 per minute, the pulse was 56 and somewhat irregular, and the temperature was 98.2° F. The outer margins of the optic discs were blurred, the inner margins being distinct. Examination of the ears revealed pus in both auditory canals. On the right side there was a perforation in the membrana tympani involving the lower third; on the left a polypus filled up a perforation in the anterior half of the drum. Within an hour of her admission she was anaesthetised and the left mastoid region having been exposed by the usual curved incision the outer surface of bone was removed and the antrum and mastoid cells were found to be full of pus, caseating material, and granulation tissue. The usual radical mastoid operation was performed, all diseased bone being removed. In the performance of this the dura mater over the tegmen antri was exposed but appeared smooth and healthy. A portion of the squamous portion of the temporal bone immediately above the tegmen antri was removed with a trephine; the surface of the dura mater was healthy but the brain did not pulsate. The dura mater was opened by a curved incision and the brain was explored with a glass tube three-eighths of an inch in diameter. An abscess was found about one inch from the surface and more than three and a half ounces of stinking greenish pus and broken-down brain matter were evacuated. Two drainage-tubes were inserted and the amount of semi-solid material in the abscess being large the cavity was syringed out with boric acid lotion. One tube was left in and the mastoid wound was packed with iodoform gauze. On the following day the pulse was 82, the respirations were 20 and quite regular, and the temperature was 98.8°. The pupils were equal, reacting to light and not exhibiting the periodic variations noted above. The rigidity of the right arm persisted and she remained unconscious but resented interference.

On the second day some return of consciousness was noticed and the rigidity of the right arm passed off. The excreta were still passed involuntarily. In the afternoon there was a short rigor during which the temperature rose to 104.8°, afterwards falling to normal, from which it did not again rise during the convalescence.

On the fourth day after the operation she recognised her friends and regained control over the urine and faeces. As discharge persisted from the abscess cavity for some time the tube could not be removed until 26 days after the operation. As soon as consciousness was recovered a marked amnesic aphasia was noticed which only slowly passed away. Three weeks after the operation she wrote the names of her brothers as "Tom" and "Alfrom," knowing, however, that the latter was incorrect. Her perception of colours was accurate and her sense of taste and smell was quite unimpaired. Ammonia could not be named until she had taxed her memory for nearly three minutes, although she at once remembered that it was used for washing purposes and was to be obtained at a druggist's shop. A certain amount of mental instability was present; she was very easily excited and would laugh immoderately on the least provocation and was also easily moved to tears.

The patient left the hospital 37 days after the operation, the wound being healed and her mental condition being almost normal. 18 months later she was apparently perfectly well and got married. She was advised to have a

³ THE LANCET, Dec. 26th, 1903, p. 1784.

radical operation upon the right mastoid, discharge from that ear still persisting, but her hearing power for conversation being almost perfect she could not be persuaded to consent to this.

On Nov. 11th, 1903, I was again asked by Dr. Oldfield to see the same individual. She had been in excellent health, with the exception of a persistent painless otorrhœa on the right side, up to eight weeks previously, when she commenced to suffer from headache chiefly on the right side. For three weeks she had felt ill, the appetite being poor and the bowels constipated. For a fortnight there had been occasional vomiting, some days not at all, on others two or three times in the 24 hours. During the preceding three nights there had been slight delirium and during the days an increasing drowsiness, the temperature being constantly subnormal and the pulse about 80. When seen on the 11th she was very drowsy but resented interference and complained constantly of intense pain on the right side of the head. The temperature was 97°, the pulse was 72, and the respirations were 24. The pupils were equal, they reacted to light, and were of average size. There was no optic neuritis. The knee-jerks were present and there was no rigidity or paralysis of any limb. There was no tenderness or swelling over the mastoid. The right auditory canal was full of pus, the drum was absent, and the bottom of the canal was filled with granulation tissue. The diagnosis was complicated by pregnancy of three months' duration, but it seemed clearly to point to intracranial suppuration secondary to the ear disease on the right side.

The patient was removed to the General Infirmary for immediate operation. The right mastoid was opened in the usual way and was found to be completely excavated and filled with stinking pus and broken-down cholesteatomatous material. A radical mastoid operation was performed. The bone forming the roof of the antrum and middle ear had been entirely destroyed by the disease and the dura mater, covered with granulation tissue, was exposed. Pus could be seen exuding through a small opening in the dura mater. The ridge of bone between the tegmen antri and the squamous bone was removed, together with a portion of the latter bone itself. The dura mater over the inferior temporo-sphenoidal lobe being thus well exposed was opened, the incision being carried downwards to the point where pus was exuding. The underlying brain was incised and more than three ounces of very offensive pus gushed out. The abscess cavity was cautiously explored with the little finger and was found to extend upwards for more than two inches and forwards and backwards for about one and a half inches in each direction. The lining membrane feeling very delicate the cavity was not washed out but a large drainage-tube was inserted. The pus was found to contain a pure culture of the *bacillus coli communis*.

On the following day there was a slight discharge from the tube; the temperature was 100°, the pulse was 92, and the patient's mental condition was much improved. On the fifth day the discharge was very slight, the pulse and temperature were normal, her mind was quite clear, her appetite was good, but constipation was still marked. The tube was removed on the sixteenth day. She left the hospital a month later, the wound being healed and her mental condition being perfectly natural.

On both occasions the points by which the diagnosis was established were the presence of a chronic otorrhœa, severe unilateral headache, subnormal temperature, slow pulse, drowsiness progressing into coma, and occasional vomiting. These are the only signs usually present in uncomplicated cases of temporo-sphenoidal abscess. From the size of the abscess the second and third temporal lobes on both sides must have been practically destroyed. On the first occasion the rigidity of the right arm and the aphasia indicated pressure upon, or extension of inflammatory œdema to, the internal capsule and the first temporal lobe.

The centres for taste and smell, and perhaps of hearing, are usually regarded as being located in the three temporal lobes.

In the case now recorded taste and smell have been very carefully tested with a variety of objects, each side and the tip of the tongue and each nostril being separately examined, but no defect whatever can be elicited. The hearing power on the left side, upon which the first operation was performed, is the same as after that operation and is reduced to ability to hear a loud whisper at a distance of six inches. The deafness is fully accounted for by the extent of the ear disease present before the operation was performed. On the right side a low whisper is heard at a distance of 30 inches,

a watch at ten inches which a normal ear hears at 40 inches, and the ordinary speaking voice can be clearly heard at five feet. Although the disease must have destroyed the lower temporal lobes of the cerebrum on both sides taste and smell are absolutely perfect and the hearing power is so little affected that ordinary conversation can be followed with the greatest ease. The memory and general mental power are also absolutely unimpaired.

Leeds.

ON LATENT OR INTERMITTENT NASAL OBSTRUCTION.¹

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THE object of my communication to-day is to ask you to consider with me a condition of things within the nose that up to the present has scarcely been entertained by rhinologists and certainly not with the apprehension that this condition was one of any moment or worthy of much consideration. I want to point out to you that there is a condition of things within the nose which is extremely common; that this condition, although extremely common, has escaped general recognition; and that this condition of things is potent for harm and is a source of many of the affections found within the throat, ear, nose, and post-nasal space. The terms "latent" or "intermittent" nasal obstruction are sufficiently descriptive of the condition I wish to discuss with you this afternoon. I suggest to you that, apart from the various forms of nasal obstruction due to growths, out-growths, deflections, or what not, with which we are all familiar, there is a form of nasal obstruction that is more common and more harmful than all these put together. This form of nasal obstruction is latent—that is to say, it may come on in a nose that is physiologically perfectly patent and in which there is nothing abnormal to be seen. This form of obstruction may alternate with a condition of things in which the functions of the nose are perfectly performed and yet for 12 hours out of the 24 the nose may be absolutely occluded and the patient in a condition of extreme misery and discomfort. This intermittent form of nasal obstruction often eludes recognition and the surgeon is led astray because at the time of his examination the nasal chambers are perfectly free and patent and the functions of the nose are perfectly performed. I feel sure that no one present would resent the suggestion that more or less complete obstruction of the nasal chambers might be harmful to the individual and might lead to ear, throat, or nose troubles. If you admit that constant nasal obstruction is in many cases a cause of ear, throat, and nose troubles, I am not straining your imagination when I ask you to believe that intermittent nasal obstruction is also powerful for harm in the same direction. Or, in other words, if continuous loss of the functions of the nose results in trouble in the nose, throat, and ear I am here to contend that intermittent loss of the functions of the nose has a similar effect.

This, then, is the subject-matter of my remarks to you to-day. In order to understand properly this question we must have a clear idea of what are the functions of the nose and how the physiology of this organ is related to the physiology of the surrounding organs and to the economy in general. The nose has important relations with respiration, with digestion, with audition, with speaking and singing, with taste and smell, with sight, and with the various emotional states. The nose may also be looked upon as a respiratory organ in itself, as it is certain that a considerable interchange of gases takes place in its recesses and cavities. There is also some reason to believe that the nose is the safety valve of the brain. In order to appreciate fully the effect of the loss of the functions of the nose and the harm that may in consequence accrue to the individual we must first be in a position to appreciate their value. This can only be done by a careful survey and accurate knowledge of these functions as far as we are able. In order to obtain this we will discuss *seriatim* the nose in relation to the various functions I have enumerated.

¹ A communication read before the British Laryngological, Rhinological, and Otological Association on Jan. 29th, 1904.