PROCEEDINGS OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION.

Held in Atlantic City, New Jersey, May 25–27, 1914.

(*Continued from p.* 65.)

Endonasal Operation in Tumour of the Hypophysis—Report of a Case in a Female, aged nine.—T. H. Halsted.—The patient first seen February 6, 1914. The prominent symptoms were adiposity frontal headache, impairment of sight, tiring very easily, muscular fatigue, marked ataxia, dizziness, intention tremor, extreme difficulty in making co-ordinated movements. Skin dry and coarse, hair black, coarse, growing low on forehead. She was mentally acute, described as being almost brilliant. There was an increased tolerance for sugar, no glycosuria after 200 grm. glucose, slight pyrexia. The eyes showed $\frac{6}{9}$ + each eye, sight occasionally obscured, fields normal for form of each eye, colour fields normal. Pupils large, in dark room no reaction to light, but in very bright light moderate change. Reaction with convergence normal. Muscle balance normal.

Patient is short, thick-set for her age, tendency to adiposity, particularly about hips and abdomen, facial expression flat and ironed out, well marked general ataxia, marked choreiform movements, marked athetosis, decided intention tremor, some deafness, but not persistent.

X-ray examination—stereoscopic plates—showed sella turcica somewhat larger than normal, bony outlines irregular and not as clear-cut margins as other outlines in this area. Above and posterior to sella is a brain area of lessened density, fairly well defined, the antero-posterior diameter one and one-half inches, vertical about one inch. This area seems to surround the sella turcica, the interpretation being a soft growth, possibly a cyst, surrounding and pressing upon the pituitary body. The diagnosis was a cyst either of the hypophysis or a neighbourhood cyst pressing upon the hypophysis, the optic thalamus, corpora quadrigemina and contiguous regions forming the interpeduncular space.

Preliminary operation March 13, 1914, upright position, cocaine, adrenalin. Removal of both middle turbinates and exenteration of right anterior and posterior ethmoidal cells.

Second operation, anæsthesia, local, submucous resection of the septum. The entire septum, vomer, perpendicular plate of ethmoid and the rostrum of the sphenoid were removed. Anterior wall of both sphenoid and sphenoidal septum removed.

Nineteen days later third operation, posterior third of the soft, bony septum removed, then the bony sella, the dura incised, and there was an immediate gush of more than a half ounce of yellowish fluid.

During the week following the last operation there was a very marked change in her condition for the worse. Frontal headaches increased, shrieked a great deal, much stupor, dull, apathetic, involuntary urination, polyuria, two tonic convulsions, pulse irregular and thready, respiration at times slow and of Cheyne-Stokes type. At end of a week, following the convulsions, gradual improvement began, a very marked improvement in the ataxia and athenoid movements being first noticeable, pupil contracting, headache less, but there was a decided change for the worse in her disposition. Loss in weight and in muscular strength very per-

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ceptible, involuntary micturition and defæcation. This decided change in symptoms, some better, some worse, continued for three weeks, and seemed to be due to the relief of pressure in the interpeduncular space, as shown by improved eye conditions, less headache, less ataxia and intention tremor, whereas there was seemingly now a condition of hypopituitarism instead of the hyperpituitarism when she entered the hospital. For four weeks it was noticed that her black hair was changing colour rapidly to a reddish-brown, beginning at the distal end of the hair and extending rapidly to the scalp.

She was now put on pituitary extract—pituitrin—when there began an immediate improvement in her mental condition, the child becoming bright, cheerful, singing happily, displacing the apathy and dulness following the last operation. Muscular strength showed an equal improvement. No complaint of headache. But ten days have elapsed since giving the pituitary extract and writing the report of the case—consequently, too short a time to know how much real and permanent improvement may follow the operations.

Dr. Lewis A. Coffin: I have operated two of these cases, practically doing the same operation that Halsted has reported, excepting that I take out the posterior part of the septum instead of doing a submucous resection. I took out the rostrum and got to the sphenoidal wall in that way. They were done in two or three stages. The first case was a woman, an idiot, that was referred to me from a charity hospital, and I operated her in three sittings. She was a poor patient under cocaine, because she had no mentality, but I was successful in getting back as far as the sphenoid. I went into her sella, and put her back in the ward. Her symptoms as to pain in the head improved, but her mentality did not. Some ten days after I had done the operation I felt more or less chagrin because I had not any of that tumour in a bottle for examination; it was a cyst, there being a gush of straw-coloured fluid. It had become so easy to go into the sella turcica that I thought I would go in with curved forceps and get some of the tumour. I put her on the table under an anæsthetic, and took Yankauer's right and left forceps, somewhat curved, and opened the sella turcica, closed my forceps, and took out what I thought was the tumour; there was a small hæmorrhage. I backed right into the opening in the sella. I put her back in the ward feeling pretty well. Two hours later the patient was not so well. She was comatose, evidently from brain pressure. I removed the packing, but she died that night. Another case was sent to me from the eye clinic of the Manhattan Hospital—a young girl of seventeen, who had complete blindness in one eye and temporary hemianopsia in the other, with extreme and constant headache. I operated under cocaine, removed the posterior half of the septum, opening the sphenoid, and took down the sphenoidal septum under cocaine. I then, instead of inserting a plate, took her up to the X-ray room, and took a periosteal elevator and slipped it into the sphenoid, and without any light whatever, and put a little adhesive around it to hold it under the X ray, and found the periosteal elevator was exactly where I wanted to enter the sella turcica. I then put her back on the table, opened the sella, could see the tumour very well indeed, but could not get any tissue. It seemed to break down, and I was not so ambitious to get any of it in a bottle as I had been before. However, just as she went back to the ward I took a curette and slipped it in, and put her back in the X-ray room and X rayed her under ether, which showed my curette in the middle of the pituitary gland. That girl improved very much, not in vision, but her headaches dis-

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appeared. The interesting part is when she had gone out of my hands. She was coming to me for probably three or four or six weeks. She felt very much better. Dr. Sharp, who is consulting neurologist to our hospital, who worked for a number of years with Dr. Cushing, said we were not warranted in doing anything further for her. I was looking for a case where I could do the Frazier operation; but this was not justified in this unless her headaches returned. Her sister, however, wanted her vision improved, and took her to several other men. Dr. Elsberg, Dr. Charles A. Dana, etc., saw her in the course of time. I asked Elsberg if he ever operated her to notify me, and some two weeks later he sent me word he was going to do the Frazier operation. I went to see the operation. I was delighted with his wonderful and beautiful technique. He did not, however, remove more than the size of a grain of rice. I do not know her recent history.

Dr. CORNELIUS G. COAKLEY: I saw one case operated on of a man who was totally blind in the left eye, with hæmianopsia on the opposite side. Elsberg did the operation, a decompression, but a decompression above the optic nerves. If you are going in for decompression you have your growth below the optic nerve, and pushing the nerves upward, and here semi-classical decompression is of far more value than decompressing the lower portion of the floor of the frontal lobe. The Frazier operation is not so satisfactory as the Hirsch or Cushing, or as the regular decompression operation.

Dr. HARRY L. SWAIN: I too have seen an operation and assisted at one for pituitary tumour in the hands of a general surgeon. What impressed me was the smallness of the view of the tumour mass. The operation was done skilfully enough; the nose was taken off at the face and turned up to the forehead, and fastened with towels, and the septum taken away, set back, the sphenoid opened, and the septum between the two sphenoidal sinuses taken away, and a good operative field cleared up. When all is considered, the range of light in surgical amphitheatres is not enough for a clear view of the further wall of the sphenoid to enable one to open into the sella turcica. The first stroke of the chisel opened into the sella turcica, and enough was chipped out to enable us to look through at the cranial cavity; there was a growth, not a cyst, of organised tissue, and it was supposed to be a glioma, although this would be very rare in this situation. There was immediate improvement in vision after the operation, but on the night of the second day she developed a combination of œdema of the brain and pressure from that, with rise of temperature, œdema of the lung, and cessation of the kidney function, and died. During the first twenty-hours, while still in possession of her faculties, there was a marked improvement in vision as a result of simple decompression, because I doubt if the mass of tumour taken away in itself was sufficient to have relieved the pressure enough to improve the symptoms.

Dr. THOMAS E. HALSTED (in closing): In answer to Dr. Coffin's question, I think the field was better after the taking off of the posterior end of the septum, and, in fact, I first started to do what he had done, not the submucous resection, but I got cold feet. I knew what Hirsch had done, and thought I would stick to that operation. I am sure that the field which I got the third time, when I took out the posterior end of the septum, was better than at the second operation. I do not know regarding the comparative possibility of sepsis. This child that we thought was going to die after the second operation, developed a tonsillitis with a temperature of 103° F., and finally pulled through.

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Chronic Influenza of the Nose and Throat.—Lorenzo B. Lockard (Denver).—At various times cases have been recorded in which influenza bacilli, either in pure culture or in symbiosis, have been found during a period of several months, and in some instances for as long as one or two years. Usually these have been cases of chronic bronchitis, pneumonia, or tuberculosis, although a few have concerned individuals with rhinitis and otitis media.

The patient whose history is recorded presents the unique spectacle of an infection of the nose and throat lasting twelve years, during all of which time cultures of the *Bacillus influenzæ* have been obtainable whenever sought for, whether or not subjective symptoms of the disease were present. In 1902 he had an attack of influenza, which terminated in a peritonsillar abscess; the pus showed *Bacillus influenzæ*. During the next two years three swabs from the tonsillar crypts gave similar findings. In 1909 his tonsils were removed, and after three days a false membrane appeared, covering the pharynx and pillars. A culture from this showed the bacillus. In the following two months three positive cultures were obtained. An autogenous vaccine had no effect. Three years later, following an attack of typhoid fever, there developed acute inflammation of the maxillary sinus, the pus from which gave a pure culture of the *Bacillus influenzæ*. There was a second attack six months later, with the same bacteriological findings. A third attack developed the following winter, when a radical operation was performed, and again the influenza bacillus was found. Three months later an abscess appeared over the second bicuspid. This tooth and the first molar were extracted, and the necrosed portion of the floor was resected. A pure culture was obtained from the extracted tooth. Five months later the bacilli were still present. The literature fails to show a similar case, although cases of chronic infection have been described by several authors.

Bacilli are found in the throat secretions of many normal individuals, and in a large percentage of patients suffering from other diseases. In 172 normal individuals the bacillus was found 43 times, and in 427 patients with other diseases it was present in 215. Following attacks of influenza, bacilli may remain latent in the throat, bronchial tubes, or nose, and give rise to recurrent attacks in the individual, or transmit it to others. In this way may be explained the eruption of sporadic cases in non-epidemic periods. For the diagnosis of chronic influenza the finding of the influenza bacillus is not essential, as the symptoms are characteristic. No treatment aside from that which depends upon raising the resistance of the individual has been effective.

Niagara Falls, Canada, June 1, 2, 3, 1915.

Papilloma of the Larynx.—Thomas Hubbard.—Cases presenting complications and describing special features of surgery and general treatment were reported.

The first case was like a papilloma, but was diagnosed microscopically to be an epithelioma. Two tumours removed at different periods were pronounced malignant. The treatment was removal by forceps, followed by cauterisation, made thorough by means of a fenestrated intubation tube whereby the crystals of trichloracetic acid were rubbed into the base without injury to the sound mucosa. No recurrence up to now, about twelve years.

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A case presenting asthma as a complication was reported. The larynx was the source of the reflex which excited bronchial spasm of the most severe type, uncontrolled by morphine and adrenalin, and making operative procedures extremely difficult.

Two cases of papilloma in children were reported. Both had emergency tracheotomy. Operations by direct laryngoscopy and curettement through tube and also through the tracheotomy wound were successful. One case required a second operation in less than a year, the removal of one large papillomatous tumour giving her complete restoration of voice and no recurrence now for a year. The other case, a boy aged four, was cured in one curettement by upper and lower route. No recurrence in three years.

Papilloma of the larynx in an adult, operated thoroughly about six times in one year with active recurrence each time, was finally brought to a successful issue permanently by the aid of neck massage. This was begun one month prior to final operation, and it seemed to the operator that the operation was made more easy in that the patient controlled the larynx better than formerly. Massage was continued after removal of many small papilloma from all parts of the larynx except the inter-arytænoid space, and at this date, now six months, there is a perfectly clear larynx. It seems to the author that massage accomplishes precisely what is aimed at in the tracheotomy: the absolute rest method advocated by Clark and others, and in a much more rational physiological manner. Normal nutrition is restored and normal functional activity is maintained. The author urges trial of massage in connection with timely operative procedures even in young children, in preference to tracheotomy and prolonged rest.

Dr. J. Payson Clark: I wish to take exception to Dr. Hubbard's view with reference to tracheotomy in children. I cannot agree that leaving the tube in place for a long period hinders the restoration of function of the larynx. I have had patients who have worn the tube for a number of months, and after its removal there was no difficulty in the re-establishment of laryngeal function. It seems to me to be dangerous to remove the tube in children as long as there is any of the growth in the larynx, because there is apt to be an increase of this, and one may face the problem of doing another tracheotomy, which, as is well known, is more difficult than the primary tracheotomy. I would also like to register a plea for the indirect method of laryngoscopic examination. With the invention of all the instruments for the direct view of the larynx there is great danger of neglect of the indirect method, which seems to me to be much better for adults.

Dr. E. Fletcher Ingals: I would like to ask the reader of the paper about his results with trichloracetic acid. I cannot understand how it can be used in strong solution. Neither do I understand whether the tube, through which he did the cauterisation, was removed immediately after the operation or later. If it was removed at once, was there no swelling or trouble in restoration of function afterward? Dr. Clark says the second tracheotomy is more difficult than the first. I have not had much experience in this regard, but my recollection is that the second was the easier. I do not see why this should not be the case. In curetting the growth from below, was it done by sight—could Dr. Hubbard see what he was doing? I would also like to know whether he used an interrupted stitch in suturing.

(To be continued.)

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