

be suspected of hysteria; he is also able to make a much louder and better voice when he sings in a high key than when speaking. He has paresis of the left vocal band probably of cerebral origin.

REPORT OF CASE OF TOTAL ADHERENT SOFT PALATE; OPERATION AND RECOVERY.

Read in the Section on Laryngology and Otology, at the Forty-fifth Annual Meeting of the American Medical Association, held at San Francisco, June 5-8, 1894.

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Eighteen months since, James S. consulted me in reference to complete stenosis of the nasal passages and deafness which had existed for a period of seventeen years. On examination of the nasal passages they were found to contain polypoid growths varying in size, which by their presence seemed to annoy considerably the patient by creating a continuous flow of serous fluid from the nostrils and bringing on attacks of violent sneezing, which condition ceased soon after the tumors were removed.

Inspection of the throat revealed partial obliteration of the pillars of the palate, entire loss of the uvula, and total adhesion of the velum palati to the posterior wall of the pharynx. What still remained of the soft palate consisted chiefly of cicatricial tissue as was evidenced by the firmness and density of the structure. After explaining to the patient the character of his trouble, informing him of the difficulty surrounding such an operation and advising him against one being performed, he left me, determined to seek advice elsewhere. Two months ago he returned to me and insisted on my giving him relief, if it be possible.

The patient is a book-keeper by occupation, was born in Manchester, England, and came to the United States in 1885. As to family history; mother died early in life from the effects of puerperal septicemia and the father three years ago from an attack of gout. The subject of this sketch is the eldest of six children all of whom except himself are in the enjoyment of good health. The history is negative, so far as tubercular or malignant diseases are concerned. Mr. S. is now 32 years of age, married, weighs 140 pounds, is in a general way robust and healthy and complains of the local malady only, on account of which he seeks advice. He denies ever having had acquired syphilis. When 10 years old he developed a sore throat which continued to disturb him for some months when the family physician was consulted, who pronounced the disease "an ulcerated sore throat" and made repeated applications of lunar caustic. The morbid process of the throat seemed to have remained unarrested as is shown by the fact that at the age of 14, interference of nasal respiration was markedly experienced, and at 16, the sense of smell was lost, the function of the ears was impaired and the power to breathe or blow through the nose was totally abolished.

Cocainizing the parts to be operated upon as thoroughly as possible, I divided the adhesions by the use of an angular probe-pointed knife and curved scissors such as are employed in gynecologic work.

After puncturing on either side of the adherent parts with a sharp-pointed bistoury, I insinuated through the opening thus made the probe-pointed

blade of the angular knife and severed the attachments by first cutting downward to the lowest point of adhesion, thence upward to the median or uvular line where the adhesions were freed with the scissors.

These different procedures effected a communication between the naso- and oro-pharynx of sufficient spaciousness for me to introduce my index finger into the post-nasal cavity for purposes of exploration. By means of this manipulation, numerous bands of adhesions extending from the superior surface of the palate to the vault of the naso-pharynx were discovered, which bands I divided with the knife guarded by the finger. The loss of blood was slight. The patient was at once enabled to blow his nose with entire freedom and nasal respiration was restored. In a few days after the performance of the operation, a sense of smell in a measure returned and hearing without any other aid became perceptibly improved. Regarding after treatment which I deem most essential, the plan adopted to keep the denuded surfaces from reuniting, was as follows:

A piece of iodoform gauze, two inches wide, fifteen inches long, was in half its length divided, which parts were respectively drawn through the nostrils from behind the palate forward, thus by means of slight traction bringing the crotch of the tape to rest firmly against the posterior extremity of the septum narium. The broad or oral end of the tape was brought forward through the mouth, and united with the ones passing through the nose over the upper lip. This appliance was well borne by the patient, its presence interfering somewhat with the acts of deglutition and phonation. Apart from this inconvenience no demurrer was made. The dressing was changed every twenty-four hours for two weeks, after which it was omitted during the day and worn through the night only. Mono-chloroacetic acid (Smith and Delavan) was applied occasionally to the raw surfaces to insure if possible a favorable issue. Whenever a point of adhesion would show itself, it was immediately broken up. The nostrils and post-nasal cavity were kept clean by the employment in spray form of antiseptic washes.

REMARKS.—1. The cause of the ulcerative processes of the soft palate followed by adhesions, was inherited syphilis. This opinion is confirmed by the fact that the patient had typical Hutchinson teeth.

2. The operation is justifiable and made successful by effecting a thorough division of the points of adhesion, and devoting most zealous attention to all details of after treatment until recovery takes place.

TREATMENT OF HAY FEVER.

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Bostock, himself a sufferer from hay fever, gave the first detailed account of this disease in 1819. In 1869 Helmholtz held that the symptoms were produced by vibrios existing in the nasal passage. In 1873, Blackley, by carefully conducted experiments, was led to believe that the pollen of grasses and flowers was the exciting cause of hay fever. In 1883, Roe advocated that hyperesthesia is associated with, or occasioned by a diseased condition, either latent or active, of the naso-pharyngeal mucous membrane. Harrison Allen attributed the disease to permanent