swollen, and his nasal passages were very narrow. Cocaine was applied preparatory to removing the polypus, which I suspected of being the cause of the trouble by blocking the duct, and while waiting for it to act he suddenly sat up and said: "My headache has gone! I felt it go this moment." The cocaine had caused the mucosa to shrink sufficiently to allow air to enter beside the polypus. The polypus was removed, and he attended to his business. He has had no more trouble.

Such dramatic cures are regrettably rare. More usually relief is obtained gradually by means of the usual remedies for catarrh, or by an operation to correct a septal deformity or remove the anterior end of the middle turbinate.

The posterior group of sinuses are less often the cause of chronic headache, and the pain caused by chronic infection in them is not characteristic. It has been said that suppuration of the sphenoidal sinus causes a "bursting" temporal headache or pain in the occipital region, but this does not always happen. However, a complaint of headache of this or any other type, especially if associated with post-nasal catarrh or crusting, would raise a suspicion of involvement of the posterior group and lead to an x-ray examination. I have never come across a case of otherwise symptomless headache of which the sphenoidal sinus was the cause, but they are said to exist, and adequate drainage should produce rapid relief of symptoms, for the sphenoidal sinus is one of the most satisfactory to deal with.

Atrophic rhinitis is associated at times with severe headaches. There are cases of this condition in which there is no fetor, and in which the crusting in the nose seems to be a minor annoyance. The main complaint is of severe generalized headache, and in the absence of fetor, or of any mention by the patient of nose trouble, the rhinitis may be overlooked. The cause of the headaches, of course, is that not only the mucosa of the nasal passages is atrophic and crusted, but all the sinuses also are full of crusts. If the crusting has extended to the pharynx and larynx, as it may, the cause of the headache will be apparent.

Nasal obstruction may seem at first sight beyond the limits of this paper, yet it is surprising what a degree of obstruction patients will tolerate seemingly without distress, and will complain of their headache and not of their nose.

A man came one day with a polypus protruding from the anterior nares, having been unable to breathe properly through his nose for years, or at all for months. He said that he could not stand prolonged or extensive operative treatment, as he was a very sick man, having been under treatment for years for chronic headaches, neuralgia, and gastro-intestinal troubles. He was thin, pale, and sunken-eyed. He had never mentioned his nasal trouble to anyone, and his slightly nasal voice had apparently not attracted attention. He was persuaded to consent to having the nose cleared of polypi, which was done bit by bit under local anaesthesia, and took months, but since he has acquired nasal respiration and ceased to swallow mucus his troubles have vanished.

Patients with severe septal deviations will do the same thing.

An educated man of 23 said that he did not know he had nasal obstruction and was only persuaded with difficulty to see a rhinologist by his doctor, who had by chance seen him sleeping with his mouth wide open and had found out his trouble. Yet he has such a gross deformity that he cannot breathe at all through one nostril and only very badly through the other. He suffers from frequent headaches, as do most cases of severe septal deformity. Complete submucous resection produced an excellent result.

A word of warning may not be out of place. There are many sufferers from headache, and there are even more people with minor septal deformities. The two are not necessarily related. It is scarcely an exaggeration to say that a perfect septum does not exist. Given the right case, however, and a complete operation, which is often far from easy, and the results are excellent. The operation has fallen rather into disrepute because it is sometimes performed ill-advisedly and incompletely, and an inadequate septum operation is worse than none at all.

Summary.

The thesis has been that many cases of chronic recurrent headache are of nasal origin though there are no obvious signs of nasal disease; that many are missed because their

incidence is not sufficiently appreciated; and that therefore the nose should take a place with the eyes in a mental list of possible etiological factors in such cases. Some clinical material has been brought forward to back the contention that more cases of headache are due to nasal disease than is generally realized, and that the rhinologist can often help heads as well as noses.

THE ETIOLOGY OF FIBROUS STRICTURE OF THE URETHRA.

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STRICTURE of the oesophagus and stricture of the rectum are rarely diagnosed without some effort being made to eliminate the possibility of syphilis acting as a determining factor in their etiology, but, strangely enough, I have never heard it whispered that stricture of the urethra is associated with syphilis. Recurring or successive attacks of gonorrhoea have been held to account for most cases, while some few have been associated with physical or chemical trauma.

Fifty consecutive cases of stricture of the urethra have been examined thoroughly at the Seamen's Dispensary, Liverpool. Every case of chronic urethritis in the male was examined by the urethroscope, and if stricture tissue was found the blood was examined. It is well known that a considerable number of apparent infections with gonorrhoea are in reality infections with syphilis also, although no external signs of syphilis are present then or later—that is to say, that the syphilis is latent from the beginning, and there is neither primary ulcer nor secondary syphilides. The Wassermann reaction is the only method of diagnosis, and a second confirmatory test is absolutely essential.

Of the fifty cases of stricture under review, twenty-one conformed to this type. Twelve others gave a history of penile ulcer during or before the attack of gonorrhoea, and the blood Wassermann test was positive. Six others gave a history of treated syphilis and gonorrhoea, and their blood Wassermann reactions were returned as "negative." One man was sent by a general practitioner to have his blood tested, as his wife had a history of several miscarriages, followed by five full-time children who were born dead or who survived birth for a few hours only. This patient attended twice; stricture tissue was found at 5 cm. and 11 cm. from the meatus, and his blood reaction was reported negative. Had he returned again a provocative injection of neosalvarsan might have given a positive reaction, as the gonorrhoeal infection was eighteen years old. Ten cases of stricture gave no history of syphilis, and the Wassermann reaction in the serum was returned as negative.

Analysis of 50 Cases of Stricture of the Urethra.

Wassermann reaction positive	...	...	33=66%
History of syphilis, Wassermann reaction	...	...	
negative	...	...	6=12%
No history of syphilis, Wassermann reaction	...	...	
negative	...	...	11=22%

Stricture of the urethra, therefore, is more common in cases which have coincident syphilis and gonorrhoea, and it is good practice to ascertain the Wassermann reaction of the blood in all cases of stricture. In cases of long duration a negative Wassermann reaction may become positive after a provocative dose of neosalvarsan.

The pathology of the condition is probably that the inflammation of the mucous membrane by the gonococcus provokes a greater response in the submucosa of syphilites, that an abnormal number of small round cells is developed, and that these subsequently form the urethral stricture.

In view of this connexion between syphilis and stricture it is not surprising to find that cases of resistant stricture having a positive Wassermann reaction become amenable to dilatation after a course of antisyphilitic treatment with bismuth alone, or neosalvarsan and bismuth. One patient, who on four different occasions had been diagnosed as a case of impermeable stricture, was dilated up to 45 Charrière within three months of the inception of antisyphilitic treatment.