a spoon and fork. It was then too late to take an x-ray photograph, so the operation was proceeded with. An incision was made in the right linea semilunaris, and on opening the peritoneum the caecum was exposed with a teaspoon impacted in the ileo-caecal valve. An incision was made in the small intestine, the spoon was extracted, and the aperture closed with two layers of catgut suture. The appendix was acutely inflamed and perforated at the apex, but was not adherent. This was removed and the stump dealt with in the usual way; the appendix contained no foreign body. The pelvis contained very offensive purulent fluid; a coil of the ileum was adherent to the back of the uterus, and more foreign bodies could be felt in this portion of the intestine. The abdominal incision was enlarged down to the pubis to gain access to this loop of bowel. This was separated from the uterus, and was brought up to the surface and packed off from the rest of the abdomen. The intestinal wall was acutely inflamed, covered with lymph, and perforated in several places. With a pair of scissors a 5-inch incision was made to include all visible perforations, and through this the following foreign bodies were removed: three pennies, three halfpennies, three pieces of spoon, the handle of a fork, one screw, one darning needle (broken), two tacks, one trouser button, one pen nib, one hairpin, four needles, three pins, and one half of a boot tip. The incision in the bowel was closed with two layers of catgut suture and two large drainage tubes were inserted, one into the pelvis and the other towards the caecum.

The patient stood the operation well and was given morphine to quieten the intestines. Rectal salines were administered, and nothing was given by the mouth except sips of water until forty-eight hours after the operation. There was profuse offensive discharge from the drainage tubes but no faecal fistula formed. Ten days after the operation she was sufficiently recovered to be taken to the x-ray department to be photographed. The accompanying plate shows the prongs of the fork in the stomach, a needle in the abdomen, three hairpins and the larger portion of the boot tip in the pelvis. Although the patient still had acute abdominal pain, and was obviously in great danger, it was not considered advisable to open up the abdomen again until her general condition had improved and the discharge from the tubes had ceased. She was kept strictly on fluid diet, and the bowels were opened every other day with enemata; she passed two hairpins in the motion, accompanied with great pain. Three weeks after the operation, the drainage tubes having been removed, and the wound being quiescent, a further operation was done. The original wound having been isolated, the abdomen was opened in the middle line below the umbilicus. A hairpin was removed from the small intestine in the pelvis, and the heel tip of the boot was found in a coil deep down in the pouch of Douglas, the latter being difficult to isolate and remove satisfactorily. The abdominal incision was enlarged up to the ensiform cartilage and the needle was felt lying between the stomach and transverse colon close to the large vessels. The point of the needle was pushed outwards and the needle extracted, a catgut suture being inserted at the point of exit. It was difficult to say exactly where the needle lay, as it seemed to have escaped from the stomach into the retro-peritoneal tissues. The fork was eventually located in the cardiac end of the stomach with the prongs entangled in the mucous membrane. It was impossible to remove it from this situation, so it was turned over on itself and pulled down towards the pyloric end of the stomach. This was opened, the fork removed, and the opening closed with two layers of catgut sutures as in the removal of the other foreign bodies. The abdomen was closed with a drainage tube in the pelvis, but, as no discharge followed, this was removed in forty-eight hours. The after-treatment was similar to that employed in the first operation, and the patient made an uneventful recovery.

The history of the actual swallowing of the different articles is, of course, unreliable; it is impossible to say how long these were in the intestinal tract. The patient said she had to break the fork and darning needle to swallow them, but managed the teaspoon whole, and had no great difficulty with the heel tips. She states that she first complained of severe pain in the abdomen one week after her discharge from the asylum, and this caused her to consult a doctor.

The onset of acute appendicitis with a teaspoon impacted in the ileo-caecal valve, the tolerance of the intestinal tract to this extraordinary collection of articles, and her eventual recovery are somewhat remarkable.

NASAL DIPHTHERIA AFTER ENUCLEATION OF THE TONSILS.

BY

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It is an interesting coincidence that the writer has seen five cases of nasal diphtheria at the out-patient department of the Birmingham Ear and Throat Hospital during the last year, in which the tonsils had been perfectly enucleated and the adenoids removed. It is not desired to indicate that the removal of the tonsils renders a patient more susceptible to infection by diphtheria, but that, through the removal of the *locus minoris resistentiae*, the tonsils, infection may be diverted to a situation where it escapes prompt recognition by a practitioner with appropriate serum treatment; hence the patient becomes a carrier and propagates disease.

In the cases seen the initial symptoms appeared to have given rise to such little constitutional disturbance that no doctor had been consulted. Close questioning in each individual case elicited that the child had been "out of sorts" from periods ranging from one month to three. They were brought to the hospital because, as the parents expressed it, "they were getting a lot of rubbish from the nose."

In three cases the margin of the anterior nares was red and excoriated and covered with dried secretion resembling dark-brown sugar. In the other two there was no excoriation. The nasal chambers in four cases appeared dark red, with engorgement of the lower turbinates, and were covered with light-brown crusts of dried sero-fibrinous exudation. On detachment of a crust in some cases, or even on introducing the speculum into the nose, bleeding occurred. In one case the upper lip was covered with a crust below the nostrils, which on separation revealed a superficially ulcerated area. The nasal cavities in this case were profusely purulent.

A short time back the writer saw in his consulting room a boy, aged 7, who had been operated upon two years previously for tonsils and adenoids. The parents brought him because they thought that the operation had not achieved all they expected as he was still unable to breathe through the nose freely. His symptoms had been markedly aggravated the last three weeks. When examined with a nasal speculum a condition resembling lupus of the nasal septum was seen; the latter was very swollen and oedematous, with some cloudy gelatinous secretion on it, and a fibrinous membrane was seen gumming the lower turbinates to the septum. The alae were reddened in patches, and also swollen. The throat manifested no suggestive signs and appeared perfectly healthy, but there was an accompanying slight adenitis and glands could be palpated below the parotid on either side. A swab was taken and the report stated: "Klebs-Loeffler bacillus found in profusion." It is evident from this that the membrane will persist for three weeks in the nasal cavity.

The local treatment ordered in all cases was a spray of colloidal argenticum, 1 in 2,000, six times daily. The cases were notified and it was suggested that at least 6,000 units of antitoxin should be administered.

Nasal diphtheria may exist, however, in adults without giving rise to any discomfort and to few or no symptoms.

A long-suffering and slightly resentful officer was referred to the care of the writer at the 2nd Southern General Hospital, Birmingham, as a carrier. Swabs taken at intervals from his nose showed persistence of Klebs-Loeffler bacillus, in spite of antitoxin and recent vaccine treatment. His nasal cavities on examination presented no departure from the normal, except that the mucous membrane appeared drier and, if anything, slightly atrophic. In his case the writer suggested enucleation of the tonsils, a spray of colloidal argenticum, and continuation of the vaccine injections.

There is ground for the presumption that nasal diphtheria may be a considerable factor in the causation of atrophic rhinitis, owing to its occurrence in children when the nose is growing, the turbinal bones in process of development, the arteries thin-walled, and the mucous glands immature. The diphtheritic toxins may act on the olfactory, sensory, and vasomotor nerves of the mucous membrane, paralyzing them, and consecutively inducing trophic changes by inhibiting the central impulses which govern growth. The atrophic changes and lack of development appear evident later with concomitant ozaena. It is within the bounds of possibility that the toxins of other infections, such as influenza, may cause local atrophy of the mucous membrane by acting on the nerves, while other toxins derived from pneumococcus, staphylococcus, etc., cause stimulation of nerve fibres and overgrowth—local hypertrophies.