A CASE OF SWALLOWING OF A METALLIC DENTURE SUCCESSFULLY TREATED BY THE INTERNAL ADMINISTRATION OF COTTON-WOOL.

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THERE are certain points of interest in the history, physical examination, and treatment of the following case which have prompted me in bringing it before the Academy :—

T. M., aged twenty years, was bathing at Blackrock on the evening of August 9th last. When nearly half a mile out he put up his arms with the intention of sinking to the bottom. On reaching the surface again, he was struck in the face by a wave, and immediately after found himself choking. His attempts to swim by a breast stroke being futile, he turned on his back and succeeded with some difficulty in reaching the shore in this posture. He called for assistance, and informed some bystanders that he had swallowed his artificial teeth ; he was then conscious of the plate being stuck in the back of his throat, but had no difficulty of breathing. An individual who was assisting him struck him sharply on the back, when the plate changed its position and brought on a dyspnoeic attack, rendering him " black in the face " ; he was slapped on the back a few more times, with the effect of relieving the breathing, though he suffered great pain. Dr. Flood saw him, and advised his removal to hospital. The patient states that during the journey to town the jolting of the car caused the plate to go further down his throat, and that the seat of the pain became situated lower down.

I saw the patient soon after his admission to hospital, and found him in a very exhausted condition, pale and in a cold perspiration ; he had no difficulty of breathing, but complained of severe pain, which he referred to the lower end of his sternum ; neither digital exploration of the pharynx nor palpation of the neck revealed

anything abnormal. I gave him a teaspoonful of milk to swallow, and the act was so painful he begged not to be given any more. I then passed a sponge probang without any appreciable resistance into his stomach. The passage of the instrument was evidently painful, and the probang returned smeared with bright blood. He expressed himself considerably relieved—in fact the relief was so marked and maintained as to suggest the possibility of the plate having been pushed from the lower end of the œsophagus into the stomach.

When the possibility of the plate not having been swallowed was spoken of, the patient asserted positively that it had not been ejected, and was certainly swallowed. As there were now no urgent symptoms I reassured the patient and put him on 5m. doses of liq. morph. mur. every three hours, with the double object of allaying the pain and minimising peristalsis. He suffered much pain on Friday night, all day on Saturday and throughout Saturday night; the pains, however, ceased early on Sunday morning. The pains were paroxysmal in character, and occasionally very violent. There was, on Saturday, a distinctly tender spot approximately over the pylorus. I watched carefully for signs of gastric peristalsis, but was unable to discover any, owing to the rigidity of the abdominal wall during the attacks. On Monday I was supplied with a wax model of the plate. The saw-like edge where the plate fitted against the posterior surfaces of the natural teeth, and the rather formidable (from an intra-gastric point of view) clasps for holding the plate in position, naturally suggested the question of gastrotomy. However, I decided to wait and administer cotton-wool. Accordingly I ordered bread and butter sandwiches to be prepared with a thinly teased outlayer of cotton-wool in each; the patient relished the idea and the sandwiches and partook of them as freely as I permitted. I made no accurate estimate of the actual amount of cotton-wool used, but had in my mind a rough calculation of the amount which might possibly cause obstruction.

Dr. E. J. Watson kindly went to a great deal of trouble in examining the patient with the Röntgen rays, and notwithstanding that an extended examination was made on three successive days with the most recent apparatus, no indications of the plate were seen. The screen showed most distinctly metallic buckles and buttons through the whole thickness of the body. I can offer

no explanation of the failure of the skiagraphic examination further than that the plate was in the small intestine and the peristalsis prevented the plate remaining sufficiently long in one position to be recognised.

Nothing of interest supervened until the following Friday—that is, a week after his admission—when the patient was again seized with paroxysmal pains, this time referring them to the right iliac fossa. Without any leading question the patient stated that he was distinctly conscious of the plate being in that region and changing its position. Palpation over the ileo-cæcal valve caused the patient to wince and complain of pain. The pains were not nearly so severe as in previous attacks, and only lasted two hours.

His bowels not having been moved since his admission, I considered it safe to order some aperient, and he was given about 3ss. of liquorice powder. Next morning (Saturday) he had a motion, which was examined with negative results; three hours later his bowels were again moved quite painlessly, and the plate was seen to be enveloped in an admixture of cotton-wool and fæces; the cotton-wool was easily removed from the left side of the plate where the clasps are not very prominent, but it required some little effort to remove it from the other side, where the large clasp was completely entangled in the wool. I regret that it is not possible to exhibit a photograph of the plate in the condition in which it was passed, as the enthusiasm of the nursing staff resulted in the plate being restored to me as clean and polished as when it left the hands of the dental practitioner who made it.

The patient left hospital next day, and has been perfectly well ever since.

The plate weighed ninety-five grains, and measured four centimetres long, by one and a half wide; affixed were two teeth, the right lateral incisor and canine of the upper jaw, a long clasp for the right first bicuspid; there were indentations for the right central incisor, the two left incisors, and a short clasp for the left first bicuspid.

One can practically read the progress of the plate in the history. It would seem that the plate at first stuck in the back of the pharynx, and remained there until the patient reached the shore, as there was no obstruction to respiration.

The slaps on the back which the patient received apparently caused the plate to change its position and press on the glottis, causing great difficulty of breathing with cyanosis and prominent eyeballs; renewed slapping relieved the dyspnœa, the plate slipping down into the œsophagus, where it seems to have remained until he reached hospital. The location of the referred pain—namely, the lower end of the sternum—and the practically instantaneous relief given by the passage of the probang, leads me to assume that the probang pushed the plate into the stomach, where it remained until Sunday morning. The passage through the small intestine lasted until the following Friday—the paroxysmal pain in the ileo-cæcal region pointing to its passage through the ileo-cæcal valve; the laxative given hastened the passing through the large intestine, which was terminated next morning.

I have already given the only explanation I can of the negative results of the Röntgen ray examination.

The treatment adopted in this case was not original, but is not, I believe, as widely known and appreciated as its obvious merits entitle it to be.

MR. LENTAIGNE confessed he would not like to take cotton-wool under any circumstances. He thought it would not be without risk of producing obstruction. He considered the case important, as it impressed the well-known danger of small dentures on their notice. All the accidents resulting from artificial teeth getting into the pharynx are due to small dentures, which, he thinks, should be prohibited, for a large plate can be made for any case calling for artificial teeth.

MR. TOBIN would like to know if all the cotton-wool the patient swallowed was passed with the denture.

MR. G. JAMESON JOHNSTON did not know the amount of wool either taken in the sandwiches or passed with the denture, the nurses having cleaned the latter before he saw it.