TRANSACTIONS

OF THE

PHILADELPHIA ACADEMY OF SURGERY

Stated Meeting Held April 3, 1922

The President, DR. JOHN H. JOPSON, in the Chair

TETANUS FOLLOWING HERNIOTOMY

DR. GEORGE P. MULLER reported the following case:

A man, aged thirty-seven, was operated on for a recurrent inguinal hernia. Chromic catgut used throughout. Rubber dam drainage in the fat for twenty-four hours. Patient had scratch marks on the abdomen from shaving during preparation and had cut himself on the face on the day before operation. No other etiological factors. Eight days after operation he complained of soreness in the region of the wound and two days later trismus was noted. Death occurred eleven days after operation. Patient treated by intravenous and spinal tetanus antitoxin. Wound contained no tetanus organisms.

PROLONGED WELL-BEING IN CASE OF INOPERABLE CARCINOMA OF SIGMOID COLON TREATED BY COLOSTOMY

DR. GEORGE P. MULLER presented a man, sixty-two years of age, who was admitted to the Misericordia Hospital, August 18, 1920, complaining of "cramps" when the bowels moved; some blood in stools, loss of 20 pounds in weight. At operation (August 21) a mass was found in the sigmoid flexure of rather large extent and almost completely occluding the bowel. Many small nodules were scattered under the pelvic peritoneum. Six or seven nodules the size of grapes were found in the liver. As the case was deemed inoperable from the radical standpoint, an inguinal colostomy only was performed.

The patient did well. A Wassermann test was pronounced negative. Three months later he had gained 5 pounds and nineteen months later he had gained 13 pounds since the operation. He sleeps well, eats well, has no pain, and the bowels move every day between 9 and 12 A.M., through the colostomy bag. They move suddenly as though propelled by a peristaltic movement. Practically no discharge comes from the anus.

Comment.—This case well illustrates the advantage to be obtained by conservative treatment of an advanced carcinoma of the lower colon, and the formation of a colostomy before acute obstruction occurs. Cripps in 1912 reported upon his results in colostomy as showing a mortality of 40 per cent. in twenty-four cases when the operation was done in the presence of obstruction, whereas of forty-four cases oper-



FIG. 1.—Lower tray.



FIG. 2.—Appliance mounted on skull, lateral view.



FIG. 3.—Appliance mounted on skull, anterior view.



FIG. 4.—Appliance inserted in mouth, lateral view.



FIG. 5.—Appliance inserted in mouth, anterior view.

TREATMENT OF MANDIBULAR ANKYLOSIS

ated on before acute obstruction developed there were no deaths. Paul in the same year reported twenty-one cases with obstruction and approximately a 50 per cent. mortality, and 125 cases without obstruction with a mortality of only 4 per cent. In regard to longevity Paul noted that the cases having colostomy lived an average of twenty-two months, whereas those patients of inoperable cancer left alone only lived an average of seven and eight-tenths months.

UNIVERSAL JAW DILATOR AS AN ADJUNCT IN THE TREATMENT OF MANDIBULAR ANKYLOSIS

DR. ROBERT H. Ivy said that to insure permanent success in the treatment of any form of chronic limitation of motion of the mandible, whatever operative procedure is performed it should be supplemented by mechanical stretching apart of the upper and lower teeth. In mild cases, such as frequently follow acute inflammatory conditions involving the muscles of mastication or fracture in the region of the angle, mechanical treatment alone may suffice to bring about free motion, without resort to operation. Many forms of apparatus, from the spring-clip clothes pin and the rubber cork inserted between the teeth to the most complicated devices, have been used for this purpose. It is recognized that a constantly acting mild force, either by springs or rubber elastic, will accomplish better results with less danger of injury than sudden positive application of screw pressure acting powerfully for brief periods at repeated intervals. Heretofore, it has generally been necessary to first obtain impressions of the teeth prior to the construction of an apparatus suitable for the individual case. This frequently occasions a delay of several days before insertion of the appliance, during which recontracture of the jaws occurs. In the jaw dilator here presented, it is believed that these objections have been overcome, as it can be made as a stock appliance, in three sizes, ready for immediate use either after operation or in other cases where there is an initial opening between the teeth of one centimetre. It can be easily fitted by the surgeon, and is practically as stable as an apparatus that has been made from dental impressions of the individual. The construction is extremely simple, the two parts being flat metal trays passing between the occlusal surfaces of the upper and lower teeth. The trays can be inserted through a space of less than one centimetre between the upper and lower incisor teeth, which is manifestly insufficient space to obtain impressions. To the outer sides of each tray are soldered heavy wires which pass out of the mouth and curve backward over the cheeks in the manner of Kingsley splints. The wire attached to the upper tray on each side turns down at a right angle about opposite the premolar region and ends in a hook about three inches lower down. The wire attached to the lower tray passes directly backward horizontally and is provided with a hook at a point opposite the downward turn of the upper wire. The dilating force is a heavy elastic band placed between these hooks on each side. This application of dilating force in the manner described is original with Darcissac of Paris (Dental Cosmos, March, 1922), who has proved its value in numerous cases. Darcissac, however,

made individual apparatus from impressions of each case, casting metal caps to fit the teeth. The advantage claimed for the present appliance is that it is ready for immediate use in any case with not less than one centimetre of separation, without the necessity of impression taking. It can be applied readily without any special skill, and can be used much earlier in the case when there may be insufficient room for taking impressions of the teeth. The elastics produce a constant counteraction to the powerful elevator muscles of the mandible, which at the same time are permitted to function, the upper and lower jaws being at no time fixed. Lateral movements as well as opening and closing are possible. Where additional stability is desirable the trays may be filled with a little softened dental impression compound before insertion, to receive the imprint of the teeth. This compound can be renewed from time to time. The dilating force can be readily regulated by the size and tension of the elastic bands. In some cases, where it is advisable to aid in the forward movement of the condyle as the mouth opens, this can be accomplished by running a second rubber band between the hook on the wire attached to the upper tray and one placed at the extreme posterior end of the lower wire.

He was indebted to Mr. J. A. Eberly, Jr., of the Senior Class of the University of Pennsylvania School of Dentistry, for following his suggestions in the construction of the original models of this appliance; also to Messrs. George P. Pilling and Son Company, Philadelphia, for making the finished appliance.

Stated Meeting Held May 8, 1922

The President, DR. JOHN H. JOPSON, in the Chair

BRANCHIAL FISTULA

DR. BENJAMIN LIPSHUTZ presented a girl, six years of age, in whom, after an attack of scarlet fever two years ago, there appeared a small opening surrounded by an inflammatory areola and discharging pus, situated at the anterior border of the right sternomastoid muscle between the angle of the mandible and the inner end of the clavicle. Pressure over the latter caused the exit of distinct pus. On examination a distinct cord was felt which seemed loosely attached to the surrounding and subjacent structures and over which the skin moved freely. Colored fluid injected through it came out of the mouth. No probing of the tract was attempted because of the infection present, and because it is frequently impossible beforehand to know the type of fistula under consideration.

Operation at the Mt. Sinai Hospital, March 4, 1922, ether anæsthesia. An incision was made so as to leave a small disc of skin about the margin of the opening and extended upward and backward nearly to the angle of the jaw. On cutting through the skin, fascia, and platysma the sinus was exposed to view. It lay on the deep fascia