TWO CASES OF
INTUSSUSCEPTION OF THE LARGE
INTESTINE,
DUE TO THE
PRESENCE OF A PAPILLOMATOUS GROWTH,
SUCCESSFULLY REDUCED BY INTRODUCTION OF THE
HAND INTO THE RECTUM, AFTER REMOVAL
OF THE GROWTH.

BY
THOMAS BRYANT, M.CH., F.R.C.S.,
CONSULTING SURGEON TO GUY'S HOSPITAL.

Received December 5th, 1893—Read February 13th, 1894.

CASE 1.—On October 22nd, 1886, I was asked by Dr. J. Mackern to see Mrs. R—, a healthy old lady 84 years of age, for intussusception; and I now quote the history of the case from Dr. Mackern's report. The patient was first seen on October 20th. She was then suffering from dyspeptic symptoms, accompanied by intermittent abdominal pain of a griping character. The bowels had acted, but not in a satisfactory manner. Carminatives and directions as to diet were given.

October 21st.—Pain still present, and more severe. Bowels had not acted. A feeling of nausea existed. A teaspoonful of castor oil was ordered.

22nd.—Sickness followed all food. Bowels still obsti-

nate. A careful examination of the abdomen was made, when the left side of the abdomen was found to be full, and through the thin abdominal parietes coils of intestine were seen working and twisting about. There was no hernia.

A rectal examination at once showed that there was an invagination into the lower bowel of some part of the tube higher up. Mr. Bryant was at once called in, and his examination brought to light the fact that there was an intussusception into the rectum, and that this was due to the presence of a large papillomatous growth attached to the wall of the orifice of the inner tube—the intussusceptum.

An operation was decided upon on the morning of the following day.

23rd.—Ether was given. The anus was forcibly dilated. The growth and bowel to which it was attached were pulled down below the sphincter and held. The growth was then ligatured at its base in two parts and cut off, and the bowel returned. This was effected by the introduction of the right hand through the dilated anus into the rectum, well above the wrist, when the bowel suddenly rushed away from the hand.

The next morning the patient was comfortable, having lost all her pain and sickness. On the fourth day after the operation an enema was given without any good result. On the fifth day the bowels acted, and from this time the patient made steady progress to recovery, and she never had any trouble with the bowels afterwards. She regained more than her previous strength and took an active interest in everything, being both mentally and bodily surprisingly robust for her age. In October, 1887, or one year after the operation, she was taken ill at St. Leonards, and died on October 31st from paralysis of the left side of her body, in her eighty-sixth year.

CASE 2.—On August 7th, 1893, I was asked by Dr. Gilbert Richardson to see Miss R—, æt. 50, who was suffering from obstruction of the bowels of twenty days'

duration, associated with colicky abdominal pain and tenesmus, with the discharge of mucus from the bowel.

From the report of the case kindly supplied to me by Dr. Richardson, it appeared "that the patient had always been a weakly subject, and had suffered for many years from functional liver trouble, and attacks of gastro-enteric catarrh. The early attacks usually lasted about four or five weeks, and were followed by a period of good health of five or six months' duration, after which a renewal of the symptoms took place. As years passed, however, the attacks became more frequent and more severe. During the attacks mucus was often passed with the motions, and at times this was blood-stained." "During June, 1893," wrote Dr. Richardson, "the patient had been coming to me at weekly intervals, suffering from a condition apparently similar to the usual illnesses, except that more mucus was passed from the bowel, and the treatment employed was attended by less benefit than had formerly been the case." On July 24th, the patient being too ill to leave her home, Dr. Richardson was sent for, when he found her in bed with a temperature of 100°, suffering from a good deal of colicky abdominal pain, restlessness, nausea, and constipation of a week's standing, and as the patient was thin, a hard mass supposed to be a collection of fæces in the ascending and transverse colon was made out to be present. Enemata of oil were ordered, with pills of conium and belladonna, and directions given to report progress to Dr. Richardson. Ten days later, as all the symptoms had steadily become worse, and the means employed had failed to give relief, he was again sent for, when, on making a rectal examination, he discovered the presence of an intussusception just within the reach of his finger, but which, after the lapse of two or three days, had descended to the anus.

I saw the patient at this time (August 7th) with Dr. Richardson, and having obtained the history of the case as just recorded, proceeded to examine her. I found, as I

expected, a pronounced intussusception filling the rectum, and attached to about half of the orifice of the invaginated bowel a large papillomatous growth (specimen shown). The abdomen was very lumpy, but no distinct tumour could be felt.

The next day, August 8th, the patient being anæsthetised, I proceeded to remove the tumour, and with the kind help of Dr. Richardson completed the operation, including the reduction of the intussusception, in a very satisfactory way.

The operation.—I first of all forcibly with my thumbs dilated the anus to its fullest extent, and then with ring forceps drew down externally the invaginated bowel with the growth attached to it. I next isolated the short peduncle of the growth, and with a needle armed with a thick silk ligature perforated its base so as to enable me to keep it *in situ*, and then, having ligatured the base of the growth in three sections, cut it off. The bowel was subsequently carefully examined, so that no other growths should be left, papillomata being often multiple.

The reduction of the intussusception was then proceeded with as follows :—I first well anointed my right hand and forearm with carbolised vaseline, and with the patient on her left side took the exposed end of the intussusceptum from which I had removed the growth between my fingers and thumb, and returned it within the anus, at the same time by a steady and not very forcible screwing movement of my hand followed the bowel upwards until my hand and forearm beyond its middle had disappeared into the rectum. At first I simply mechanically pushed the intussusceptum upwards, but when I had reached the distance described, the bowel suddenly escaped from my fingers and passed out of reach. I concluded by these signs that the intussusception had been reduced, and so withdrew my hand. In this view I was not disappointed, for after the operation everything went on favorably, all pain ceased, the bowels slowly emptied themselves of their impacted contents, and no complaint

was subsequently made of incontinence of fæces or more than a temporary anal soreness. Indeed, the patient speedily convalesced, and is now in good health.

Remarks.—I believe the two cases which have just been related are worthy of the attention of this Society, not only on account of their comparative rarity, but from the practical lessons which are to be learnt from their consideration.

I would, however, like to remind you that prolapse of the rectum, and invagination with intussusception of the large or small intestine, are but different degrees of the same condition; and that both are brought about by the same causes, namely, local irritation. The surgeon is familiar with prolapse of the rectum in cases of piles and rectal polypi, as well as in those of ulceration of the rectum and of local irritation by worms; and he meets with the same condition in the rarer but not less marked cases of papilloma of the rectum. He recognises also a certain degree of invagination of the bowel in cases of annular stricture of the rectum, cancerous or otherwise. Here the orifice of the strictured bowel feels to the finger introduced into the rectum either like the exaggerated and patulous mouth of an elongated neck of the uterus, or like a more complete example of intussusception. In the former class of cases the bowel prolapses through the anus. In the latter the upper part of the bowel prolapses as an invagination into the lumen of the canal below.

It would be well for the surgeon to recognise with equal confidence the view that local irritation of any kind, either the result of the presence of a new growth—simple or cancerous, of an inverted diverticulum, or of some other local cause of a more temporary character, when applied for a sufficient length of time to any part of the lumen of the intestinal tract, is prone to be followed by prolapse, invagination, or intussusception; and that these conditions are most liable to occur when the local source of irritation is situated either above and within a few inches of the ileo-cæcal valve—where there is a narrowing of the

bowel followed by an expansion, or within a few inches of the anus, at which a like narrowing of the bowel exists.

In support of this view I would adduce the well-recognised fact that ileo-cæcal intussusceptions are the most common in young life, when temporary local sources of irritation are most common ; and that in the middle-aged and old people, when intussusception and severe examples of prolapse of the rectum occur, some papillomatous growth, if looked for, will very frequently be found ; and lastly, that in our museums excellent examples of intussusception due to the presence of papillomata, polypi, and cancerous or other growths are to be met with.

I may add that it was from a full recognition of this view that I was led in both the cases I have brought before you to search for the cause of the intussusception and thus to effect a complete cure. For I conclude that everyone present will accept the opinion that it was from the presence of the papilloma in the bowel, and the irritation it produced, that the intussusception was brought about ; and that the intussusception was really due to nature's efforts to get rid of the irritating offending growth. To illustrate this matter further, I have brought from the Guy's Hospital Museum some specimens.

The first (1819⁹⁵) is one of intussusception of the *small intestine* about three feet above the cæcum, due to the presence of a polypus the size of a chestnut with a broad pedicle. It was taken from the body of a woman aged forty-two, who died after an illness of ten months under the care of the late Dr. Moxon, and who had suffered from gnawing pains at the umbilicus for nine months previously, associated with diarrhœa, vomiting, and abdominal distension.

The second (1849¹⁸) shows a *jejunal intussusception* with polypoid growth at the apex of the intussusceptum, taken from a young woman, aged nineteen, a patient of Dr. Goodhart, who suffered from periodical attacks of vomiting and abdominal pain for nearly two years before

her death, and in whom a kidney-shaped tumour was felt in the lower part of her abdomen, which towards the end of her illness was observed to undergo slow rhythmic alterations, being alternately hard and well defined and soft and ill defined.

The third (1819⁴⁵) is one of an *inverted diverticulum* of the ileum causing intussusception, taken from James C—, aged twenty-two, who was admitted under Dr. Fagge for constipation and vomiting of five days' duration. He was operated upon by laparotomy and the intussusception was reduced, but he died a few hours after the operation.

Three are examples of cancer of the colon associated with intussusception, viz. :

Specimen 1849¹⁷, which was taken from a woman aged fifty, who suffered for months before death from chronic intestinal disturbance and a lump in her right flank, and passed also a large shred of sloughing tissue. The intussusceptum, which was of the colon, was enormously thickened, and at its apex there is a sloughing mass of growth attached by a slender pedicle.

Specimen 1875⁵, which is a portion of colon in a condition of invagination. The intussusception is about four inches in length. The wall of the intestine at the returning angle is greatly thickened, and the mucous membrane of the entering layer is partially destroyed by ulceration. Histologically the wall of the gut is infiltrated by a growth of cylindrical-celled carcinoma.

Specimen 1887⁷⁵, which is one of adenoid cancer of the rectum causing intussusception, taken from a man aged forty-four.

In both the cases I have recorded, the cause of the intussusception was the presence of a papilloma of large size ; in both the papilloma had a broad base, and involved only a segment of the circle of the intestinal lumen ; and in both it was quite certain that the disease was situated high up the bowel, that is, at a far distance from the rectum, for in Case 1 when the intussusception was reduced after the removal of its cause I had to introduce

my hand well beyond the wrist to carry out my object, and the bowel then sprang out of my fingers with a rush, like that of the intestine in a case of reduction of strangulated hernia by the taxis; and in Case 2 I had to insert my hand and forearm nearly up to the elbow before the intussusception of the involved bowel escaped upwards from the hollow of my fingers in which it rested.

It seems also from the two cases, and from the preparations I have brought before you, that a growth which involves only a segment of the circle of the intestinal lumen is more likely to be associated with a complete intussusception than an annular stricture, as it is certain that these papillomata when they attack the rectum are attended with far more straining, tenesmus, the discharge of serous fluid, and prolapse than any other growth, whether cancerous or otherwise.

There is no need to say much as to the treatment of these cases, for it was such as the judgment of any good surgeon would support when the diagnosis of the case had been determined upon; but surely its success is suggestive of a lesson we might well take to heart, and should lead us to apply the means which in these two cases proved so successful to future examples of intussusception in adult females which have made their way into the rectum, whether due to the presence of a growth or to some unknown cause.

In many cases it is more than probable that success would not follow, but in some it surely would be achieved; in the only two examples in which I have employed it, or I think I may say in which it has been employed, the result has been all that could be wished.

In conclusion, I may add that I found little difficulty in introducing my hand into the rectum after I had forcibly dilated the anus. A steady half-screwing movement, alternating with moderate pressure, effected the desired purpose, and enabled me to pass the anal orifice of the bowel as well as the narrowing of the bowel at the brim of the pelvis, and these two points being passed, all difficulty vanished.

I have never succeeded in passing my hand into the rectum of a male patient, but have never failed in the case of the female adults upon whom I have made the attempt—about a dozen in all—and my hand when closed for introduction measures over the knuckles nine and a quarter inches.

I may add that in neither of these cases, nor in more than one of the others in which I have introduced my hand into the rectum, has any very prolonged want of control of the anal sphincter been complained of.

In thanking the Society for their kind attention to this paper, I would strongly urge upon surgeons the adoption of the practice which it illustrates.

(For report of the discussion on this paper, see 'Proceedings of the Royal Medical and Chirurgical Society,' New Series, vol. vi, p. 57.)