

so the eye is kept open and exposed, and when the patient is told to close the eye he turns it up so that the pupil becomes invisible and nothing but the white is seen, and he thinks that the eye is closed. Even the tensor tarsi cannot contract, and epiphora ensues. Thus the whole right side of the face is an expressionless mask, and yet the left side is full of vivacity, and conveys to you very plainly the workings of the brain.

The next case I have to bring before your notice is a very different one—one from central origin, and but very seldom met with. The celebrated Dublin physician, Dr. Graves, in his work on Clinical Medicine, says, "I have seen two cases of seizure, evidently apoplectic, in which the paralysis that followed the seizure was seated in the muscles supplied by the portio dura." And, again, Trousseau says, that "when examined with great care, using Burq's dynamometer, these patients invariably display slight want of power in the arm or leg, of which they are not conscious"; and adds in another part, "It is conceivable, therefore, that if a small hæmorrhage occurred in a very limited spot of the pons it would give rise to the symptoms of Bell's paralysis exclusively. But such cases are so very rare that, in the course of a very long practice, I have not yet met with a single instance of the kind."

This patient is a married man, aged twenty-four, a tanner by trade. His family history is good. When seventeen years of age he fell down the cellar steps and injured the left side of his head. Until five weeks ago, for two years and a half he has suffered from epileptic fits, two or three every month. Five weeks ago he fell down in the street in a state of insensibility. He was carried home, soon recovered, but suffered from headache for three weeks. About two weeks ago, one morning his friends noticed that his face seemed peculiar, and laughed at and chaffed him. No treatment whatever was adopted for one week, when he presented himself at the hospital as an out-patient. You see that all the muscles supplied by the portio dura are paralysed, but not completely. The right orbicularis palpebrarum is not much affected, but closes a little later and less firmly than the left. There is also slight epiphora, showing implication of the tensor tarsi. The point of the uvula is turned towards the paralysed side and drawn by its base to the left. The soft palate and arches hang into the mouth, or, in other words, the left side is more arched and roomy. If you apply a weak acid solution to the right side of the tongue, it gives rise to a burning sensation, but no taste, unlike the other side. Hearing on both sides is normal. The occipito-frontalis and corrugator are partially paralysed, and his speech is not natural owing to implication of the buccinator and orbicularis oris.

I should like to draw your attention to the following interesting facts relating to this case:—1. The temporal masseter and pterygoids supplied by the motor branch of the fifth, and the muscles of the tongue supplied by the hypoglossal, are not affected in this case as they are often in hemiplegia, where so frequently the tongue, when protruded, points to one side. This shows that the portio dura only is affected, as in Bell's, wherever the lesion may be. 2. As in facial paralysis with hemiplegia, the orbicularis palpebrarum has not been much paralysed; in Bell's it is. 3. The paralysis of the muscles of the face is not quite complete, and contractility not quite gone, as in hemiplegia. In Bell's the paralysis is generally complete, and electric contractility gone. 4. The paralysis of the uvula and soft palate on the right, and impairment of the sense of taste, show that the great petrosal and chorda tympani nerves are involved, and that the mischief is probably above the part where they are given off. In this case we have not had any ear symptoms whatever, neither intensity of hearing nor obtuseness, so the disease is probably higher than the bony canal. 5. This patient has suffered for two years and a half from about three epileptic fits a month, probably from some central cause. He has not had an attack now for five weeks, but at the end of three weeks from the last attack this paralysis came on. This, to my mind, decidedly points to some central cause, especially when taken in conjunction with the other symptoms. 6. Ever since the attack came on his memory and his mental powers generally have been very much impaired, whereas they were not so before. You will observe that I have come to the conclusion that it is of central origin, not for one reason, but for many—viz., because the electric contractility of the muscles has never been lost, the paralysis has never been complete, the orbicularis palpebrarum has been but slightly paralysed, and

the implication of the chorda tympani and petrosal nerves, without any evidence whatever of ear mischief, rather points to central cause; and the epilepsy before and mental symptoms after the attack of paralysis also aid us.

ON INVERSION WITH INFLATION IN THE CURE OF INTUSSUSCEPTION;

WITH A SUCCESSFUL CASE.

BY R. CLEMENT LUCAS, B.S., M.B.LOND, F.R.C.S.,

SENIOR ASSISTANT-SURGEON TO, AND TEACHER OF OPERATIVE AND PRACTICAL SURGERY AT, GUY'S HOSPITAL; SURGEON TO THE EVELINA HOSPITAL FOR CHILDREN.

ACUTE intussusception in childhood must ever be regarded as an exceedingly dangerous condition, but an early recognition of the symptoms will much lessen its dangers, by bringing the case within the range of surgical treatment before adhesions may have taken place, or irreparable damage have occurred to the intussuscepted bowel. It is one of those conditions I would claim as surgical from the onset, inasmuch as the only efficient treatment must be surgical, and it is strictly comparable in this respect to the obstruction occasioned by strangulation in hernia. To my mind, the cases appeal for relief in precisely the same terms as do those suffering from strangulated hernia; and it is grievous to have to reflect upon the valuable time often wasted in palliative treatment, and the lack of promptitude in applying surgical aid, not to speak of the failure to penetrate the shadow of dangerous symptoms which overhangs and enshrouds these unfortunate infants. I have even heard it calmly discussed whether it might not be justifiable to wait patiently till nature might detach the intussuscepted bowel, as if this were a common event or as favourable a result as could be anticipated. I have myself already been in the profession long enough to have witnessed a complete change in the relation of operative treatment to hernia. It is no longer considered a disgrace to fail to reduce a hernia by taxis; and the pounding and crushing which I witnessed as a student have, I trust, now disappeared from surgery. No wonder that, after all the time wasted with hot baths, opium, poultices, and ice, with periodical kneading of the tumour, the dreaded operation, when at last performed, was often unsuccessful. What has brought about this change is the acknowledgment that the danger lies, not in the operation, but in the duration of the strangulation, and in the rough treatment to which the bowel may have been subjected. I look forward to the time when the treatment of intussusception will be in every respect as successful as that for hernia, but this improvement must come about by an earlier recognition of the gravity of the symptoms and a greater promptitude in the application of the means available for obtaining reduction. During the past ten years I have often advised students to disencumber their minds from the general unessential symptoms of strangulated hernia with which word-painters depict in eloquent terms the condition of the patient, and to fix indelibly in their memories three salient signs of strangulation—viz., (1) an irreducible hernial tumour devoid of impulse, (2) persistent vomiting, and (3) constipation. With these signs present, there is no room for doubt or excuse for delay. There should be no speculation upon what other conditions might give rise to the vomiting and constipation. The surgeon's duty is to concentrate his attention upon the hernial tumour and to relieve any constriction that may be there present before having regard to other possible contingencies. The signs of acute intussusception in children—another form of mechanical obstruction—are, as a rule, equally clear, and may be formulated with equal precision—viz., (1) vomiting, (2) constipation, (3) passage of blood per rectum, and (4) the presence of a tumour to be felt through the abdominal wall and occasionally per rectum. With these symptoms present, there is nothing to gain, but everything to be lost by hesitation or delay. There is a mechanical obstruction present, which must be overcome by mechanical means, and medical treatment in such grave crises is apt to raise in a surgical mind a feeling allied to contempt. The administration of purgatives can only do harm, and anodynes will but obscure the danger by clouding the acuteness of the symptoms. The invaginated bowel is

impacted, swollen, and congested. Every hour lessens the freedom of the circulation through it, and the peritoneal surfaces which lie in contact will soon become inflamed and pour out lymph that will glue the introceding bowel to that which surrounds and constricts it. Before this has happened, or at least before the lymph can have so far organised as to withstand gentle traction, surgical interference should have completed its task.

What right have we to stand by with folded hands and watch the efforts of Nature to give relief when we possess such efficient means for cure as are altogether beyond her reach? The prejudice of friends, it is true, is opposed to the means we advocate as essential, nor will they ever give the credit to their surgeon of an unequivocal saving of life, which they would be only too ready to accord to the so-called faith-healers, or such unprincipled men as fill their own pockets whilst affecting to make cures through the aid of the miraculous. From time to time I see cases reported of recoveries from intussusception after the casting off of so many inches, or it may be feet, of intestine; but I read these with pain, for I feel they ought not thus to have been left to recover; and I know their convalescence is seldom permanent, and that there is a prospective early death from stricture at the seat of separation. At best it is only one out of a vast number which can make an imperfect recovery without surgical aid. To hesitate, dally, postpone, is to trifle with Nature. A great, a terrible, and altogether unequal struggle may be carried on to open up a free way from within, when a prompt and simple surgical means from without may easily bring about complete relief.

The means we have at our disposal are—first, inflation with inversion; secondly, should this method of reduction fail, abdominal section, with the object of withdrawing the invaginated bowel; or, finally, when this is impossible, enterectomy may be entertained. I am strongly of opinion that, if the cases are seen sufficiently early, the first of these methods, when properly applied, will seldom fail. The principal object of this paper is to advocate the inversion of the patient during the time inflation is being performed—an addition and aid to the reduction by inflation which occurred to me after failing to reduce an invagination by inflation alone. My experience of the value of inversion during taxis for hernia in children led me to adopt this position as an adjunct to inflation in the case presently to be recorded. Intussusception and hernia, which I have been trying to show have so much in common, are here again brought into parallel lines in the course of treatment. In both the object of the inversion is to cause the intestines to gravitate towards the upper part of the abdomen, and the effect in the case of intussusception will be to straighten the lower part of the bowel, so that the air forced into the rectum will act more directly upon the plug of intestine closing the lumen of the gut. It has been advocated by some to distend the bowel with water in lieu of air, but against this practice I hold a very decided opinion. There are two strong objections to the use of water. In the first place, owing to its weight it exerts much too strong lateral pressure for the intestine safely to bear, and I have found it is easy to rupture the bowel after death by forcing in water. Secondly, should reduction have been accomplished, the contact of a large quantity of water with the lower bowel is apt to increase the tendency to subsequent diarrhoea. Air, on the other hand, is a natural occupant of the intestinal canal, and, whilst its pressure is of the gentlest, its presence excites no unnatural peristaltic action.

The manner in which inflation should be performed is as follows:—An ordinary bellows is connected with a gum-elastic enema tube by means of a piece of rubber tubing, which is firmly wired at either end. Around the base of the enema tube lint should be wrapped, so as to make a conical and air-tight base. The tube is inserted about three inches into the rectum, and the anus closed by the conical plug of lint. Further to guard against the escape of air back through the anus when inflation is commenced, an assistant should press the edges of the buttocks firmly together. It is very important that an anæsthetic should be administered up to the stage of muscular relaxation before the operation is commenced, otherwise the forcible contraction of the abdominal muscles will leave the operator little chance of effecting his object. As soon as anæsthesia is complete, the child should be seized at the ankle and knee on either side, and be raised vertically with his back to the operator, the head being allowed to rest on a pillow. The enema-tube is next inserted, and the anus

closed in the way directed. An assistant now places his hand over the tumour in the abdomen to watch the effect of the operation, and the inflation is commenced. The air is at first forced slowly in, and the effect watched through the abdominal wall. The upper part of the rectum or sigmoid flexure will probably be seen to swell up, and the tumour may be noticed to change its position somewhat. If the tumour show little tendency to yield, more rapid action of the bellows may be employed. How, then, are we to know that the intestine has been reduced, and there is no longer occasion to continue the operation? There are three indications of the reduction of the bowel: (1) The assistant whose hand is over the tumour will feel this gradually sink away and be lost; (2) a gurgle of air will at the same time be felt by the assistant, and often heard by the bystanders; (3) the whole abdomen becomes suddenly and uniformly distended and tympanitic. When these signs of reduction have occurred, the enema-tube may be withdrawn and any compressed air be allowed to escape, and the surgeon may leave the case with a feeling of contentment that he has almost certainly saved a life. The after-treatment consists in limiting the diet to milk and ice, and in administering stimulants if there be a tendency to collapse. Small doses of opium may also be given to relieve pain and check any tendency to diarrhoea.

The following is a careful report by Mr. H. W. Drew of a case in which the means advocated were successfully employed on the third day of the intussusception.

Charles T—, aged six years, was admitted into Guys Hospital, under the care of Dr. Pavy, for abdominal pain and vomiting, on June 22nd, 1885. In the absence of Dr. Pavy he was seen by Dr. Carrington, who, after determining the nature of the case, sent for Mr. Clement Lucas. From the history obtained from the friends it appeared that the child had been well up to and including Friday, June 19th. On Saturday morning, June 20th, he began to complain of pain in the abdomen and sickness. These symptoms continued and increased up to the time of his admission on Monday evening, June 22nd. The condition of the bowels during this period was not positively known. He appears to have gone to the watercloset two or three times between Saturday and Monday, but whether anything was passed was not known. He vomited just prior to his admission and the vomit was yellow. On examination he complained of great pain over the abdomen, but there was only slight tenderness. In the left iliac region, corresponding to the region of the sigmoid flexure, a fusiform tumour, four or five inches in length and about two in breadth, was very readily felt. It was dull on percussion, but not hard. The region of the cæcum was markedly empty and dull on percussion, and the fingers sank down, without resistance, into the right iliac fossa. The rectum was quite empty, but high up there was a transmitted feeling of resistance. The tongue was somewhat furred, but there was not much general disturbance. Pulse full, about 100 per minute, rather irregular; heart-sounds normal; apex-beat in the fourth space half an inch below and to the inner side of the nipple; dulness normal; respiratory system normal. Soon after admission, the child passed per rectum about two ounces of red fluid blood. When Mr. Clement Lucas arrived the patient was placed under an anæsthetic. The house-surgeon commenced to administer chloroform, but as the pulse seemed to fail somewhat, ether was substituted. The patient being fully under the influence of the anæsthetic, an enema-tube connected with a bellows was inserted into the rectum and inflation commenced. A coil of intestine was at once noticed to rise and become distended to the right of the median line, as if the sigmoid flexure or rectum were pushed over by distension. Inflation was continued for about five minutes without further effect, the patient lying meanwhile in the recumbent position. A change was now made in the position of the patient, who was held up vertically with his head downwards. Inflation was again commenced, and in about three minutes Dr. Carrington, whose hand was on the tumour, felt it resolve itself with a gurgle. The operation was then suspended, and a suppository, containing a quarter of a grain of morphia was placed in the rectum. Milk diet with ice was ordered, and the following prescription every six hours: Tincture of opium, two minims; chloroform water, one drachm.—June 23rd: He passed a good night, and this morning is free from pain. No tumour can be felt in the abdomen, which seems rather full, but there is no tenderness. A little more blood was passed, but no fæces. He has taken

a pint of milk and seems to enjoy it. Temperature 98°8'; pulse 116. He has not passed any urine since he came in. In the evening, as there was still retention and the bladder could be distinctly felt above the pubes, some chloroform being administered to prevent struggling, a catheter was passed. Twelve ounces of urine, acid, and of specific gravity 1015, were drawn off.—24th: He has again slept well, and this morning complains of no pain. There is no swelling of the abdomen. He has had no motion, and there is still complete retention of urine, which has to be drawn off by the catheter. No vomiting. Temperature normal. Ordered: tincture of belladonna, ten minims; camphor water, half an ounce; every six hours.—25th: Early this morning he passed a small quantity of fecal fluid. He slept well, and is comfortable. Complete retention of urine still continues. The urine was drawn off by catheter this morning without chloroform, and fourteen ounces were evacuated. It was acid, clear, and of specific gravity 1012. He takes his milk readily.—26th: He had another good night, and continues cheerful and free from pain. There is still complete retention of urine, but this morning he passed a very dark liquid stool containing only small pieces of solid matter, the largest about the size of a pea. Temperature normal; pulse 92. Twelve ounces of urine were drawn off about midday. He is taking custard to-day.—27th: He has again passed a good night. He complains of no pain, but the catheter was required again to relieve his bladder. The bowels have not acted to-day.—28th: He continues free from pain and takes his food well. In the afternoon he passed urine naturally for the first time since the operation. In the evening the bowels acted again, and much more naturally; he passed about six solid pieces, the largest the size of the little finger, greenish-yellow and firm. Ordered farinaceous diet with milk.—29th: After passing a good night he emptied his bladder naturally. The bowels acted well in the afternoon. In the evening he sat up for the first time since the operation.—30th: His bowels acted well again this morning, and he was allowed to get up early in the day—July 1st: He is running about the ward apparently quite well.—2nd: He continues well, and went out to-day.

It will be observed that the vomiting and abdominal pain which commenced on Saturday morning continued without relief until the operation on Monday evening. The condition of his bowels was not known with any certainty until after his admission into the hospital. All that the friends were able to state was that he had been two or three times to the watercloset, but whether anything was passed was not ascertained. Among the children of the poor little attention is paid to the condition of the excreta, and the sanitary arrangements are often such as to prevent any examination of the motions passed. Soon after his admission into the hospital, however, he passed blood per rectum without any natural motion, and, a tumour being felt in the abdomen, the diagnosis of intussusception was not doubtful. The obstruction was overcome by combining inversion with inflation, after inflation alone had failed. The tumour was felt to disappear under the hand, and the intestine, becoming unravelled by the *vis a tergo* allowed air to pass up beyond the seat of obstruction. From this time the vomiting ceased, and the only trouble that followed was due to retention of urine, which is a not uncommon complication of abdominal operations. His diet was restricted for several days to a pint of milk in twenty-four hours; the bowels acted on the morning of the third day; and, when the bladder began to empty itself naturally on the sixth day, there was no longer any cause for anxiety.

Nothing could have been more satisfactory than the result of our treatment in this case; but had we failed to reduce the obstruction in the manner described, we had other resources at our command. It was our intention, under such circumstances, to have opened the abdomen on the linea alba; to have sought for the tumour, and, having found the intestine at the point of invagination, to have exerted gentle traction, thus employing what might be described as *vis a fronte* for the restoration of the bowel to its proper position. Had we been again baffled in our attempts to restore the intestine to its natural condition, we should probably have proceeded, if the condition of the patient had permitted, to perform resection of the intestine. This would be performed only as giving a last chance; and I am strongly of opinion that, with a better recognition of the symptoms characteristic of intussusception, it will seldom be necessary to resort to this extreme measure, or even to that of opening

the abdomen. It is sometimes pleasant to look back on the experience of former years, and these cases possess an especial interest for me, inasmuch as the first case I ever published and the first printed article to which my name was ever attached was, "A Case of Intussusception cured by Inflation," which appeared in THE LANCET for 1870, vol. ii. page 183.

"POLITICAL MANIA" IN CONJUNCTION WITH PARALYSIS AGITANS.

By ALFRED MANTLE, M.D.

THE following particulars of a case of "political mania" in a respectable working man, the subject of paralysis agitans, may be interesting, since attention has recently been drawn to this form of madness in the columns of THE LANCET.

W. S—, aged sixty-nine, has been under my observation five years. He never had any serious illness until ten years ago, when symptoms of tremor appeared. He has always been of strictly temperate habits, and was formerly a carrier by occupation, but latterly worked at a colliery. He is the eldest of eight children. His father, who always took a lively interest in politics, died of senile decay. His mother died of consumption. Three sisters are living, and healthy. His four brothers are all healthy, with the exception of the youngest, who is now suffering with the same disease—paralysis agitans. There is no history of any other member of the family having any nervous disease, but all take an interest in politics. My patient is a well-educated man for his position in life, and has always watched the political world with a considerable degree of enthusiasm. When a Conservative working-man was supposed to be a being scarcely in existence, and only rarely heard of, let alone seen, my patient, although living in a remote corner of the country, was a staunch supporter of Conservative principles; and, unlike the majority of politicians, he has never deviated from the path of Toryism, but has always remained true to the cause he first espoused. For seventeen years he has taken a daily paper and closely watched the political party in power, but it was not until the election of 1874 that he became an extraordinary political enthusiast. At this time he was most anxious for the Conservatives to be in power, and, the result of the elections being such as to enable Lord Beaconsfield to form a government, his political craze became more and more intensified. It was noticeable then that he was more easily agitated when anyone advanced an opinion contrary to his own. A few months afterwards he had tremor in the right hand, the arm becoming likewise affected after a short time. He gave up work for nine months, with no improvement. His political ardour was as strong as ever. He attempted work again, but after working for some four or five months he was obliged to give up, the left leg becoming affected with tremor. The disease continued to progress slowly, and at the end of two years all the limbs were similarly affected.

The patient's interest in politics, in spite of so sad a disease, instead of diminishing, has steadily increased, and at the present time, when sometimes he is quite prostrated by the sufferings and discomfort such patients have to endure, he will make a determined effort every morning to learn the political news revealed in the daily papers. On account of the tremor being so general, and having the constant desire to change his position, suffering as well from excessive heat, this is only accomplished under the most trying circumstances. Anything else save politics receives little or no attention from him; and his one topic for morning to night, if he can get anyone to talk with him, is that of politics. Should anyone disagree with him, he is very soon in a great state of mental agitation, which results in an exacerbation of the tremor, terminating in great prostration. His wife, knowing that his first question to a stranger is to discover his political creed, makes it her business to ask anyone who may hold different opinions from himself to be Conservative *pro tem.*, in order to prevent an exacerbation of the tremulous symptoms and consequent prostration. I have always made the same request to a *locum tenens* seeing him in my absence. One marked feature is the opinion he entertains of his opponents, denying them any principle whatever. He has a particular