mined by the hand, the unceasing vomiting, and the passage of a bloody mucus from the bowel, together pointed to the occurrence of intussusception. The exploration of the rectum, when the tumour occupying its interior was discovered, left no doubt.

The amount of intestine displaced was unusually large. The invagination, consisting of the three lowest inches of the ileum, the cæcum, and appendix, with the ascending and transverse colon. In the other nine fatal cases, the inversion was, in no instance, to the same extent. The invagination consisted of—the ileum into ascending colon, 3; ileum into transverse colon, 1; ileum, cæcum, and ascending colon, into transverse colon, 3; cæcum and ascending colon into transverse colon, 1; transverse into descending colon, 1; or 4 examples, where a portion of the small intestine alone was inverted; 3 of portions of the small and large together; and 2 of a portion of the large alone.

The sequence of events at the time of, and subsequent to, the occurrence, was probably the following. At the time of the action of the bowels, said to have been both violent and sudden, some irregularity of the intestinal contractions followed; the consequence being that the termination of the ileum passed within the colon, carrying with it the cæcum and appendix. The effect of drawing the breast, in all probability, increased the displacement. The ileum then, acting as a mechanical obstruction, would soon rouse the peristaltic action. These contractions to overcome the obstruction, aided by the diaphragm and the muscles of the abdominal parietes, instead of lessening, would only increase the derangement. There being no hindrance to this, from the peritoneal folds being unusually lax and free, not fixing the intestine in position. Thus, a predisposition to the affection would exist, the chief cause of its greater frequency in children over adults. At each subsequent contraction, the inverted portion would be forced onwards, nearer the outlet, dragging after it the successive portions of the colon.

Any treatment, to be efficacious, must be manipulative rather than remedial. Aperients are, with certainty, contraindicated; every movement and muscular contraction increasing the displacement, and only adding to the danger. Castor-oil, so useful a remedy in the various disorders of early childhood, and so frequently administered by the anxious parent, must often establish, if it do not increase the malady. In every case, the rectum should be explored. If a tumour be present, its reduction should be attempted at once, by the finger or the rectal bougie, aided by the gentle palpation of the abdomen. If no tumour be discovered, or if by these manipulative efforts its reduction cannot be effected, insufflation of air and the injection of warm water may be successively employed. The former may be safely accomplished by an ordinary pair of bellows. To be serviceable, either proceeding must be employed early. The adhesions are quickly formed. In the autopsy related, in less than thirty hours after death, when decomposition was advanced, a considerable amount of force was required to withdraw the inverted intestine.

The question of opening the cavity of the peritoneum, and then attempting the reduction by drawing upon the uppermost portion of the invagination, forces itself forward for consideration. The most eminent surgeons of the day neither advise nor perform this operation themselves. There is no case recorded of obstruction from intussusception, in which the operation has been followed by a successful result. These are not satisfactory data to rest this question upon. With the difficulties consequent upon the operation superadded, it may be fairly considered untenable.

In those cases, in which a tumour is present in the rectum, if the sufferer survive the first few days, it may be proper to puncture the protrusion by means of a trochar. The distension will thus be relieved; and a way will be formed for the exit of the contents of the bowel, especially the gaseous, a fertile source of irritation. In the early period, no good can, with any possibility, accrue from this proceeding.

If a fair attempt has been made at reduction, manipulative efforts must be suspended for the administration of narcotics and sustaining food; trusting that, by these means, time may be obtained for the operation of Nature's curative efforts. In which process, the portion of damaged bowel is discharged, and the canal rendered pervious, and capable of performing its allotted functions. The remedy of all others most fitting, and from which the best results are obtained, is opium. To be of any service, it must be given in full doses, and repeated at short intervals. From a certain power it exercises over the circulation, the inflammatory action becomes less. In addition, from its sedative action on the nervous system, the irritability of the intestinal canal is allayed, the expulsive efforts of the abdominal muscles becoming less forcible, and occurring at notably longer intervals. Last, but not least, by the aid of a drug, that has been called "the gift of God" to man, one of the greatest aims of any treatment is accomplished, the assuaging of pain.

Original Communications.

INFRAMAMMARY PAIN.

By THOMAS INMAN, M.D., Liverpool.

DR. MARTYN considers that some cardiac distress may be the cause of inframammary pain; but we can scarcely agree with the conclusion, when we consider that the pain in question is absent in endocarditis, pericarditis, valvular disease, and in all other cases where the heart is organically changed.

In any inquiry upon the signification of a symptom, we should, I think, try to discover its analogies, its concomitants, and its relations. If we treat inframammary pain in this way, we shall find that it has no analogy with common tic. I have had under my care a man who, from the extension of an aneurism affecting some of the dorsal nerves as they emerged from the spinal canal, had a pain about and below the nipple, from true nervous irritation; and that pain had no resemblance to that spoken of by females and others. The pain is analogous to that complained of over the spinous process of the seventh cervical vertebra after a very long walk, with a heavy coat on one's back. It resembles the pain felt at the insertion of the biceps humeri after carrying a heavy gun all day; it is similar to that felt at the insertion of trapezius, in the shoulder, by so many consumptives; it is described in the same terms as the pain in the back in gibbous spine; and a similar symptom is occasionally met with in gouty subjects in the knee, in the heel, in the pubes, and elsewhere; and I have known a similar pain in the plantar fasciæ of delicate housemaids, from long standing, etc. The pain is associated with delicacy of constitution, and with work disproportioned to strength. With it come pains in other parts, showing muscular weakness; loss of appetite and digestive power, showing stomachic feebleness; flatulence, borborygmi, irregularity of bowels, showing a want of "tone" in the intestines. There is something wrong in females with the uterine functions. In all, there is a weak

heart and respiratory muscles, as shown by palpitation on movement, sluggish action during repose, and frequent sighing. The nervous system is generally unusually irritable, and the "spirits" are either low or variable.

The pain is related closely to movement. Absent in the morning, it increases in severity as the day wears on, and reaches its acme at night. It is invariably relieved by perfect rest. The spot most commonly affected can readily be seen in athletes who are exhibiting feats of strength; it is the sole point in which no movement of the skin takes place; viz., where the integument is tied down to bone, and is more or less stretched at every movement of the trunk. The left side is more commonly affected than the right, because it is weaker. The pain is occasionally persistent in pregnant women after the fifth month, and seems to be due to stretching of the skin.

I conclude, therefore, that inframammary pain is due to movement disproportioned to strength. We may call it myalgia, neuralgia, or any other algia that we like, without harm, so long as the name involves no wrong system of therapeutics. As the symptom is due to movement, the relief must be sought in repose; and counterirritants, anodynes, etc., are rarely of service, except in so far as they compel quiescence. Strapping with a sufficient number of strips to insure immobility of the side is an instant cure. But, as few persons like to go about thus crippled, a more satisfactory method of treatment is solicited. This is to be sought by endeavouring first to save the patient's strength, and secondly to increase it. In carrying out the details, each practitioner can adopt the plan he likes best; but of one point he may be assured—viz., that, as a general rule in these cases, air without exercise is better than air and exercise. Even in Dr. Fuller's case, the cure was not effected without "bodily repose", though the air and exercise he took increased his health.

CONTRIBUTIONS TO DENTAL SURGERY.

By SAMUEL ADAMS PARKER, Esq., Licentiate in Dental Surgery of the Royal College of Surgeons of England; Surgeon-Dentist to the Queen's Hospital, and Senior Surgeon-Dentist to the Birmingham Dental Dispensary.

CASE I. *Facial Neuralgia of Twelve Years' Standing, Cured by the Removal of Diseased Teeth.* J. Johnstone, aged 43, was admitted to the Dental Dispensary in February 1863, suffering from a violent attack of facial neuralgia, which had existed for a space of twelve years with greater or less severity.

During the last three months previous to my seeing him, the pain, which had been of an acute character, had come on regularly in the evening, and had increased in severity till nearly midnight; when it had gradually subsided into a dull heavy pain, continuing uninterruptedly till the following evening, when the same thing was repeated; and this without variation night after night. The patient also complained of a burning pain on the top of the head, and of a little intermittent pain in the ears. Previously to the occurrence of the neuralgic pains with such severity, the patient had suffered much from his teeth; but, as in numerous cases which I have already published, the pains in the teeth had subsided before those of a neuralgic character supervened. The patient attributed his sufferings not to his teeth, but to tic douloureux.

I examined his mouth, and found the teeth for the most part sound, of a slight yellow colour, indicative of strength, and non-liability to decay like those of a

pearly white character. However, the stumps of the first and second superior left bicuspid and the second inferior right molar were remaining in the jaw; and the inferior right dens sapientiae was much decayed. On the sixth day of February 1863, I removed all the stumps above mentioned. On the 10th, the patient was somewhat better, but still experienced much pain. I then removed the dens sapientiae.

The patient saw me on the 18th, and informed me that he had been perfectly free from pain since the last operation; and I know he has continued so up to the present time.

CASE II. *Facial Neuralgia Cured by the Removal of Diseased Stumps.* November 6th, 1863. J. Wood, aged 49, had been suffering a long time from neuralgic pains in the head, which had visited him in such violent paroxysms that he became for a time perfectly giddy, and his vision was somewhat impaired thereby.

He had been in this state three years, during which time he had been under medical treatment, and had taken a variety of medicine without much benefit, and had been ultimately consoled by the information that the pain would continue for the remainder of his life. This patient always had an idea that the pains started from the lower jaw, where two or three old stumps were; but the mouth had never been examined.

From the condition and appearance of the stumps, I was induced to believe that much benefit, if not an ultimate cure, might be effected by their removal; to which the patient readily consented. I removed four stumps, which were all that remained in the lower jaw; the other teeth being in a tolerably good condition.

I saw him three times after the removal of the stumps, and found that the pain had gradually subsided, and had finally left him.

CASE III. *Morbid Growth of the Gums Caused by Diseased Stumps: Removal of the Stumps, and Ultimate Cure.* Mr. B., aged 30, consulted me in July 1863, respecting his gums and palate, which had been in an inflamed and otherwise diseased condition for four months.

I found upon examination, that the gums were very thick and spongy; that they bled profusely upon the slightest touch, and discharged a thin matter from their margins, which rendered his breath very offensive. This condition of things had extended to the palate and throat, and had rendered them very much inflamed. In the centre of the palate was an abscess, which, when opened, discharged a quantity of thick pus. The patient had lost the crowns of nearly every tooth; the stumps were for the most part loose, and on that account had been a cause of great irritation, and had rendered the patient's condition daily worse.

I removed four or five (as many as he was able to bear at one time) stumps and freely scarified the gums, more particularly between the teeth; and ordered a wash for the mouth composed of

Tinct. myrrhæ ʒiv; infusi rosæ comp. ʒviii; acidi nitrici diluti mxx.

To be used three times a day.

This wash I invariably order in cases where the gums are at all inflamed and spongy, and always have found that patients have derived great benefit from it. I also ordered him to take a small quantity of lime-juice internally every day, and to be careful as to his diet.

I saw the patient a few days after the operation, and found that a more rapid improvement had taken place than I had anticipated. The palate and throat were free from all inflammation, and the abscess was fast closing up. The gums, although not by any means well, had an improved condition about them