

Case 6.—A. J. S., aged 30 years, came under my care at about the same time as did Case 5. The two cases had about the same symptoms, tenderness and temperatures, and both were treated similarly up to the time that Case 5 required operative measures. This man, however, made a good recovery in about three weeks without any operation and has had no return of the symptoms, with the exception of slight pain, at times, in the region of the appendix, but not severe enough to call for further interference.

At this writing all of the above patients, with the exception of Case 1, are well and attending to their usual duties.

In my own practice and in consultation with my colleagues I have, in the past year and a half, seen about twenty cases of appendicitis of almost every degree of severity, and I have become thoroughly convinced that, as a rule, the surgeon is not called early enough in the development of the disease to get the best result.

In treating chronic recurrent cases, unless they progress badly, it is best to wait until there is a lull between the attacks, for this is the most favorable time for operation.

If we are convinced that an abscess is forming we should wait, if the case will allow, until the abscess wall is strong enough to withstand surgical interference.

In abscess cases I would never hunt for the appendix if it is not present in the pus cavity.

I believe the best method of removing the appendix is to cut it off close to the cecum and treat the wound thus formed as you would any other small wound in the intestine.

And finally, in my opinion, it is bad practice to apply blisters and like remedies over the region of the appendix, when treating the disease, because, if operative measures are subsequently adopted, there will be more probability of suppuration and sloughing in the wound.

SAVE THE PIECES.

Read before the Fox River Valley Medical Society April 27, 1897.

BY J. R. BARNETT, M.D.

NEENAH, WIS.

It is not long that "conservative medicine" and "conservative surgery" have been familiar terms to our ears; and yet by reason of their repetition it seems long. They would have sounded strangely in the mouth of a Watson or Erichsen, and were tentatively and diffidently spoken by a Flint and a Gross.

Every day has its surgical record which reads as if the word conservative had not been incorporated into the language of our art; and as if surgery meant only amputation, mutilation, disfigurement, and as if her chosen collaborer were that carpenter of prothetic art, the wooden-leg maker. If one had the power to glean the facts and give a clinical report of the needless mutilations of yesterday, done under the stress of supposed necessity, of fingers and toes, hands and feet, arms and legs, amputated because their salvation was doubtful or deemed impossible, it would be a ghastly record. Preservative surgery is a term more in harmony with our conception of a surgeon as one whose art is invoked to save, first the man, and next, as much of the man as possible. Our old student admiration for the surgeon who could complete a major amputation in four minutes by the watch, and triumphantly exhibit three-fourths of a man as secured to life, if laudable pus but crowned his skilful work, is now quite misplaced. The compound fracture and the lacerated tissues that justified it then would offer no

defense now. We have to answer to our conscience, the question, can the limb be saved, even at a little greater risk to life, and at the added cost of much longer, pains-taking and unattractive care in the after-treatment? We have even to face the clamor, grown popular as well as professional, for an aseptic operation that shall make even laudable pus both unlaudable and reprehensible, and that shall make the final treatment of the wound a matter of one or two dressings. The surgeon delights in such an operation, and the people look upon anything less as evidence of unskilful work. Nevertheless, the present requirements of our art are such that we must face the charge of reactionary and retrogressive tendencies, since preservative surgery means something of a return to the patchwork of olden times, and something of a flouting of that potent organism, not then recognized in high scientific circles, the pus microbe. If we are to save the pieces, we must often save them in company with several busy colonies of that same microbe, which not all the antiseptic scrubbing and irrigations will with certainty avail to wash away or kill. A hand mangled on the dead-wood, or crushed in the dirt of the street, is the certain host of innumerable germs; and the temptation to dispose of both host and guest, once for all, by a few touches of the knife and saw, is a deadly one; but it is a temptation to be resisted so long as whole blood vessels and nerves traverse any portion of the mangled member. Every finger and part of a finger in which life can be kept should be spared, even if the bones are fractured, and the fractures are compound. Is its integument partly gone? Patch it up.

Is a partial excision necessary, with any part of the saved member of doubtful vitality? Patch up an excess of integument at the amputated part to hold in reserve for the possible needs of repair later on. If such repair is needed you will bless your provident forethought; if it is not needed the redundant integument will atrophy and disappear, if not too great, or it can be easily trimmed away.

Frost bitten members should be put in a protective dressing until nature points out the utmost limit of vitality; and the saw or bone forceps should be about the only instrument needed to complete the amputation; for nature has shaped a bloodless flap, which will fall naturally enough over the end of the severed bone.

Burns of the extremities, involving the deeper tissues, should be treated in the same way. The preliminary waiting will be safer, for the destructive agent has sterilized the part with the utmost thoroughness.

To discuss conservative operations with reference to prothetic aid later on, would need both more time and an abler essayist. The question has been much considered from both sides, and both sides have seemingly strong arguments.

Permit me to outline a few cases:

Case 1.—A workman in a planing mill had the back of his hand so lacerated by a saw that the integument was literally in strips. Some of the extensor tendons were shredded up and some of the phalangeal bones uncovered, and in a few places sawn through. Every finger, including the thumb, had at least one joint opened up and more or less injured.

The shredded, soft tissues were trimmed away, the multiple lacerations carefully sutured, and a protective dressing and splint applied. A thoroughly useful hand was saved, and one not greatly impaired in its necessary movements.

Case 2.—A man aged 60 years, froze all the fingers of one hand. When he consulted me, a few days later, three of the fingers were swollen and discolored their entire length. Fortunately he had done them up at the outset in antiseptic cotton, so that they were in good condition for preservation until a limitation of vitality could surely be made out. He lived at a distance, and various delays occurred, so that amputation was not performed until a month later, when I found the fingers, nearly to the bases of the middle phalanges, completely mummified. The living integument was pushed up a little, the bones severed with forceps, and the rather serrated flaps allowed to fall into position, no suture being used. The stumps were not handsome at the time, but in a few weeks they looked as well as if fashioned with the most fastidious care, and each of them possessed one more joint than it would have had had the amputation been primary.

Case 3.—A brakeman sustained a crushing injury of the hand while coupling. The third and fourth fingers and the ulnar side of the hand were completely pulpified and devitalized. There were compound fractures of all remaining phalanges excepting the thumb, the soft tissues being frightfully lacerated, but offering a promise of preservable vitality. Excision was done through the crushed metacarpal bones, patches of integument from the sacrificed finger being pieced together to close the wound and afford a surplus for later repairs should sloughing occur. Lacerations were sutured and ample drainage provided, and the man was sent to his home, where the most difficult part of the treatment fell to Dr. Bishop, the company's surgeon. I heard two weeks ago that the two fingers had been preserved, and the patient thus left with a comparatively useful hand.

Case 4.—February 9, a man of about 60 years of age, was caught by a moving train in such a manner that the integument was torn wholly loose from one foot, the accompanying laceration reaching from the base of the great toe, along the inner border of the foot, across the ankle and along the outer border, to the metacarpal bone of the little toe, which had sustained a compound fracture near the head. The toe was shucked out of its integument, and so was removed, with its metacarpal fragment, the skin being patched up for later repair. There was also a compound fracture of the tibia just above the malleolus, not to mention an intercondyloid fracture of the humerus of the same side, a fracture of a rib on the opposite side, and several lacerated wounds of the scalp. The skin of the foot was completely detached and crushed through at two or three points, so that the finger could be passed about underneath it, while most of the foot could be laid bare. The dirt upon, and underneath, and all about, was appalling; and much labor was spent in cleansing what may, with double aptness, be called "the field." It took more than two hours to do this and properly suture, drain and dress the foot, putting it in a fixation splint. No anesthetic was needed, as, partly from the traumatic anesthesia, partly from the head injuries, or possibly from the "drop too much," which is the usual incident in such cases, the patient felt but little pain. No part of that elaborate patch-work was saved except a fragment from the little toe and from near the base of the great toe. From a line surrounding the foot at these points to another surrounding the ankle, every vestige of that integument with its fascia melted utterly away. Most of the flexor brevis digitorum shared in the destruction, together with much of the tendo Achillis at its insertion, while the posterior surface of the os calcis became carious and had to be cut and scraped away. The wound became infected from the first, mainly by the bacillus pyocyaneus; and with the infection and the devitalization of patches of unknown depth, here and there, it took six weeks to get the field ready for grafting; the compound fracture of the tibia meantime sharing for a few days in the suppurative process, though afterward uniting rapidly. The Thiersch method of skin grafting was employed, upon the sole first, to stop cicatricial contraction as promptly as possible. The surface was most thoroughly curetted and completely covered by grafts removed from thigh. These were covered in by the usual strips of rubber tissue; a copious dressing of iodoform and sterile gauze saturated with normal saline solution was applied; over this a sheet of oiled silk, and over all a free covering of sublimate cotton. When this was removed, the fourth day afterward, every graft was alive, and only one necrosed a few days later on, when the sole of the foot was

practically closed in. Eight days after the first grafting the dorsum of the foot was similarly covered by grafts taken from the other thigh, every one of which survived, although they were not placed everywhere in contact. Now, after two weeks, the only open spot is where the deeper mischief to the os calcis and tendo Achillis was done. This is closing by granulation, although it may need another curetting.

One can not say how soon the foot can be useful for all service. Probably, owing to the thinness of the new covering and the absence of subcutaneous fat, it will take many weeks, or perhaps months, of careful use with a deeply padded shoe; but that in the long run the superior usefulness of the natural member over a wooden one will fully reward all parties concerned for the tedious and unattractive work bestowed upon it, admits, I think, of no doubt whatever.

AN UNUSUAL EXPERIENCE IN DIPHTHERITIC INFECTION.

Read at the Thirteenth Annual Meeting of the Second District Branch of the New York State Medical Association.

BY E. D. FERGUSON, M.D.

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March 15, 1897, I was requested by Dr. M. B. Hut-ton of Valley Falls, N. Y., to visit a family in which four members had been stricken with illness in an unusual and very serious manner.

The family consisted of the father and mother, a daughter, two sons, and a brother of the father. The daughter had been away from home, teaching school, until three or four days prior to my visit.

The cases were as follows, viz:

C. M., a boy, aged 14, became ill March 4 with the ordinary signs and symptoms of lobar pneumonia. The local physical signs corresponded to the ordinary course of the pulmonic disorder, and March 11 the lung had so far cleared as to show that some element other than ordinary pneumonia existed, for instead of an improvement in the general condition, the symptoms became progressively worse, and the patient died March 13. No complaint had been made of discomfort in the throat, and no evidence of trouble was present there, until it was too late to examine. This patient died two days before my visit.

I. M., a boy, aged 11, became ill March 9, presenting, in the same manner as his brother, the usual signs and symptoms of lobar pneumonia. A favorable course was pursued until March 14, when a membranous exudate was discovered in the throat, and death occurred March 16.

E. M., aged 62, the father of these boys, was taken ill March 11. He, also, presented all the physical signs and the symptoms of lobar pneumonia, but March 14 the throat showed an exudate and death resulted March 16.

J. M., aged 70, a brother of E. M., became ill March 12, but refused to go to bed until the following day. In his case all the classical signs of lobar pneumonia were present, but March 14 the throat trouble had developed, and death supervened on the 16th.

Of these patients, one died two days before and three were alive at the time of my visit, but they died during the following day.

The lad, I. M., was in a profoundly toxic condition, and in so profound a stupor as not to realize anything concerning his surroundings, in fact he was evidently moribund. The other two patients were fairly comfortable, having passed the stage of pain due to the pneumonitis and its associated pleurisy, the mind of each was clear, the pulse was of fair strength and not greatly accelerated, and the temperature was only slightly raised.

The pneumonitis in each and all the cases had been limited to a single lower lobe. The physical signs in the lad taken ill six days before my visit, indicated that resolution was nearly complete; in the case taken ill four days before my visit resolution had made pos-