

Mental excitement remains but the patient has a difficulty in recognising those about her and she rambles. There is a progressive loss of strength and the skin becomes cold, the pulse imperceptible, and the respirations fast. Death ensues in from two to four days after operation. The treatment is stimulants, but nearly all cases in which these symptoms have typically developed in my experience have ended fatally. Post-mortem examination reveals a healthy stump and bowels and no peritonitis; in short, it discloses no adequate cause for death.

*Peritonitis and ileus* are discussed under the heading of "distension."

#### RESPIRATORY COMPLICATIONS.

Ether bronchitis is a frequent and troublesome complication and I have found the following mixture invaluable for it: 30 grains of bicarbonate of soda, half a drachm of aromatic spirit of ammonia, and 20 minims of spirit of chloroform to an ounce of camphor water, to be taken every four hours. Broncho-pneumonia spreading from a primary bronchitis requires the usual remedies. Septic broncho-pneumonia is characterised by diffuse dry râles with little or no expectoration; the outlook then is hopeless. Pulmonary embolism, if large, causes immediate death with cyanosis and dyspnoea. I have, however, seen two cases in which, with sudden pain and dyspnoea, a large area of consolidation rapidly appeared. I regarded these as examples of pulmonary infarction on a scale not large enough to endanger life.

#### THE ABDOMINAL WOUND.

Hæmatoma of the abdominal wound is discovered when the skin stitches are removed at the end of a week. I always scrape the clot out and if the cavity be small powder it thickly with iodoform and let it granulate up; this it does rapidly if kept dry. If the cavity be large it had better be closed afresh with silk-worm-gut sutures; this is excellent treatment.

Stitch abscess may declare itself at any period after an operation in which the wound is closed with buried sutures.

As I have before said, fever without anything else to account for it should always awaken suspicions of suppuration around a buried suture. The treatment is to let out the pus and allow the cavity to granulate, which it will often do without removing the suture. If it refuses to do so the offending stitch must be removed.

#### BLADDER SYMPTOMS.

It is a common thing for pain on micturition to develop about the beginning of the second week. On examination the urine is found acid but it may contain a little pus. It is an interesting point that salol in doses of 15 grains taken three times a day is almost a specific for this condition. It is no doubt due to an inflammation of the bladder wall by infection from the site of the operation. Probably at first the mucous coat escapes and so the urine is unaffected; subsequently when this also is inflamed pus appears in acid urine. The organism causing this form of cystitis is either the bacillus coli communis or ordinary pus organisms, not the micrococcus ureæ; therefore there is no alkalinity of the urine. After the cystitis has existed for some days a secondary infection with the last-named organism may occur and the urine may become alkaline and ammoniacal.

Suppression of urine is either obstructive or is due to renal shock. In the first case the ureters have been divided or have been included in a ligature or clamp. The urine after all operations near the ureters should be examined for blood. Clear urine shows that in all probability the ureters are intact. The condition is grave and the surgeon must adopt such treatment as the case indicates. After vaginal hysterectomy in which clamp forceps have been left on these should be removed or re-adjusted lest they include the ureter. In the second case the ordinary measures for renal suppression, such as large drinks of hot water or tea, or copious injections up the bowel, should be tried. Dry-cupping the loins, the hot-air bath, and pilocarpin are indicated without delay if these milder measures do not succeed in stimulating the kidneys.

#### FEMORAL THROMBOSIS.

This most interesting complication appears late. On referring to a considerable number of these cases I find that in the great majority of them the symptoms developed between the eleventh day and the thirteenth day after the operation. It is usually ushered in with fever, a sallow face, and marked malaise. The leg is very tender when first swollen or the pain may precede the swelling. It is

variously localised, sometimes in the inflamed vein, but not uncommonly on the outer side of the leg. The swelling may be limited to a non-pitting enlargement of the calf or there may be œdema of the whole or part of the leg. After being acutely tender and painful for a few days it gradually subsides. A relapse may occur and a tendency to swelling of the leg is left for many months. The most striking thing about this complication is the varied nature of the operations preceding it. Thus I have seen it occur after abdominal hysterectomy, after vaginal hysterectomy, and after simple incision of the abdominal wall, and I have seen left femoral thrombosis follow on the removal of a right ovarian cyst through abdominal incision. If I had not seen it occur after vaginal hysterectomy I should have believed that the condition was due to a spreading thrombosis of the superficial epigastric veins secondary to some infection through the cut edge of the abdominal wound, but though this may be one channel of infection it is evident by its occurrence without an abdominal wound that there must be others. There is no direct communication between the veins in the broad ligaments and the external iliac vein, and even if there were it would not explain left thrombosis after right ovariectomy. That it has followed on simple abdominal incision without interference with the pelvic organs is remarkable. Again, it is nearly always the left leg which is affected, though the right or both may suffer. In some cases the popliteal or deep tibial veins would appear to be primarily thrombosed. In these cases the infecting agent must have travelled against both venous blood and lymph stream. The whole question is wrapped in mystery and it well merits careful investigation. It appears to me that the balance of evidence is in favour of a general systemic infection with a local spot of "least resistance." The treatment is rest, elevation, firm bandaging, and the application of glycerine and belladonna locally, while the general health, which is often much lowered, requires good feeding and stimulants.

#### INFLAMMATORY PELVIC EFFUSION.

Inflammatory pelvic effusion around the site of operation occurs at about the end of the second week. The symptoms are fever, weakness, and wasting (often marked), and nearly always frequent and painful micturition. On vaginal examination a pelvic effusion is felt which in the majority of cases, the patient being kept in bed, subsides in a week or so without suppuration. But pus may form and then usually discharges by the vagina or bowel with marked remission of the symptoms. If a fluctuating swelling appears in Douglas's pouch it should be opened, for once the pus has been discharged the patient mends rapidly. Pending this relief stimulants, quinine, and good feeding are indicated.

#### ACUTE PAROTITIS.

This unfortunate and unexplainable complication is rare. The larger number of cases subside without suppuration, but in patients who are cachectic and enfeebled the whole gland may slough. There is then much constitutional depression and great pain and the condition is dangerous both from these causes and from the possibility of the ulcerative process extending into the external carotid artery. In this emergency it would probably be necessary to ligature the common carotid, as the œdema and swelling extend down the neck too far to render it possible to reach the external carotid through healthy tissues. In the milder cases painting with belladonna and glycerine and the application of a wool pad are all that are required. When the skin becomes dusky these measures should be changed for fomentations and cautious incisions in lines corresponding to the important vessels and nerves of this region. Plenty of stimulants and a liberal diet are necessities. More or less facial paralysis may co-exist or even remain permanently after the inflammatory process has subsided.

## CHRONIC SUPPURATION OF THE ACCESSORY NASAL SINUSES.

By BERTRAM COOPER, M.R.C.S. ENG., L.R.C.P. LOND.

INFLAMMATION of these sinuses when acute is undoubtedly very common. There can be few who have not felt the frontal ache which is so often the accompaniment of a severe "head cold." When, however, chronic suppuration affects these cavities we have a far more serious disorder

which is still imperfectly understood, perhaps because of its previous rarity before the advent of its probable parent influenza.<sup>1</sup> The indications of frontal and antral empyema are often clearly shown. Unfortunately the same cannot be said of the sphenoidal and ethmoidal, but the two latter are rarely involved except in common with the others. In view of the recent and increasing interest which has arisen on this subject I venture to record three cases which for comparison I quote together.

In these cases the appearance of the patients was anæmic and the teeth were much decayed, and there was a history of influenza. The nasal discharge was unilateral; it was first mucoid and then intermittently purulent. In one case the pain followed the course of the supra-trochlear nerve and in the other cases it followed the course of the supra-orbital nerve. In two cases the pain was not apparently dependent upon retention, and in the third it was less or disappeared with a free flow of pus. Its duration was never more than for four of the 24 hours, and it was most intense about midday. Slight pain was also present in all of the patients in the malar and superior maxillary bones on one side. In two cases the tenderness was not severe and followed on slight pressure on the nasal side of the orbital roof. In the third patient there was no tenderness. Sneezing was a constant annoyance and heralded the nasal discharge. All three patients suffered from a spasmodic cough which was worse after sleep. In one patient the maxillary antrum on the same side was distended with pus. This some years before had been drained through the alveolar process. In the other two patients implication of the antral and the other sinuses was not marked. In all congestion of the conjunctivæ, especially on the affected side, transitory giddiness, tinnitus aurium, indefinite pains in the head, and slight epiphora were present and often there was a raised temperature. The inflammation was at times quiescent, only to be again and again excited by "catching cold" which was of frequent occurrence. A polypoid state of the mucous membrane of the middle and inferior turbinated bones on one side, and in two of the patients mature polypi also, were associated conditions.

The treatment consisted in the removal of the polypi and cauterisation of the diseased mucous membrane. Nasal douching was then tried, but all the patients complained of deafness and increasing tinnitus, so a coarse spray was substituted with a warm alkaline antiseptic and occasionally a menthol or alcohol fine spray. None of the patients would entertain any operation beyond those for the removal of the polypoid growths.

Though there has been much improvement in respect of pain and discharge, yet it must be confessed that there has been no absolute cure. One patient since the removal of the polypoid growths has had an intermittent semi-purulent expectoration. The presence of pus in the sputa corresponds accurately with the intermittent character of the purulent nasal discharge. I would suggest the following queries: 1. As to the origin of the disease, is it not probable that nasal polypi were present at the time of the so-called "influenzal" illnesses? 2. Were not the decayed teeth the starting point of the "coagulation-necrosis" of the nasal mucous membrane? The intimate relation between the teeth and the nasal cavities has been already shown.<sup>2</sup> The case referred to was cured by the extraction of a tooth. 3. Is it not likely that the "attacks of influenza" were really acute suppuration of the sinuses and that the symptoms were those which would occur as part of an infective process were the duct or ducts temporarily blocked? 4. As regards the advisability of operation on the frontal sinuses, one would feel inclined to hope that the partial shrinking of the sinuses which occurs with advancing age would tend to ameliorate the distressing symptoms and, with a better general state of health, to bring about a natural cure. This would be assisted by appropriate palliative treatment; though before this perhaps ideal state is attained the patient must run a grave risk of local and general infection. The direct operations for permanent cure are numerous and they aim at the obliteration of the diseased cavities. This filling up of air reservoirs must be, at least physiologically, detrimental. The good results of surgical treatment for empyema of the maxillary antrum are beyond dispute, but operations on the

(surgically) more remote sinuses at present seem much less hopeful and by no means free from danger. Lastly (5) I would point out that Mr. Walsham's warning against the nasal douche was exemplified by the foregoing cases.

Chiswick, W.

## Clinical Notes:

### MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

#### A CASE OF STRANGULATED RIGHT INGUINAL AND SCROTAL HERNIA; LAPAROTOMY; RECOVERY.

BY HENRY SMITH, M.R.C.S. ENG., L.R.C.P. LOND.

IN the first number of THE LANCET of this year was published an interesting paper by Dr. E. Matthews Owens entitled "Herniotomy plus Laparotomy Successfully Performed under very Unusual and Difficult Circumstances." Its perusal was of great interest to me at the time and has since been the means of saving life in a case which, with your permission, I will briefly record.

A fellah, aged about 20 years, who was employed on the Nile reservoir works, was brought to me there at 10 A.M. on May 30th, 1899. While lifting a large stone a few minutes before he had been seized with sudden pain in the groin and a cursory examination quickly revealed the fact that the patient was suffering from a tightly strangulated right inguinal and scrotal hernia. Gentle taxis was tried, but recognising the probable necessity for operation he was removed without delay to the American Mission Hospital and there was seen by Dr. H. T. McLaughlin. Taxis was again attempted under an anæsthetic but without result. An incision three inches long was at once made by Dr. McLaughlin over the external ring and the structures were divided until the bowel appeared, much congested, but not having lost its polish. Seven or eight inches of the bowel were found external to the ring and every effort was made to return it. The incision was cautiously enlarged to the utmost limit of safety. Native assistants raised the lower limbs till the position of the body was entirely reversed. The most painstaking manipulation was persevered with but to no purpose. In this dilemma I thought of the paper in THE LANCET and Dr. McLaughlin gladly followed the plan carried out by Dr. Owens. A median incision four inches in length was made. One hand was introduced into the abdominal cavity, some flatus passed along, and working with both hands the bowel was with very little difficulty partly drawn and partly pushed back into the abdomen. Both wounds were now stitched up and the right testicle, which had presented at the lower end of the inguinal incision, was restored to its place. The whole operation took nearly three hours. The after-treatment was simple. The patient did not display a single bad symptom. The stitches were removed on the fourteenth day and the patient was discharged on the thirtieth day radically cured, and he now has the additional satisfaction of exchanging his duties as a labourer for the lighter work of a watchman in consideration of his experiences.

I do not for a moment mean to compare the difficulties of the operation with those of Dr. Owens. Our operating-room is small, but vastly better than a ship's cabin, and our antiseptics are more up-to-date. I wish rather to thank him and you for the publication of such a case the recollection of which at the right moment proved so useful to our patient.

Assiout, Upper Egypt.

#### SUPRAPUBIC DRAINAGE IN PERINEAL FISTULA.

BY J. CROPPER, M.B., B.C. CANTAB.

IN the autumn of 1896 a boy, aged 11 years, from the neighbouring village of El Zib on the coast, came here with a perineal fistula the result of a native quack operation for stone. This operation is generally performed by pressing on the bladder above the pubes and cutting down on to the

<sup>1</sup> THE LANCET, Feb. 19th, 1898, p. 486.

<sup>2</sup> A Case of Coryza Apparently of Dental Origin, THE LANCET, Jan. 1st, 1898, p. 49.