In the former cases the best hearing was 7/17 watch, whilst in the latter the hearing was practically normal (15/17). These cases had not been operated upon by any one surgeon, but were drawn from all over England. Of the 44 unhealed cases, 33 had widely patent Eustachian tubes. This is interesting, as one very seldom, if ever, gets trouble from the tubes after Heath's operation; and the reason is, I think, because in it the drum heals up and so prevents what may be called a draught from the throat via the tubes through the ear. This draught, owing to the loss of the drum, and the inefficient closure of the tympanic orifice of the Eustachian tube in the radical operation, keeps on reinfecting the ear with micro-organisms from the throat. Ten of the 53 cases had had more than one operation performed, and another six had well marked facial paralysis.

In all except 5 cases the radical operation had been performed so that the statistics read: 48 operations, 5 healed, 10 operated upon more than once, 6 cases of facial paralysis, and 43 of the 48 in the same condition, possibly worse than they were prior to operation. The number of Heath's operation was small, in all probability because they were in a higher category than B 3, and so would not be found in a low category area such as Blackpool was.

From these statistics even the most ardent supporters of the radical operation can hardly claim satisfaction, and it cannot be wondered at that from them, and my other experience, I am of opinion that, save in very exceptional cases, it is hardly a justifiable procedure. These "very exceptional cases" are hard to define, as I have seen advanced cases of cholesteatoma recover after Heath's operation, and there is no necessity for a radical operation, if the internal jugular vein is ligated as a preliminary step, in cases of lateral sinus thrombosis. I think I should confine the indications for the radical operation to those cases in which there is present a non-functioning labyrinth, in which the operation has to be followed or continued by a complete labyrinthectomy.

The actual technique of the Heath operation has so often been described that it need not be repeated, but one or two variations I have found useful may be mentioned. As a preparatory dressing I find that iodine 2 per cent. in carbon tetrachloride is by far the nicest and does not blister or irritate the skin. The flap, which I described in the *Annals of Otolaryngology* (June, 1916), is the most useful, and, after one has used it for a few operations, can be so fashioned in nearly every case that the stitch which holds it closes the post-auricular wound and obviates the use of skin stitches. One skin stitch at most is all I ever use.

As after-dressing I prefer ribbon gauze soaked in freshly prepared eusol for a week, until the flap stitch is removed, and then instillations of rectified spirit with no syringing of any kind, as the drier the ear is kept the better.

After-complications are rare. I have never had a case of facial paralysis, but have had one of very large keloid in the post-auricular scar (possibly due to the use of scarlet-red ointment), which disappeared under treatment by radium. There was one case of metastatic ophthalmia; it occurred in a child, aged 7, who was admitted to my wards in 1912 with semi-acute mastoiditis on the right side. I operated by the Heath method, and for a day or two all seemed to go well, when a septic temperature with no localizing symptoms began. I opened the post-auricular wound, and, after washing it out, packed it from behind. The temperature dropped, and there seemed nothing to hinder her convalescence until the fourth day after the second operation, when she developed hypopyon in the left eye. This was accompanied by no pain, redness, or discomfort, and there was no wound or abrasion of the cornea. The vitreous gradually became infected, and she is now (1919) waiting to be taken into hospital to have the shrunken remnant of the left eye removed. Her ear is perfectly healed, the membrana tympani is normal, and the hearing 17/17 watch. The mastoid infection was streptococcal in origin. A point of interest in this case was the fact that the metastatic ophthalmia occurred on the opposite side to the operated ear, and hence the side on which the child lay in bed.

LAVAL UNIVERSITY, Montreal, has been separated from Laval University, Quebec City, and will henceforth be known as the University of Montreal.

TWO CASES OF ACUTE PERFORATED GASTRIC ULCER: OPERATION: RECOVERY.

BY

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THESE two cases are reported in order to illustrate once more the necessity of bringing such cases under treatment at the earliest possible moment if success is to be hoped for.

CASE I.

Pte. C. E., R.A.F., aged 49, was sent to hospital in an ambulance about 7 p.m. on December 20th, 1918.

He stated that before joining the army he had been an upholsterer. He had suffered from indigestion for years—that is, he had pain and tenderness in the epigastrium with occasional attacks of vomiting, and was always subject to "wind." He had been able to keep these symptoms more or less in check by dieting himself, until after he enlisted, when he had to have the food that was supplied to the troops. For two days before admission he had had rather more pain and had been sick once. On the day of admission he had had tea, consisting of tea and bread and jam, about 5 p.m.; shortly afterwards he was seized with sudden acute pain in the epigastrium and was sick.

He was a tall spare man, with very few teeth, and those he had were in a deplorable condition. The tongue was clean. He stated that his bowels had acted in the morning. Pulse 80; temperature 97.8°. He was very pale and wore a scared look. The pain was less severe and more generally distributed over the abdomen than when first seized. The epigastric region was distended. The rest of the abdomen was somewhat retracted but rigid. Tenderness was most marked a little to the right of the middle line midway between umbilicus and xiphoid cartilage. This area was tympanitic and there was complete absence of liver dullness. The patient was seen, at my request, by Major Brasher, R.A.M.C.(T.), who confirmed the diagnosis of perforated gastric ulcer.

He was prepared at once for operation and taken to the theatre, Major Brasher kindly administering the anaesthetic for me. An incision was made from just to the right of the middle line between the xiphoid cartilage and the umbilicus. When the parts were retracted, the liver held up, and the stomach pulled gently downwards, the perforation was found to be on the anterior surface of the stomach, close to the pyloric end and rather nearer the lesser curvature. Bubbles of gas were escaping, as well as fluid that looked like weak tea. The perforation was of fair size; there was very little induration around it. It was closed with fine silk, invaginated, and sewn over in the usual way. Not much fluid was seen in the abdomen, but what was there was mopped away and two large drainage tubes with wicks inserted; one drained the right kidney region, and the other was placed in the pelvic cavity through a separate incision in the middle line above the pubis. There was no recent peritonitis to be seen anywhere, nor were there any adhesions to be found pointing to previous peritonitis. He made a completely uninterrupted recovery. He was kept on sips of water for forty-eight hours, and given salines by the rectum. He had been on chicken diet for three weeks before leaving hospital, and was discharged from hospital on February 17th, 1919, stating that he had not felt so well for a very long time.

CASE II.

Pte. M. S., Royal Irish Rifles, aged 38, was sent into hospital at about 8.30 p.m. on December 31st, 1918, in an ambulance. He was examined by Captain E. J. Coombe, R.A.M.C.(S.R.), who diagnosed perforated gastric ulcer. He was sent into one of my wards and seen by Major Brasher, R.A.M.C.(T.), and myself, and the diagnosis confirmed.

The patient stated that he had been subject to indigestion for a very considerable time, and that it had been worse during the past week. He had been in his usual state up to about 6 p.m. on the day of admission, when he was seized with violent pain in the epigastrium and was sick. On arrival he was somewhat collapsed, very pale and cold, with subnormal temperature and pulse of 88. He had very few sound teeth, and was generally of poor physique. The bowels had acted in the morning. He stated that the pain was easier and had become more general over the abdomen. The lower part of the abdomen was flat, but not retracted. The upper part was full, and the liver dullness quite absent. The epigastrium was tender, but no one spot could be found.

He was prepared for immediate operation, and taken to the theatre, where Major Brasher gave the anaesthetic. An incision was made to the right of the middle line, and as soon as the peritoneum was opened gas and greenish stomach fluid escaped. The perforation in this case was much larger, and was situated at the pyloric end of the stomach on its anterior surface, rather closer to the greater curvature. The induration around was distinct. The perforation was closed in the usual way, and a tag of omentum stitched over the site of the perforation. As much of the fluid as could be found was mopped away, and two drainage tubes with gauze wicks were inserted—one through the operation wound into the right kidney region, and the other through a separate incision below the umbilicus.

to drain the pelvis. No adhesions were found of any moment, and there was no sign of commencing peritonitis.

This patient progressed very satisfactorily for about ten days, when he had an attack of influenza followed by right-sided pneumonia. He weathered this storm under Major Brasher's care. He left the hospital on February 27th, 1919, somewhat pulled down in general health, but with no sign of any abdominal trouble.

In neither of these cases was irrigation of the abdomen performed after the closure of the perforation; in early cases such as these I am of opinion that irrigation may possibly do more harm than good.

The happy result in both these cases I put down to the patients getting under surgical treatment so early, and to the excellent nursing they received from first to last.

My best thanks are due to the nurses for their skill and kindness, and to Lieut.-Colonel Henschley, D.S.O., R.A.M.C.(T.), Commanding Military Hospital, Fargo, for his permission for me to publish these notes.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

JAUNDICE IN INFLUENZA.

IN accounts of the recent influenza epidemics jaundice has been mentioned as a serious, and often terminal, symptom. Lieut.-Colonel E. C. Cooper Cole, in a recent number of the BRITISH MEDICAL JOURNAL, states that "epigastric pain, with some rigidity, was a frequent complaint, and jaundice of considerable degree was usually of bad omen, fairly marked hepatic degeneration and occasionally peri-hepatitis being found *post mortem*." Dr. W. H. Willcox, in his Lettsomian Lectures, mentions that it has been noted by others in a less severe form.

In my experience jaundice is a fairly common complication, and has not been of serious import; it has sometimes occurred as a relapse after the patient has recovered from the initial attack of influenza. Many patients complain of nausea, epigastric and hepatic heaviness and pain, and if the urine is examined bile pigments are found.

The following sequence occurred in the epidemic at the end of last year in three consecutive cases of mine, all of which made good recoveries:

Case 1.—Influenza, temperature 104°, congestion of bases of both lungs; constipation, nausea, epigastric pain; bile pigments in urine.

Case 2.—Influenza, temperature 102°, nausea and vomiting; epigastric pain; icterus, bile pigments in urine.

Case 3.—Influenza, temperature 104.2°; right pleurisy; nausea and epigastric pain; icterus, bile pigments in urine.

Chester.

BARBARA G. R. CRAWFORD.

A CASE OF ASPIRIN IDIOSYNCRASY.

C. H., male, aged 32, married, a patient in Brompton Hospital under the care of Dr. Batty Shaw, was given 10 grains of aspirin, in tablet form, at 2.45 p.m. on June 19th, for some minor neuralgic trouble. At 3.45 I was called and found the patient cyanosed and gasping for breath; although he made efforts to speak he was unable to do so. His hands and feet were cold and clammy. His pulse was good; the rate slightly increased. This condition lasted about twenty minutes.

About 5 p.m. his face, forehead and neck began to swell, and this oedema was so marked at 5.30 that the patient was unable to open his eyes. About this time an erythematous rash was visible over the face and upper extremities. His breathing became less laboured, and by 6 p.m. was practically normal. The rash and oedema gradually subsided, but traces of them were visible at the end of the third day. At 6 p.m. on June 19th he passed about a pint of urine. It was clear; specific gravity 1015. There was a trace of albumin, but no sugar.

On questioning the patient closely I found that three-quarters of an hour after the dose of aspirin he experienced a sensation of choking and intense irritation of the skin of the feet. He also informed me that two years ago a somewhat similar series of symptoms developed after the taking of a small dose of aspirin. Obviously the case is not one showing toxic effects of the aspirin, for the same aspirin is in common use in the wards and has never

during my service in the hospital for twelve months produced such effects in any other patient. Further, this particular patient has only twice in his life taken "aspirin," and on each occasion he has had the above severe symptoms.

I am indebted to Dr. Batty Shaw for permission to publish the notes of this case.

W. A. E. KARUNARATNE, M.B., B.S.

Brompton Hospital.

Reports of Societies.

NASAL HYGIENE.

AT a meeting of the London Association of the Medical Women's Federation, held on July 1st at 11, Chandos Street, the President, Lady BARRETT, in the chair, Dr. OCTAVIA LEWIN read a paper on nasal hygiene and national health, and showed several cases of children successfully treated for nasal obstruction and deafness without operation. She also showed a case of stenosis of the posterior nares following an operation for adenoids in a child who was a diphtheria carrier. Dr. Lewin emphasized the fact that many operations could be avoided by proper attention to the nose and breathing. Miss LOWRY, in a paper on the nose in relation to general diseases, referred to the importance of nasal obstruction and sinus suppuration in respiratory, digestive, and nervous diseases, and gave instances of mistakes in diagnosis and treatment of such cases. She mentioned some of the superstitions held by patients as to the connexion between gynaecological conditions and the nose and throat, and said that it was to be regretted that similar statements were still made in textbooks on gynaecology, and apparently copied into papers and books on the nose and throat.

Reviews.

BELGIAN SURGERY.

THE first fasciculus of the second volume of the reports of the *Ambulance de "l'Océan,"*¹ under the general editorship of Dr. DEPAGE, fully maintains the high level set in the first issue. The matter is, of course, largely "war" material, and for much of it there is happily little immediate application, but it serves to show how great a measure of unanimity of opinion and practice amongst Entente medical men was attained before the armistice. The editor describes the operation of excision of wounds with moderation and common sense; he discusses the proper limits of primary and delayed suture. With Dr. Delrez he describes the treatment of wounds of the foot, giving incidentally an account of a method of flap transplantation *en cascade*, that is to say, gliding one end to a new position, and when that is well "alive," detaching the original pedicle, and reimplanting still lower, and so on.

The authors do not seem to experience the same trouble as other surgeons with ineradicable sepsis of the tarsus, possibly because they excise large portions with reconstruction of "dumped" feet, which, however, do not—as far as may be judged from pictures—promise very well for the artificial limb makers' purposes. Delrez himself deals with joints, and speaks in high terms of the early movement of infected joints, a novel method which obtained equally good results in the hands of some of our own surgeons. Dr. Neuman writes of wounds of the abdomen, with statistical results comparable to those of the British and French armies. Dr. Janssen describes his method of cranioplasty; he employs tibial grafts, periosteum to dura. His methods have their greatest employment in the relief of headache, vertigo, hypermotivity, epilepsy, and psychic disturbances, with cosmetic improvement. Dr. Harven makes an interesting contribution to the histology, physiological and pathological, of wound tissues. Dr. Govaerts describes a new method of ascertaining the bacterial state of a whole wound surface pre-

¹ *Ambulance de "l'Océan," la Panne.* Published under the direction of Dr. A. Depage, Tome II, Fasc. I, July, 1918. Paris: Masson et Cie.; London: H. K. Lewis, 1918. (Roy. 8vo, pp. 376; illustrated. Single copies, 14s. net. Annual subscription, 25s. post free.)