in disordered thermolysis without other change, the temperature might rise and remain high. But there was good ground for the belief that such non-pyrexial elevation of temperature was not in itself dangerous. Take, for example, the cases of aseptic operation, described by Volkmann and other surgeons, in which a temperature of 104° or 105° was accompanied by no loss of appetite, no distress, no symptom such as could be called characteristically febrile.

Many of the current beliefs as to the beneficial effects, functional and textural, of mere high temperature were based on experiments in which animals were forcibly overheated. These experiments were examined critically, and in the light of fresh researches, such as those of Naunyn, and Welch of Baltimore, shown to be capable of other interpretation. With due precautions, such animals could be kept in comfort and without permanent damage for days or weeks, their rectal temperature being, on the average, 106° F. Danger did not arise till a much higher point was reached; and then the evidence proved that the overstrain on the thermal system broke down the regulating mechanism, and complete thermal dissolution or hyperpyrexia set in.

The phenomena of relapsing fever were adduced as bearing in the same direction. In this disease, the subjects of which were often weak and anemic, temperatures of 107°, enduring for five or six days, were common, and were tolerated well, as was shown by, among other things, the small mortality (4 or 5 per cent.).

The conclusion ultimately reached was: That high temperature in itself was not proven to be salutary, neither was it in itself the efficient cause of all the morbid phenomena commonly described as febrile.

ON RARE DISEASES AND EXCEPTIONAL SYMPTOMS.

By JONATHAN HUTCHINSON, F.R.C.S., F.R.S., LL.D.,
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(Continued from page 1112.)

XXXIII.—ON THE SIMULATION OF OBSTRUCTION OF THE BOWELS BY ATTACKS OF GALL-STONE COLIC.

At the Association Meeting at Brighton, Dr. Ord gave a valuable address on some of the rarer symptoms produced by gall-stones. The diagnosis of hepatic (or cystic) colic is of much interest for surgeons, on account of the frequency with which the passage of a gall-stone simulates abdominal obstruction. I am not thinking of cases of real obstruction by the impaction of a gall-stone in the bowel, but of cases in which constipation and vomiting are due to a stone of small size impacted in the neck of the gall-bladder or its duct. I can fully support Dr. Ord's statement that attacks of gall-stone are often not attended by jaundice. I well remember many years ago meeting two physicians, together with the family surgeon, at the bedside of a gentleman who was supposed to be the subject of acute internal strangulation. There had been much vomiting, and forty-eight hours constipation. The way in which the pain had begun, and the patient's distinct reference of it to the region of the gall-bladder, with other symptoms, made me think that it must be a case of gall-stone. On expressing that opinion I was met by the rejoinder that there was no jaundice. The discussion was vigorous, and the family surgeon, taking the matter up warmly, had the motions carefully strained, with the result that three days afterwards a gall-stone as big as a horse-bean came away. Dr. Ord states that gall-stones are often present, and may even pass into the bowel, without there ever having been present any of the symptoms usually supposed to indicate them. If by this statement is meant only the absence of severe attacks of colic with vomiting and jaundice, then I can quite agree with it. I believe, however, that almost always minor attacks of pain, more or less sudden, such as are often called "spasm of the stomach," have been present. It is difficult to accept the statement that gall-stones may leave their location and escape by the bowel, there having been from first to last no symptoms of their presence. Hepatic colic is a far more common event than it is generally supposed to be, and many cases escape recognition because there is a general belief that jaundice ought to be present.

We are indebted to Dr. Ord for showing that this symptom may be wholly absent, even in severe cases and where the stone is large. With Dr. Ord's second proposition I can also fully agree. It is

that gall-stones, far too big to pass through the common duct, and which can, therefore, only get into the bowel by the formation of an ulcer of communication, do escape by that process without producing any very severe symptoms, either general or local.

I have several times known stones of very large size, big enough to quite plug the bowel for a time, to be got rid of by patients who had never been seriously ill. I do not say that they had never had tenderness over the part, nor that slight paroxysms had been wholly absent, but these had been so unimportant as to attract but little notice. In cases in which in reference to proposed operative measures it is necessary for the surgeon to diagnose as to gall-stones, it is of great importance to take cognisance of these slight attacks of colic. They may have been very transitory, but if they have been present they count for much in helping us to an opinion.

The use of anesthetics to full insensibility, kept up for a long time, and both preceded and followed by opiates, is, I suppose, the best treatment for all forms of gall-stone colic. It does not matter whether the stone is impacted in the common duct or in the bowel, we can scarcely do better than prevent spasm and favour relaxation of the parts concerned. By these measures I have, in several cases in which I had been called in with a view to operation, succeeded in quite removing symptoms which were very urgent.

It is of interest to know that attacks referred to stomach disorder from indigestible food are often really hepatic colic due to the presence of gall-stones. By the patient I have no doubt that this mistake is constantly made, and the surgeon must be cautious of taking the lead suggested. A gentleman was liable to attacks of pain which he referred exactly to the site of the gall-bladder, but which, he said, were produced by certain articles of food, such as carrots, broad beans, etc. The pain, he said, was often terribly severe, and might last a whole night, and even on one recent occasion for three days. It always left a sense of soreness over the whole region. He had never had jaundice. I told him that, in spite of his impressions as to the influence of food, I had no doubt that his attacks were due to gall-stones. He corroborated my diagnosis by at once telling me that his father and a sister were known to have voided them.

XXXIV.—ON THE ACUTE BRONCHOCELE OF ADOLESCENTS. AN AUNT AND NEPHEW AFFECTED AT CORRESPONDING AGES. COMPLETE RECOVERY OF THE FORMER.

There is a variety of bronchocele which, as far as my experience has gone, is almost peculiar to adolescents, which increases very rapidly, and is sometimes attended by urgent symptoms of tracheal compression. It is worth study as a form of constitutional disease, and the following narrative affords two good examples of it.

M. P., aged 18, was brought to me by Dr. Greenwood, of Dalston, for a very large, soft bronchocele which embraced the whole front of his neck and was already causing some difficulty of breathing. He did not know how long it had existed, but thought that it had been there only a few weeks. He was a tall lad, of rather dark complexion. His pulse was soft, and his hands chilly and rather dusky. He considered himself in good health, and there were no indications of Graves's disease excepting a certain degree of irritability of the heart. I inquired carefully as to family history, and was told that the disease had never occurred in the family before, and that none of his predecessors had lived in Derbyshire. A month later M. P.'s mother came with him, and I then got a fresh fact as to the family history. She said that her eldest sister had, when about our patient's age, suffered from an exactly similar affection to that which her son now had. This sister was now 60 years of age, very thin, but in tolerably good health. When adolescent she was much out of health, and was for two years under treatment for "Derbyshire neck." The bronchocele at length entirely disappeared, and at the present time her neck is thin rather than otherwise. No other relative was known to have had bronchocele, but my patient's mother, who was a very intelligent woman, said that it was the rule with all her relatives to be delicate from the ages of 16 to 25; several had been seriously ill, and two or three had died (of phthisis?). Those who survived became stronger as years advanced.

XXXV.—OPHTHALMOPLÉGIA EXTERNA WITHOUT ASSIGNABLE CAUSE.

The late Dr. Moxon was kind enough to send to me a very in-

interesting example of ophthalmoplegia externa, for which no cause could be assigned. The patient was a florid, healthy-looking lady, aged 33. Her features, teeth, and complexion were as far as possible removed from those suggestive of inherited syphilis. She was single, and there was not the slightest reason for suspecting that she had ever suffered from the acquired disease. Her father came with her, and in answer to a direct question assured me that he had never had any suspicious disease. He had a large, healthy family.

Miss —'s symptoms were remarkable for their symmetry and evenness. Both eyelids drooped so as to almost cover the pupils. She could move both eyeballs a very little in all directions and almost equally in all. It was exceedingly little. I could not detect any squint, and she had seldom or never been troubled with diplopia. A very remarkable point was that her pupils acted fairly well, and that she could still use her accommodation. Her pupils were of normal size and equal. As she was myopic there was a fallacy as to the accommodation, but with glasses which enabled her to see well in the distance she could still see to read. I had not time to test this in detail. She was accustomed to read a good deal, and was able to see downwards well in spite of the drooping lids. Two photographs produced showed that the ptosis was commencing three years ago, and that it was quite absent ten years ago. She believed that from girlhood she had been accustomed to turn her head when others would turn their eyes. It had been, she said, a matter of remark by her companions. Her father did not, however, know anything of this.

Miss — had no other symptoms of nervous disorder. Dr. Moxon informed me that her knee-jump was good. She had never had any lightning pains. The only ailment which she would confess to was occasional very severe headaches. To these she had been liable from childhood, and was sometimes laid up for a day by them.

I do not think that I have ever seen a syphilitic case of ophthalmoplegia externa in which the symptoms were so regular. Almost always one or more of the ocular muscles escapes paralysis to a large extent.

(I know nothing as to the sequel of this case. I never saw one quite like it, and should be very glad to know the result if any of my readers can give the information.)

XXXVI.—DIPHTHERITIC PARALYSIS OF ACCOMMODATION AFTER A SORE THROAT SO SLIGHT THAT IT HAD BEEN FORGOTTEN.

I believe that it is well known that paralysis of the muscle of accommodation, such as is usually described as "diphtheritic," may occur after very slight forms of sore throat. I have myself seen and recorded several such cases, in which the sore throat had been so slight and transitory that it had been forgotten, and one such is at present under my observation. A healthy-looking girl ten years old was brought to me on account of failure of sight, which I at once found to be paralysis of accommodation. I inquired as to the sore throat, and was told by her mother that the child had not been ill in any way. At the second visit, however, two facts were remembered which had been at first forgotten. One month before coming to me the child had been in company with a little boy who had been suffering from a bad sore throat, and some time ago had had diphtheria. Three weeks prior to this, however, the child herself, while staying at Sandown, had had a three days' sore throat; it had not been bad enough to necessitate medical advice. Such were the very trivial, but I have no doubt really important, facts. The child, under treatment, recovered perfectly in about three weeks, and had no other symptoms of paralysis. I cannot doubt that the failure of sight was of the nature of diphtheritic paralysis. Does the case prove that true diphtheria may occasionally be so slight as to be overlooked, and yet be efficient to the production of paralysis as a sequela? This is my own belief, and it seems to me to establish a very important fact with reference to the natural history of the disease. I believe that it is generally acknowledged that the severity of diphtheritic paralysis is not usually in ratio with the severity of the throat affection. I have never, however, myself seen general paralysis after a slight form of sore throat like that described above; but, on the other hand, I have seen many in which the eye only, or the eye and palate only, have been affected.

NOTES ON THREE YEARS' OVARIOTOMY WORK IN THE SAMARITAN FREE HOSPITAL: EIGHTY-TWO CASES WITHOUT A DEATH.

By GEORGE GRANVILLE BANTOCK, M.D., F.R.C.S.ED.,
Surgeon to the Samaritan Free Hospital.

ON March 21st, 1885, a widow, aged 56, the mother of seven children, was admitted under my care into the Samaritan Free Hospital. She was very thin, and had lost flesh rapidly of late. The abdomen was considerably distended; and this distension, added to some chronic bronchitis, caused difficulty of breathing and a troublesome cough. On the evening of admission the temperature was 99.4°, and was probably due to the mechanical irritation of the numerous adhesions which were subsequently found. With the view of relieving the breathing and cough, and of giving the patient some sleep by enabling her to lie down, I removed twelve pints and a half of a dark-coloured fluid by aspiration on the 23rd, and on April 1st I performed double ovariectomy, removing a tumour of the right ovary weighing thirteen pounds, and the left ovary, which was as large as a hen's egg. The pedicle was twisted until its vessels were strangulated, and subsequent or consequent hæmorrhage into the large cyst accounted for the dark colour of its contents. There were very extensive adhesions involving the parietes wherever the tumour came into contact with them, the omentum, uterus, and other pelvic structures, and about two feet of small intestine with its mesentery. About twenty ligatures were applied to bleeding points in omentum, mesentery, intestine, back of uterus, and in the parietes, where the bleeding points were so numerous, and the difficulty of applying ligatures or even pressure forceps so great, that I was induced to try the thermo-cautery of Paquelin, but without success. Finally, I washed out the peritoneal cavity with warm water, inserted a drainage-tube, and closed the wound. After the operation there was an aggravation of the bronchial symptoms and cough, and the patient died on the sixth day. *Post-mortem* examination revealed some peritonitis and extensive pulmonary congestion. I may remark that the operation lasted an hour and a half, and it will be gathered from the foregoing that the case was altogether a desperate one and gave little hope of a successful result.

From the middle of April, 1885, to the corresponding date this year I have performed 82 ovariectomies in the Samaritan Free Hospital, and all the patients have recovered.

On the whole the cases have been of a rather severe character, as the following details will show. Thus, in more than one-half—47—there were adhesions properly so called; in small proportion the adhesions involved the parietes only or omentum only; in large proportion both these structures were involved at the same time; in considerable number the tumour was adherent to the pelvic organs to a varying extent, and in a few instances to the intestines also. In one of parietal adhesions only the patient had just completed seven months of her first pregnancy, in the course of which she had been twice tapped. (This case was published in the JOURNAL, February 11th, 1888, p. 296.)

Excluding all these cases of adhesions proper, there were 6 cases in which there was no pedicle, and the tumour had to be enucleated. In one of these the cyst was in a state of suppuration; in another nine stout ligatures were required to arrest the bleeding from the torn structures left after removal of a tumour involving the left broad ligament and left side of the uterus, and in the last case of this kind operated upon, the last but one of this series, the operation was so severe that when the patient was put into bed, the pulse could scarcely be counted at the wrist. In yet another the tumour apparently involved both ovaries, and when the enucleation was completed the uterus was so bereft of support, in addition to being extensively injured, that I was compelled to remove it also at the level of the internal os in my usual way.

Thus, of the 82 cases there were adhesions or their equivalent in about two-thirds or 54, leaving 28 in which there were no adhesions and there was a pedicle capable of being treated by ligatures. In one of these 28 cases there was a serious complication in the form of a large umbilical hernia, measuring over 4 inches across. After removing an ovarian tumour of ten pounds (right side), I slit open the hernial sac by continuing the abdominal incision, applied several ligatures to, divided the adherent omen-

PRESENTATION.—Dr. Walter Kent has been presented with a valuable medical chest and an illuminated address by his friends and patients, on leaving Biddulph, Staffordshire, for America.