state, and died in a few minutes. At the post-mortem there was found to be encephaloid cystic disease of the ovary and old calcareous cavities in both lungs. The heart's walls were very soft, and the muscle markedly fatty throughout.

CASE 4.—Patient aged forty-four. Married twenty years; never pregnant. Had noticed her abdomen growing in girth for some time, and had had marked distention for the last six months, and severe pain for at least nine months. The diagnosis was clear, and the ordinary abdominal incision made. It was then found that the cyst was so embedded in the pelvic tissues and adherent to the intestines that its complete removal was quite impossible. It was therefore tapped, and its edges stitched to the abdominal wall and drained. She progressed slowly but well, and quite recovered from the operation. Five weeks afterwards she had an attack of pleurisy, and died rather suddenly on the fortieth day after the operation. The heart was found to be the seat of marked fatty infiltration, and in parts there was distinct fatty degeneration of the muscular fibres.

CASE 5.—Patient aged thirty-seven. Had been married for twenty years; no children, but one abortion. Had been suffering from marked abdominal swelling for the last two years. The abdomen was greatly distended; the impulse of the heart was at a point between the third and fourth ribs, with heaving but feeble action, and its sounds most markedly dull in tone. The dyspnœa was extreme, and demanded relief, but her general health was so bad that it precluded ovariotomy; she was therefore tapped, and seemed relieved for a short time, but died very suddenly on the third day afterwards. A double multilocular ovarian cyst was found completely bound down by extensive and firm adhesions. The cardiac muscle was markedly degenerated and infiltrated with fat-cells.

CASE 6.—Patient aged thirty-seven; single. Had noticed considerable and increasing swelling of abdomen for more than twelve months. The case was a straightforward one. Ovariotomy was performed easily and quickly. The woman seemed much relieved and better; but on the eighth and ninth days fainted several times, and suddenly died in the last of these attacks. The wall of the right ventricle was found to be very thin—barely the thickness of cartridge-paper, in fact—and in a state of extreme fatty degeneration. The muscle of the left side was, to a less degree, also involved in the same change, and showed a typical appearance of fatty infiltration.

Case 7.—Patient aged forty-three. Married eighteen years; two children and two abortions. The abdomen had been markedly distended for at least eighteen months. Ovariotomy was performed with some difficulty, owing to the tumour being multilocular and having many adhesions. She recovered completely, and was about to leave the hospital, when on the twenty-second day after the operation on rising from bed she fell back, and was found to be dead. The cardiac muscle was in a general state of advanced fatty degeneration.

Case 8.—Patient aged fifty-three. Married; one child. The abdomen had been considerably swollen for at least five months. Ovariotomy was performed, followed by an extreme amount of shock and very slow reaction from the anæsthetic. The pulse gradually increased in frequency, and she died rather suddenly on the third day after the operation. The right ventricle wall was found to be very thin, and the heart muscle generally very fatty.

CASE 9.—Patient aged forty; single. Marked swelling of the abdomen had existed for two years. The diagnosis was rather obscure. An exploratory incision was made, which revealed a malignant cystic growth of the ovary, with secondary disease in the omentum. Nothing further was done. She recovered completely from the operation, but sixteen days afterwards died rather suddenly. The heart's muscle was in a state of marked fatty degeneration and infiltration, the right ventricle being very small and thin-walled.

CASE 10.—Patient aged thirty-eight. Married eleven years; never pregnant. The swelling in the abdomen had been noticed for fourteen months. Ovariotomy was performed. The patient went on very well to the fifth day after the operation, and then sank rapidly, dying in a few hours. The cardiac muscle was found to be the subject of the fatty change, though not to an extreme degree.

CASE 11.—Patient aged fifty-six. Married thirty years; four children and one miscarriage. The abdominal swelling had been very marked for more than six years. An exploratory incision was made, and an ovarian cyst with most extensive adhesions was found and tapped. The patient showed signs of faintness on being raised, and finally died suddenly seven days after the operation. The cardiac muscle was here found to be universally degenerated, in parts to an extreme degree.

CASE 12.—Patient aged thirty-five. Married nine years; three children. The abdominal swelling had been noticed for the last seven months. Ovariotomy was performed. The patient never thoroughly rallied from the anæsthetic, became semi-comatose, and died on the second day. The walls of the right ventricle and auricle were very thin, and their muscle somewhat degenerated and very markedly infiltrated with fat-cells. No marked degenerative change, but some amount of fatty infiltration was found in the muscle of the left heart.

CASE 13.—This was, curiously, like the preceding one. The patient was thirty-two years of age; had been married eight years, and had had one miscarriage, but no children. The abdominal swelling had been great for twelve months. Ovariotomy was performed, but the patient gradually sank, the pulse becoming more and more rapid. She died on the seventh day. Here, again, the right ventricle was almost alone affected by the degenerative change, but there was considerable fatty infiltration of the cardiac muscle on the left side.

The last two cases, taken together, are very instructive. The average age was 33·5 years; the average duration of the swelling about ten months; that is to say, both the patients' ages and the length of their illness were considerably less than those of any other case narrated, and in these two the degeneration was not only less, but was also more localised than in any of the others.

CASE 14.—Patient aged thirty-seven; single. Swelling noticed for thirteen months. Ovariotomy was performed. Patient never rallied, and died the next day. The right ventricle was very thin. The muscle generally was somewhat degenerated.

CASE 15.—Patient aged sixty-five. Married thirty-two years; had had three children. Abdominal enlargement had been observed for five years. Ovariotomy was performed. She rallied slowly and badly from the operation, and died suddenly the next day. The cardiac muscle of both sides was most markedly degenerated, more so even than in Case 11; and these two cases, it is noteworthy, are the two oldest of the series, their average age being 60·5 years, and the average duration of their illness five years and a half; that is to say, these two patients, the oldest in age and the longest in suffering, presented the most marked examples of the degenerative change.

CASE 16.—Patient aged fifty; single. The swelling of the abdomen had been noticed for seven months. The general health did not allow of operative interference. She died suddenly, and the necropsy revealed cystic carcinomatous disease of the ovary and marked fatty degeneration of the cardiac muscle.

(To be concluded.)

NOTES ON THE

PRACTICAL TREATMENT OF SYPHILIS, CHANCROIDS, GONORRHŒA, AND GLEET.

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IN two former papers published in THE LANCET within the last few years I gave notes of some cases of sloughing sores which had occurred in hospital and private practice, and the results of the treatment of orchitis as practised in the Lock Hospital for many years past, being the mode suggested by Mr. Furneaux Jordan, of Birmingham, in 1869. In this paper I purpose giving briefly some notes on the treatment, general and local, of syphilis, chancroids, gonorrhœa, and gleet. While it is somewhat difficult to write or suggest anything original on so well worn a subject, I am not without hopes that some new and useful hints may be found. An experience of twelve years at the Liverpool Lock Hospital, and of five years at the Seamen's Dispensary, gave me abundant opportunities of practically studying these

complaints, and of trying the many various remedies which have been from time to time suggested. In private practice one has opportunities of seeing these cases at an earlier period than in hospital or dispensary practice, and some of the most severe and even fatal cases of syphilis have been in private practice.

Treatment of Chancres and Chancroids by Iodoform.—The value of iodoform as a local remedy is generally acknowledged, the difficulty in its use being its very disagreeable and penetrating odour. The tonquin bean, while to a certain extent remedying this, has itself so strong and peculiar an odour as to attract almost as much notice as that it is intended to conceal. I am indebted to a local chemist for two very useful hints. One is to mix a few grains of very finely powdered coffee with the also finely powdered iodoform. This will be found to act as a most perfect and pleasant deodoriser; it may be kept for use in a stoppered bottle, or a perforated box like a pepper-box. The other hint is that a very few drops of ol. rosmarini, rubbed up with the ung. iodof. (B.P.), will effectually disguise the iodoform smell. The proportion is about five drops of the oil to half an ounce of the ointment. I have some by me which was made several months ago, and the only odour is that of rosemary, somewhat faint.

Local Mercurial Applications.—In addition to the old black wash, which still holds its own as a favourite application, especially for chancres, I find the blue ointment diluted with an equal, double, or treble quantity of benzoated lard a very useful application, especially when the sore is of considerable extent. In these cases the local application of the ointment will often suffice to afford constitutional treatment without any internal administration of mercury. Where there is much irritation, a powder consisting of equal parts of grey powder and oxide of zinc, each rubbed into a very fine powder, will be found an excellent application, sometimes healing a large angry-looking sore in a very short time. I seldom find it necessary to apply the strong escharotics often recommended in text-books.

General Mercurial Treatment.—When I was first appointed to the Lock Hospital in 1875, I found that the practice for many years past had been to give two grains of grey powder with three grains of Dover's powder in the form of powder, twice a day. Latterly it was given in pills made up with confection of roses. As a general rule, I now order two grains each of mercury and chalk and Dover's powder, and a sufficient quantity of extract of hyoscyamus. The reason for giving the latter is that it makes a better-shaped pill than the conserve of roses, or almost any other extract. When patients complain that the pills cause griping I change them for one with three grains of blue pill and a quarter of a grain of opium. I generally find that these will suffice. I may note that they can be silvered or varnished.

Mercurial Inunction.—That this is the most effectual of all modes of administering mercury, all who have had experience will admit. But it is somewhat remarkable to observe the different modes of using it given by different authors. Thus, one recommends that the ointment be rubbed in in the morning after breakfast; another that it should be done shortly before going to bed; one prefers the naked hand, another prefers gloves; one prefers the mercurial ointment, another the oleate of mercury; and so on *ad infinitum*. I have found the results much more satisfactory in hospital than in private practice, and in cases where there had been much neglect, and the induration was very marked, the benefits were very gratifying. I have found a modified form of inunction very useful in many cases, and have seen no mention of it in any of the text-books. It is applicable in most cases of primary ulcers, especially in cases of phimosis with well-marked induration. My plan has been to wrap a piece of lint, on which about a drachm of the strong mercurial ointment has been spread, round the penis near the abdomen, and to change this every night and morning. With an intelligent patient, and in suitable cases, it acts most satisfactorily, reducing the induration and the phimosis in a very short time. Sometimes I use the ointment diluted with an equal or double part of benzoated lard. It is somewhat remarkable that the ointment does not appear to irritate the skin of the penis so much as it does that of other parts of the body, and I have never had to discontinue it for this cause. What suggested itself to me was the plan adopted by the late Sir Benjamin Brodie for the mercurial treatment of infants, by wrapping a flannel bandage smeared with blue ointment round the arm or thigh, and renewing it once or twice daily.

Syphilitic Eruptions.—In private practice it is very desirable to effect as speedy a cure as possible of the tell-tale eruptions on the face, wrists, neck, and other visible surfaces, since their probably syphilitic character may be guessed by friends, more especially those who have themselves gone through the same ordeal. In the Lock Hospital there was an ointment used for the erythematous, papular, and scaly eruptions, which, on account of its rapidly curative effects, used to be called by the patients "the magic cream." Its composition was as follows: one part of ammoniate of mercury and three parts of oxide of zinc, mixed and rubbed into a fine powder, with sufficient glycerine and lard to make a stiff cream. I have been told that a few drops of olive oil facilitate the mixture of all these. It is really astonishing how a few applications of this will make a very perceptible rash disappear in a few days. A ready method of preparing the above is by mixing one part of ammoniated mercury ointment with three parts of zinc ointment, each being fresh, and adding a little glycerine.

Mercurial Vapour Baths.—The value of these as an alternative to other modes of mercurial treatment, or even in preference to them in some cases, is generally admitted. I have found them especially useful in some of the more obstinate forms of secondary syphilitic eruptions, especially those of a scaly character. In the Lock Hospital there were vapour baths in both the male and female wards, calomel being the mercurial used; and these baths were in frequent use, the patients taking to them very kindly. In private practice I have often ordered them with benefit, but I find much reluctance on the part of patients to use them at home for reasons that must be obvious; and there seems to me some risk in patients going to and from public baths, especially in cold weather.

English and Continental Treatment.—The treatment of venereal diseases, and more particularly syphilis, is, more than that of any other disease in this country, carried out under difficulties. Patients expect to be treated and cured under circumstances most unfavourable both to themselves and their medical attendants. In many cases where rest at home and cessation of all work is all but absolutely necessary, it is out of the question. The sympathy, kindness, and care of relatives and friends cannot be had; everything has to be done in secret and on the sly. For those who can afford to leave home and pursue their treatment at Aix-la-Chapelle or elsewhere the case is easy enough. But there are many patients who must remain and be treated in this country. Is their cure any less complete because they have never had the advantage of Aix-la-Chapelle treatment? I fail to see that it is, and in this matter I think English surgeons may speak feelingly and with reasonable grounds for complaint. Let me give one out of many an illustrative case. A young gentleman was sent to me by another practitioner who declined the treatment of such cases. The patient was suffering from a scaly rash on his face, which was very suggestive of syphilis, but was limited to the face and was irritable; there was no history of syphilis or any other indications of that disease. I treated him, and with benefit, but his father insisted on his going to Paris, as the only place where the disease could be properly cured! It seems to me that in this way much injustice is done to practitioners in this country, who have quite as good opportunities of studying syphilis and allied diseases as their continental brethren. That the benefits of a visit to Aix-la-Chapelle may be and are very great must be freely admitted. But when the change of air and scene, the freedom from daily work, and the rest, are all duly discounted, the mercurial treatment which remains might be equally well followed out in England.

Ulcerated Throat and Tongue.—I have great faith in the chlorate of potash as a local application for these very troublesome forms of syphilis, and in obstinate cases the nitrate of silver or perchloride of mercury; the former solid or in strong solution, the latter in solution, the strength being from two to four grains in eight ounces of water. My colleague, Dr. Bernard, first suggested iodoform combined with starch, in equal proportions, blown on to the affected surface with an insufflator. I have found this a most excellent application in several cases very incurable by ordinary treatment. Patients bear it very well, and do not complain of any disagreeable effects. Where there is much fetor, chlorinate of soda in the proportion of half an ounce of the liquor to eight ounces of water makes an excellent gargle.

Administration of Iodide of Potassium.—In the Lock Hospital we had frequently very severe forms of tertiary syphilis. Married women especially suffered severely from the remote effects of having been infected by their husbands; having also, partly from ignorance and partly from neglect, been improperly treated at first; and the disease, besides being thus allowed to assume formidable proportions, had been also aggravated by poverty and other unfavourable surroundings. Iodide of potassium is too valuable a remedy to be withheld, but it has to be administered very cautiously. We found that the addition of acetate of potash, in doses of fifteen grains, enabled the iodide to be borne much better than by itself. In some cases we have given doses containing as much as sixty grains; but generally from ten to twenty or thirty grains, twice or thrice daily, were enough. Another mode of administration was to give alternate doses of the iodide with iodide of iron; this was found very serviceable in debilitated patients. It is remarkable that the large doses were not followed by coryza, as the smaller doses, such as from three to five grains, invariably were.

Gonorrhœa and Gleet: Specifics.—When I was a student at the Lock Hospital nearly thirty years ago, the usual treatment of gonorrhœa was to commence with an antacid mixture: liq. potassæ., two drachms; tinct. hyoscyam., two drachms; spirit. æth. nit., a drachm and a half; aq. camph., eight ounces; an eighth part to be taken three or four times a day. This was followed by the copaiba paste, made as follows: pulv. cubeb, an ounce and a half; bals. copaib., half an ounce; ext. hyoscyam., and camph., of each half a drachm; theriacæ, q.s. The dose was a piece the size of a nut (filbert) three or four times a day. I have found that this treatment holds its own up to the present day, and in spite of all the various additional modes which have been suggested since. I have seldom found it disagree with patients, and even then a second trial with a smaller dose was more successful. On the other hand, I have been much disappointed with the oil of sandal wood, both as to its efficacy in reducing the inflammation and discharge, and also in its nauseating effects upon patients, even when administered in capsules. I have given every preparation of this oil a fair trial, and my experience is that the old copaiba and cubebs paste is the best specific for the acute stage of gonorrhœa (all the other circumstances being favourable to its administration), and in my hands it has also been found very useful in obstinate cases of gleet.

Injections.—Chloride of zinc is the salt which I have found most useful for injections, beginning with a quarter of a grain to the ounce, and increasing this, if necessary, to half a grain; I never use it stronger than this. Occasionally I change it for the sulpho-carbolate of zinc, two grains to the ounce. The addition of a small quantity of tincture of iodine to the chloride seems to increase its effect. It is, I find, necessary to give the most minute directions to patients as to the manner in which injections should be used, as otherwise they will only irritate the bladder and do more harm than good. I prefer a ball syringe, capable of holding half an ounce, with a leather nozzle; if the patient is directed to hold the penis close to the abdomen with the first finger and thumb of the left hand so as to prevent the injection going past that point, and to syringe gently with the right hand, this will obviate any tendency to irritation of the bladder. Used every four hours, the chloride will reduce a very copious discharge in the course of a few days to a comparatively trifling one, and lead, if persevered with, to a perfect cure. For the more obstinate cases of gleet I have found Easton's syrup very useful, following it with the passage of full-sized metallic instruments. In some very obstinate cases, as already mentioned, the copaiba paste will be found very serviceable.

Seven years ago I read a paper at our medical institution on the diagnosis between chancres and chancroids. The then president (Mr. Reginald Harrison) lamented that I had quoted so much from other authors and given less of my own experience, seeing the valuable opportunities I had. I hope that this will serve as a sufficient apology if the preceding remarks appear egotistical. Nothing could be further from my wish than to appear so, and my object has been simply to give the results of my experience.

WOODHALL SPA, LINCOLNSHIRE.—In connexion with this Spa, situated between Boston and Lincoln, new mineral baths were formally opened on Tuesday last.

SMALL-POX IN MONTREAL: THE STORY OF AN EPIDEMIC.[1]

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PASSING recently through Montreal, during a short visit to Canada, I took the opportunity of obtaining from official sources and by personal inquiry some particulars of the terrible epidemic of small-pox which devastated that city towards the end of the year 1885; and as I am not aware that a full or detailed account of the same has been published in Europe, the facts here narrated may be not merely of interest, but of use in teaching a lesson and serving as a warning to some of our large urban communities, particularly to this our own borough of Leicester.

The population of Montreal, the commercial metropolis of Canada, was estimated in 1885 to be about 167,000; prior to that date no case of small-pox had been met with in the city for some years, the last death recorded being in 1881. Owing to a certain amount of opposition to vaccination in this city the compulsory laws which exist in Canada had for some years past not been put in force; and although public vaccination had been provided since 1876, very little pressure was brought to bear upon parents with respect to it, so that from simple neglect on the part of large numbers of the people, who were really not opposed to the operation, a considerable proportion of the children of Montreal were unvaccinated. On Feb. 28th, 1885, the municipal hospital having been empty for some time, and not ready to receive patients, a man, the conductor of a Pulman train from Chicago, where small-pox then existed, was admitted into the Hôtel Dieu (a large general hospital) suffering from some eruptive fever, very mild in character, and thought to be chicken-pox. He was discharged cured in three weeks, and there is not the possibility of doubt now that this was a mild attack of variola. Two days after his discharge a case of small-pox occurred amongst the servants of the hospital, and shortly afterwards other cases occurred amongst the inmates, and by the middle of April sixteen cases had broken out in this hospital. By this time the municipal hospital for infectious diseases had been prepared and got ready for the reception of patients, and it was determined about the middle of April to dismiss from the Hôtel Dieu all those patients whose condition rendered it possible to send them home in order to thoroughly disinfect and purify the now infected building. Even had the authorities desired, it is doubtful whether this step could have been altogether avoided, as the inmates of the institution were now becoming alarmed by the succession of cases occurring around them, several of which had proved fatal, and, besides, whilst the wards were occupied it was impossible to properly disinfect the building; it would, however, have been a wise precaution to have kept a strict watch on each of these discharged patients. The sequel proved this wholesale discharge to have been an unfortunate proceeding, for amongst the 200 patients thus sent out from the hospital and scattered all over the city numerous cases of small-pox arose, and thus became centres of infection, but until June the number known to the health authorities was not such as to cause much alarm. Seeing that no general system of notification of infectious diseases was at that time in force, doubtless many mild cases were unheard of and escaped observation. Early in June enormous crowds of people were brought together in the public streets by the procession of the "Fête Dieu," and again on the occasion of the funeral of the Roman Catholic Archbishop, and it is suspected that infected persons must at that time have mingled with the crowds, as soon after these events the cases rapidly increased in number, 46 deaths being reported in July and 239 in August. The public mind was now thoroughly aroused, business was beginning to be seriously affected, and the fear of death was laying hold of the people. By the authority vested in the Lieutenant-Governor by the Statutes of Canada increased powers were obtained by the Local Health Authority, increased hospital accommodation was rapidly provided, vaccination was vigorously enforced, and removal to hospital made compulsory when necessary. But by a section

[1] Read before the Leicester Medical Society in January, 1888.