

relief in this troublesome condition my object will have been achieved. In most of the cases an actual cure has resulted, but in a few of very long duration (including Case 7 among the foregoing) relief was obtained only so long as the drug was being taken. Nevertheless, cure will probably result with perseverance even in these.

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"RETURN" CASES OF SCARLET FEVER.

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ON reading the excellent paper entitled "Considerations in respect to 'Return' Cases of Scarlet Fever," by the late Mr. T. W. Thompson, recently published in THE LANCET,¹ it occurred to me that some precision of view might be derived from an examination of the records of a large city, and I have therefore examined the records of the Health Office and the reports of the sanitary inspectors with that object. These records concern facts which it would not be easy to overlook and reliance may therefore be placed on them. The conclusions which they suggest, at all events for the time, may be thus briefly stated.

The phenomenon of "return" cases is not an accident, but is due to the return of cases from the hospital. If we examine what happens at home at the period before the cases are discharged and in the corresponding periods after discharge this appears unmistakable. Thus in 1894, in homes to which patients had not been sent back, there occurred in the sixth week after the eruption appeared in the first case 5 cases, in the seventh week 2 cases, and in the eighth week 2 cases. If now we take the periods corresponding to the bulk of discharges we find that in the ten days 51-60 after the eruption in the first case there were 5 cases, in the ten days 61-70 9 cases, and in the ten days 71-80 again 5 cases. In 1895 there were in the sixth week of secondary cases before discharge 2 cases, in the seventh week 1 case, and in the eighth week none. After the return of patients home there were in the ten days 51-60 6 cases, in the ten days 61-70 10 cases, and in the ten days 71-80 10 cases. These figures appear to me quite conclusive as regards the phenomena not being accidental, and appear to supply a measure of how much accident can enter into them. Mr. T. W. Thompson said that these cases occur more frequently in the autumn. This would certainly seem to indicate a small amount of accident. There appears, in truth, to be some reason for thinking that a growth of the scarlatinal infective element occurs in the soil at that period, such as we have reason to believe takes place also in the case of diarrhoea and enteric fever, which would favour accidental occurrences.

We must not make too much of the possibility of these occurrences being due to the bringing forth of clothes which had been stowed away. Whether this may have been the case in the past or not there is no reason that I can ascertain for supposing that these occurrences are now so conditioned. There can, I think, be no reasonable doubt that they are due to infection from the discharged cases, and the question is, What is the nature of the influence which it exerts? Is it due to infection attaching to the discharged cases by virtue of their own remanent infectiveness? or is it due to some infectious property which has become attached to them at the hospital from which they have been discharged? We possess the means of answering this question also by a comparison of the cases which have occurred after discharge of patients from hospital and after the discharge of patients at home.

The following figures show for 1894 the number of cases in which the eruption occurred at consecutive days after the return of a case: after an interval of 1 day, 0; of 2 days, 1; 3 days, 3; 4 days, 4; 5 days, 2; 6 days, 0; 7 days, 1; 8 days, 2; 9 days, 1; 10 days, 2; 11 days, 1; 12 days, 0; 13 days, 1; 14 days, 0; 15 days, 1; and over 15 days, 5.

The corresponding figures for 1895 are: after an interval of 1 day, 0; of 2 days, 1; 3 days, 1; 4 days, 4; 5 days, 4; 6 days, 3; 7 days, 4; 8 days, 3; 9 days, 4; 10 days, 2;

11 days, 2; 12 days, 3; 13 days, 0; 14 days, 0; 15 days, 0; and over 15 days, 2.

No second cases occurred amongst those treated at home beyond an interval of six weeks in 1894. In 1895, after the removal of isolation at home, there occurred 5 cases. The interval after discharge was 14 days in 1 case and over 15 days in 4 cases.

Now the percentages of cases treated in hospital and at home were in 1894 66 and 34 and in 1895 71.3 and 28.7 respectively. Allowing for the different causes at work which would influence these figures, and which will be discussed briefly in my forthcoming annual report, and supposing, also, these figures to be continued, there can be but one conclusion—viz., that the influence is one acquired in the hospital and not peculiar to the discharged patient. When we further reflect on the possible influences which the hospital can exert, the one factor which strikes us as probable is the storing up of extraneous infection in the air passages. The nostrils especially must intercept large quantities of infective material in the manner which has been adopted for the interception and examination of bacteria in the air. The material will be in all probability discharged intermittently and thus will take effect at uncertain but not distant periods after the return of the first case. Supposing that this were the most probable explanation of these occurrences, the course most likely to diminish their number would be for some time to keep patients apparently ready for discharge in a separate discharging ward or convalescent hospital, disinfecting the nose and throat with an antiseptic spray, and producing as free discharge as possible from the nostrils. It may also be desirable to keep the skin oiled so as to diminish the infective matter circulating in the isolation hospital and also to encourage exercise out of doors so as to assist the action of the lungs. I do not say, however, that the above explanation exhausts the subject or that some of the "return" cases do not own a different origin, only that, so far as my figures go, the explanation just given appears best to fit the facts.

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A CASE OF AIR SUCTION AND ERUCTION,

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IN a recent communication¹ Dr. John Wyllie has described, under the title of "Gastric Flatulence," a class of cases in which various troublesome symptoms are produced by air-gulping or air-swallowing. As a rule the gastric disease is trifling and the affection is to be regarded as dependent on a habit acquired and developed by individuals of a more or less neurotic temperament. The mechanism by means of which they are able to swallow air either into the oesophagus or the stomach is fully described, and several illustrative cases are related which show that in the writer's experience the condition is by no means a rare one. The following case shows that when untreated the results to the patient of persistent air suction and eructation may be very serious, and that when treated correctly a cure may sometimes be easily and rapidly effected, as Dr. Wyllie has pointed out.

The patient was a man aged fifty-one years who consulted me in July, 1895. He had spent a good many years abroad, and in 1871 he began to suffer from gastric symptoms, pain, flatulence, and heartburn, the result, as he considered, of drinking very freely of iced water immediately after active exercise. These symptoms increased in severity until 1873, when he returned to this country feeling very weak and having lost considerably in weight. He tried various "cures" in England which reduced him still further, but he improved markedly during a visit to Scotland under the combined influence of exercise, fresh air, and a full diet. Since this illness he had never been as strong as formerly, but continued in fairly good health until eighteen months ago, when the symptoms of indigestion became more troublesome and they had steadily been getting worse since then. On the occasion of his first visit he complained of loss of flesh and great weakness, inability to sleep at

¹ THE LANCET, Nov. 23rd, 1895, pp. 1277 and 1295.

¹ Edinburgh Hospital Reports, 1895, vol. iii.

night, and of gastric discomfort as manifested by acidity and flatulence. He was unable to perform his work properly owing to the exhaustion which quickly followed any brain effort, and physical exercise he found most tiring. For the relief of the abdominal symptoms he had been practising the Swedish exercises introduced by Dr. Ling, and although some benefit had followed as regards the flatulence the chief result was simply to produce a feeling of great exhaustion. While his appetite was always good and there had never been any nausea or vomiting, each meal was usually followed by acidity and a feeling of discomfort at the ensiform cartilage and later by flatulence and headache. For two years he had not slept well, and at the present time he scarcely obtained more than two or three hours' sleep during the whole night—four hours he would consider a good night's rest. Soon after falling asleep a feeling of acidity and flatulence awoke him, he would be compelled to get up and walk about to dispel the wind, and the greater part of the night was spent in this occupation. His appearance was that of a man who had suffered from prolonged illness, the face being drawn and haggard and the body generally emaciated. The tongue was clean and of good colour and the bowels were fairly regular. On examination the abdomen was found to be prominent and the superficial veins were very well marked. The distension was apparently due to gas in the stomach and intestines, as the percussion note was resonant all over and no abnormal thickening could be detected. The stomach note extended to the level of the umbilicus and slight splashing could be elicited. There was no history of discharges of flatus from the bowel, and rectal examination proved negative. The urine was free from albumin, the heart sounds were clear but rather weak, and there was no evidence of any local disease apart from that described. His diet was by no means injudicious, but it contained rather an excessive amount of starch and sugar, and so it was changed to a more nitrogenous one of meat, game, chicken, fish, peptonised cocoa, and a small amount of toast in order to diminish fermentative changes as much as possible. He was ordered a mixture containing strychnine and cascara and sent off to the seaside. On his return two months later he reported that owing to the excessive heat by day and the want of sleep from persistent flatulence by night he was weaker than before and had lost a few pounds in weight. The diet had suited him very well, and the acidity and gastric discomfort were much less, but he was tired after the slightest exertion and considerably depressed in spirits. Sir William Broadbent kindly saw him in consultation and suggested washing out the stomach, as he considered that it was persistently dilated, a condition which along with a high position of the pyloric orifice did not allow of its being thoroughly emptied. The patient's weight at this time was 9 st. 8 lb. On washing out the stomach about four hours after the last meal of the day the contents were found to consist of some partially digested, sour-smelling food and a considerable amount of mucus and flatus. No *sarcinæ ventriculi* were detected in the matter removed. This process was repeated daily and at the end of six days the patient expressed himself as feeling stronger and less easily tired during the day. He could sleep uninterruptedly for two or three hours, but then the feeling of acidity and flatulence awoke him, he got up, walked about, tapped the abdomen, and was thus able to get relief. The rest of the night was spent in short snatches of sleep and long intervals spent in trying to dispel the wind. As after the stomach was washed out the abdomen was perfectly flaccid and empty of flatus a tight flannel bandage was applied for the night so as to test the amount of distension which might occur. On the following day he stated that the flatulence had been as bad as before, but that he had not felt any discomfort from the bandage. I therefore became doubtful as to the gastric origin of this flatulence, and after again washing out the stomach asked him if he felt any wind. He replied in the affirmative and I then requested him to let me hear the wind. This he could not do lying down, so he sat up on the edge of the bed and proceeded to eructate in the following manner. Supporting himself with his hands on his thighs he threw the muscles of the neck into strong action and proceeded to make a forcible inspiration, raising the shoulders and depressing the larynx, a curious noise being produced at the same time in the back of his throat. This was followed almost immediately by a loud eructation, evidently expiratory in time, and presenting no

unusual characters. The patient was able to repeat this process as often as desired without any change in the condition of the abdomen being manifested. When his mouth was kept open by means of a rolled-up handkerchief placed between the molar teeth he was able to produce the same noisy eructations. It was the necessity for getting rid of the wind in this manner, he said, which kept him awake at night and prevented his lying down. I explained to him that he was producing these eructations by drawing air into his gullet and then belching it out, that there was really no wind in the stomach, and that consequently there was no necessity for keeping up this exhausting process. It was further suggested to him that when he awoke with a feeling of flatulence he should make no effort to bring up the wind, but simply turn on his side and go to sleep again. On the following day he reported that he had carried out the instructions and had had seven hours' sleep. He awoke several times, but at once checked the desire to bring up some wind and soon went to sleep again. During the day also he had been entirely free from flatulence, having checked himself at once whenever he felt the desire to obtain relief by eructation and having found that the desire soon passed off. The further progress of the case was uneventful save as regards the rapidity of the improvement. The washing out of the stomach was continued nightly for another week (making fourteen times in all), as the patient found relief from it. At the end of that time he weighed 10 st., a gain of six pounds. He expressed himself as feeling stronger, his appetite, digestion, and sleep were good, and he had no symptoms to complain of save a slight amount of acidity at times. At the end of the next four weeks his weight was 10 st. 8 lb., a total gain of one stone. His general health and appearance were good, he slept well, and awoke refreshed in the morning. There was nothing abnormal to be detected in the abdomen except that the stomach level extended lower than usual, and the symptoms of indigestion were of such a trifling nature as to cause him little disturbance. I asked him if he could let me hear the wind still, and he replied that he thought he could but would rather not try.

It is not difficult to trace the course of this illness as far as the real gastric symptoms were concerned. The effects of the initial attack of gastric catarrh had never entirely passed off, and the patient continued to suffer more or less from indigestion as characterised by flatulence, acidity, and a feeling of discomfort in the region of the ensiform cartilage. When first seen he was suffering from atonic dyspepsia, the symptoms of which were by no means severe, and were certainly not sufficient to explain the weakness and emaciation present. His tongue was unusually healthy-looking and the appetite was always good. Under dietetic and medicinal treatment there was a certain amount of improvement, which was increased by the employment of lavage of the stomach. The fermentation and abdominal distension were markedly reduced, the digestion seemed good, and yet the result was not at all satisfactory as regards the patient's general health. Nor is it difficult to trace the gradual development of those other symptoms to which I wish more particularly to direct attention, and which were the result of habit and not of disease. In the earlier stages of the illness there certainly was considerable distension of the stomach and intestines with air, and no doubt the ejection of this by the mouth had afforded relief. But after this real flatulence had subsided a certain amount of gastric discomfort occurred at times, which was regarded by the patient as due to wind in the stomach, and forcible efforts were made to expel it. When I drew his attention to the fact that he was really swallowing air violently he was naturally surprised and incredulous. The epigastric discomfort was worst at night, and consequently the efforts to relieve it were more continuous then, and finally became so persistent that the patient himself was convinced he would be well if only he could obtain sleep. The ease with which rest and sleep were at once secured by the simple process of putting an end to the air-sucking, and the very marked improvement which followed immediately, would seem to prove conclusively that the actual gastric disease was of no great severity.

The affection of which the above case is an illustration is barely referred to, as far as I know, in the standard works on medicine, and no satisfactory explanation is given as to how the flatus is produced. In the article previously mentioned Dr. Wyllie has classified the different forms of this affection

as follows: (1) air gulping, (2) true swallowing of air, and (3) sucking of air into the œsophagus or stomach. The above case would fall under the last category, and the mechanism by which the phenomena are produced is thus described. Under normal conditions the œsophagus is collapsed and under a more or less distinct *positive* pressure from the weight of the atmosphere, which acts upon it through the thickness of the structures of the neck. But if the neck muscles are strongly contracted, the larynx pulled forwards, the chest walls raised and expanded as in forced inspiration, and the glottis kept closed, there is formed a *negative* pressure in the œsophagus which allows of air being sucked in from the mouth, and this air can be at once expelled again with a loud eructation. This description corresponds exactly with the appearances in the above case, and I further observed, as has also been noted by Dr. Wyllie, that the neck muscles were prominent and powerful from repeated exercise in forced inspiratory movements.

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NOTES ON SOME CLINICALLY INTERESTING GYNÆCOLOGICAL CASES.¹

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THE notes of the following cases are recorded because of their clinical and pathological rather than their operative importance. In gynæcology, pain, local and general distress, reflex consequences, disturbances in ovulation, disorders of locomotion, powers of conception, and sexual appetites, vary considerably under what appear to be precisely similar pathological appearances, the consequence being that the management and treatment correctly adapted to one case have to be altered or modified in another. In the instance of drugs this need for the recognition of such clinical distinctions is further increased by the individual idiosyncrasy to their therapeutical and physiological effects. Indications for treatment are dependent upon the position in life, the surroundings, and social responsibilities of the patient. Nor is the operative department of this branch of surgery free from the influences which this diversity in type produces. An operation that on pathological grounds is both expedient and justifiable in the instance of one woman may be inexpedient and unjustifiable in another. It cannot be gainsaid that pain which is constant in its presence, severe or wearing-out in its nature, thus interfering with sleep, capacity for locomotion, mental activity, and the proper discharge of the digestive functions, is one of the foremost incentives to operative interference. Yet it is a matter of the most common clinical observation that pathological changes in the pelvic viscera frequently bear no proportion whatever to the amount of suffering attendant upon their presence. This is not only true of the organ primarily involved, but applies to those abnormal conditions so commonly associated in pelvic disease. In fact, the most important clinical symptoms are here usually dependent upon such associations. It is impossible to differentiate them and to isolate in the connecting links in the chain of morbid pelvic change the particular part in the uterus, tube, or ovary that starts the perverted nervous impulse. One fact is certain—namely, that the pain and distress caused by ovarian and tubo-ovarian disease have been repeatedly shown to have no correlation with the extent or character of the morbid changes present. This is exemplified by a case the notes of which I give below. In operative procedures on the pelvic viscera the ever-varying and complex conditions found on opening the abdomen admit practically of no fixed rule in dealing with them. The true surgical artist is he who, while conforming to broad and unalterable surgical principles, deals with each case and its complications as it presents itself to him at the time of operation, his resources being limited by no rigid theoretical consideration, and his hand not held by any authoritative *ipse dixit*. Through such freedom of action can we alone hope for progress, and in no part of the human body is such liberty demanded more than it is in the surgery of the female organs of generation. The following cases, viewed broadly, possess no features strikingly unusual in character, so far as

their operative surgery is concerned; but each affords in clinical diagnosis and treatment, and in its pathology, lessons that the most experienced gynæcologist may profit somewhat by, for is it not safe to assert that every time an abdomen is opened and the pelvis explored he is a poor student who does not derive some fresh instruction, manipulative or pathological, as the case may be?

I have to thank Mr. Bland Sutton for his invaluable coöperation in four of these somewhat obscure cases, and in another interesting case to which I refer (Case 5) Dr. Heywood Smith gave me his kind assistance.

CASE 1. Ovarian cyst, with extensive adhesions to the omentum and bowel, twisted pedicle, and sanguineous contents; removal and recovery.—(The following short notes are furnished by Dr. E. J. Midwinter, the medical attendant in the case.) “A married woman first noticed that there was a swelling on one side of her abdomen at Christmas, 1895, but attached no importance to it. She had had three children, aged at the time of the operation eleven years, six and a half years, and three years and ten months, and had one miscarriage between the first and second months of pregnancy in March, 1895. The last period was three weeks before the operation and was thought to be normal in colour and quantity. The periods previously to this had been normal—ever since the miscarriage in March, 1895. On February 22nd, 1896, the patient was suddenly (with no previous warning and without making any exertion) seized with acute pain radiating all over the abdomen, but which later was more localised in the right lumbar and iliac regions. She became pale, with white lips, faint sighing, and the pulse was scarcely perceptible. When she recovered from this condition the pain was severe. The temperature rose to 104° F. and she had indications of peritonitis. Her condition remained critical for three weeks, chiefly on account of the very feeble action of the heart. The pulse was weak and from 120 to 130. As the abdomen became less distended and painful a mass could be detected occupying the right side. This gave the sensation of possessing fluid contents.” When the patient saw me in April, 1896, I found a swelling occupying principally the right side of the abdomen and extending as high as the right lumbar region. This evidently contained fluid. On vaginal examination a swelling was detected in Douglas’ pouch and the uterus was enlarged, the cavity measuring some three inches and the fundus being felt well above the pubes. The cervix was soft and the os patulous, admitting the point of the index finger. The breasts were enlarged and sensitive, the nipples turgid, and there were dark areolæ studded with prominent follicles. The diagnosis lay between a possible tubal foetation with ruptured sac, or an ovarian cyst. The condition of the uterus and the state of the breasts, added to the suddenness of the symptoms referred to on Feb. 22nd, made me suspicious of the former, while the regularity of the catamenia, added to the fact that the symptoms might also be due to hæmorrhage into an ovarian cyst, pointed to the latter. She had a history of a previous affection of the kidneys, and the presence on and off of albuminuria. Operation was determined upon, and carried out in April. The tumour proved to be an ovarian cyst, reaching from the broad ligament to the right hypochondrium. The omentum was closely adherent to its upper third, and the small intestine was also attached to its anterior surface by adhesions as low as its pedicle. There were soft adhesions fixing the tumour posteriorly. The omentum and bowel were carefully detached. The pedicle was found rotated through three revolutions on its axis. The cyst was full of blood, partly fluid and partly coagulated. The pedicle was untwisted and secured, and the cyst removed, as was also that portion of omentum which had been adherent, and which was somewhat injured in its detachment. The patient made an uninterrupted recovery from the operation. About three weeks subsequently there were some symptoms of cystitis, but these rapidly subsided. The twisted pedicle, the adherent omentum and bowel, and the sanguineous contents of the cyst, accounted for the symptoms present on Feb. 22nd.

CASE 2. Ovaries and tubes removed for persistent oöphoralgia; cystic degeneration of the ovaries; abnormal Fallopian tubes with irregular ostia.—This case is recorded rather for its histological than its clinical features. The patient, a widow aged forty-nine years, had suffered for years from severe ovarian pain. She had been on and off seen by me, and had been under various treatment for chronic endometritis and cervical erosion. The uterus I curetted, and,

¹ A paper read before the British Gynæcological Society on July 9th, 1896.