charm (as I think it does) to maladies that come under our care, then asthma is interesting in this point too.

Now I have just said that asthma is an interesting example of the way in which therapeutics hangs and hinges on pathology. What, then, is the pathology of asthma—what is asthma? I think the best and shortest definition we can give of asthma, and one in which clearness and truth are not sacrificed to conciseness, is, that it is *the spasmodic stricture of an excretory duct*. We may look upon the lungs as a great pair of conglomerate glands constantly excreting carbonic acid gas and watery vapour; and this view involves no stretch either of anatomical or physiological truth: the structure of the lungs is, in all essential points, strictly that of a conglomerate gland, and the slight points of difference are merely dependent on the gaseous nature of the materials excreted. Of these materials, the bronchial tubes are the excretory duct or means of out-draught. The only other spasmodic strictures of excretory ducts that we are acquainted with are those of the gall-duct and urethra; but it is possible that all excretory ducts of considerable size may be the seat of spasmodic stricture, because they all of them contain organic muscle. In being, therefore, the seat of spasm, the bronchial tubes differ no more from the other excretory ducts than they do in possessing muscular walls. But in many and important respects asthma differs strikingly from all other spasmodic strictures whatever; in its suffering, its causes, its gravity, its treatment: and I think these differences have their explanation in the four following circumstances, in which the bronchial tubes are peculiar and unlike other excretory ducts:—

1. The vital and ceaseless function of which they are the seat.
2. The many and various sources of irritation to which their situation and function renders them obnoxious.
3. The delicate susceptibility to stimulus and proneness to contraction that their purposes in health render essential.
4. The number of organs and functions with which their wide-spread nervous connexions bring them into relation.

The mere enumeration of these peculiarities will at once suggest to the mind, without the necessity of illustrating them, the way in which they impart to bronchial stricture the peculiar features of asthma.

Asthma certainly does not suggest to one's mind the idea of spasmodic stricture; it suggests the idea of some severe lung-disease; and this superficial and *primâ facie* impression often makes the uninitiated consider asthma as an attack of inflammation of the lungs; indeed, I have known many cases in which medical men have made this very mistake. Nevertheless, asthma is, and is nothing more than spastic stricture of an excretory duct; that is its true pathological position, and its treatment is in entire accordance with this interpretation of its pathology.

The treatment of all diseases that are at once chronic and paroxysmal, aims at two objects—the relief of the paroxysm when it exists, and the destroying in the intervals of health that particular diseased tendency which calls the paroxysm into existence. And each of these objects—that is, the cure and prevention of the paroxysm—may be obtained in two ways: positively, by the application of certain remedial agents; negatively, by removing the exciting cause during the attack, and by preventing the exciting cause and removing the predisposing cause during the intervals. Now, asthma is one of these chronic paroxysmal diseases, and its treatment naturally divides itself into the treatment of the paroxysm and the treatment in the intervals of the paroxysms; and although the last is the real treatment of the disease, while the treatment of the paroxysm is merely the treatment of a symptom, yet in asthma the paroxysm is, potentially though not essentially, the disease itself, for it is its sole manifestation—the only source of suffering and the cause of those organic changes in the heart and lungs that asthma gives rise to, and that alone makes it formidable. The diseased tendency without the paroxysms, if we can conceive such a thing, might be disregarded—it would be a non-entity, for that which has no manifestations has no existence. If, then, we can in any degree retard, cut short, or mitigate the paroxysms, we in such degree abolish the disease, and diminish its suffering and its morbid tendency. But while I thus assert the great importance of the treatment of the asthmatic paroxysm, I must admit that the treatment of the disease in the intervals is the paramount part of its therapeutics; and I must confess also, that I think it has not had sufficient attention given to it, and that the efforts of the physician have been too exclusively directed to the mitigation of the sufferings of the paroxysms when they have arisen. We may, perhaps, see at once some explanation

and some excuse for this when we remember, on the one hand, how occult the essential diseased condition in asthma is, how often it eludes detection altogether, and how perfect apparently is the health of the asthmatic in the intervals; and, on the other, how urgent are the symptoms when they arise.

The remedies at our command for relieving an attack of asthma, as it is called; for cutting short, that is, or mitigating asthmatic dyspnoea, appear to me to be of five kinds.

- a. Those which remove the exciting cause.
- b. Those which diminish nervous irritability—sedatives.
- c. Those which directly lower nervous and muscular power—depressants, contra-stimulants.
- d. Those which exalt the activity of cerebro-spinal and voluntary nervous action, and proportionally diminish the organic and reflex—stimulants.
- e. Those which in some way or other diminish or annihilate the asthmatic tendency, whose *modus operandi* is obscure, which we may perhaps call *specifics*, but which may possibly act as stimulants or sedatives.

It will at once be seen that the three first classes of remedies—those which remove the exciting cause; those which diminish nervous irritability, sedatives; and those which directly lower nervous and muscular power, depressants, contra-stimulants—are exactly those to which we resort in the treatment of spasmodic stricture in general.

As an example of the first class of remedies—those which remove the exciting cause—I may mention emetics, which, by emptying the stomach of an undigested meal, for instance, may remove the immediate cause of the attack.

As an example of the second—*sedatives*, I may mention stramonium, which, by diminishing the irritability of the nervous system, destroys the efficiency of the irritant—renders the exciting cause impotent, that is, without removing it.

As an example of the third—*depressants*, I may mention tartar-emetic, or tobacco, which, by directly lowering nervous and muscular force, relax bronchial spasm just as they would a hernial strangulation.

As an example of the fourth—*stimulants*, I may mention strong coffee, and violent emotion, which, in obedience to the well known laws of relation between reflex and voluntary nervous action, appear to diminish the activity of the organic nerve and muscle concerned in bronchial spasm, in proportion as they exalt that of the brain and of the nerve and muscle of animal life in general.

As an example of the fifth—*specifics*, whose *modus operandi* is obscure, I may mention the airs of certain localities.

There are two ways in which the remedies for asthma may be exhibited and brought to bear on the nervous and muscular system of the air-passages: either *indirectly*, by being introduced into the blood, as in the ordinary way of swallowing, and gastric absorption; or absorption by the mucous membrane of the mouth, as in smoking: or, secondly, *directly*, by being applied to the bronchial tubes themselves, as by inhalation. This last has, I think, especial advantages; it has, indeed, all the advantages of local treatment—its concentration, manageableness and rapidity of result; the air-passages are peculiarly favourably placed for this topical medication, and the movements of respiration supply us with a natural and easy means of conveyance. I believe that much more is to be done in this way for the treatment of asthma than has yet been attempted. Of the remedies thus exhibited, that which has had the longest and fairest trial, and has obtained the greatest reputation, is one which will form the subject of a future communication—the inhalation of the fumes of burning nitre paper.

Montague-street, Russell-square, July, 1858.

REPORT OF A CASE

OF

OVARIAN DROPSY, WITH MALIGNANT DISEASE OF THE UTERUS.

By G. VERNON DRIVER, Esq., M.R.C.S.

JANE C—, widow, aged thirty-nine years, of a swarthy complexion, had been married many years, but had no family. She consulted me in the month of April, 1851, for swelling and pain in the left iliac region, attributed to a violent strain or “rick” caused in an attempt to save a caged bird from falling out of a window, and “has never been easy since.” She had

also enlargement of the mammae with milk, slight febrile disturbance, and an accelerated pulse. The catamenia were regular, and on examining per vaginam nothing abnormal was detected. Leeching and the usual course of treatment were carried out with little more than temporary relief, as fluid gradually formed, and in March, 1852, I tapped her for the first time, from which she recovered so well as to be up and stirring on the third day. Owing in some degree to that stern decree, "*necessitas non habet leges*," and her own instinctive feeling that gentle exercise was her best dose, it followed that the bowels were generally relieved on about the fourth day. I operated upon her thirty-four times, the quantity of fluid and the intervals between the tapplings varying, as will be seen by the subjoined table; and she recovered equally well from them all, with the exception of the last two, when symptoms of acute inflammation of the tumour, which had attained a considerable size and a central position, set in, with almost total obstruction of the bowels, and constant vomiting of a dark green bilious matter, from which time she gradually sank.

Date of Operations.	Quantity.
1852.—March 23rd	10 quarts.
June 24th	10 "
September 16th	6 "
December 13th	10 "
1853.—June 13th	14½ "
1854.—February 13th	18 "
May 11th	18 "
August 11th	21 "
October 23rd	13 "
1855.—January 9th	15½ "
March 6th	12 "
May 21st	13 "
July 11th	18 "
August 27th	17 "
October 4th	12 "
November 26th	13 "
1856.—January 14th	13 "
March 3rd	12 "
April 9th	13 "
May 10th	16 "
June 27th	12 "
August 15th	10 "
September 13th	12 "
October 21st	12 "
December 2nd	12 "
December 31st	13 "
1857.—February 6th	10 "
March 4th	11½ "
April 1st	11½ "
May 1st	12 "
June 13th	10 "
August 1st	12 "
September 5th	11 "
September 19th	7 "

I have chiefly been assisted in the operations by Dr. Craske Webb, of Shaftesbury-crescent, and Mr. Frampton, of Lower Belgrave-street.

Autopsy.—The body was emaciated and the abdomen much distended. On opening the cyst, which was everywhere firmly adherent, about eight quarts of a straw-coloured fluid were removed, together with a considerable quantity of pus. The abdominal cavity then appeared quite empty, no viscus being visible, but only what seemed to be an enlargement of the psoas and iliacus muscles with a dark purple covering of considerable thickness, which being opened revealed the stomach and intestines much compressed and firmly matted together by old net-like adhesions, and quite empty. The spleen and kidneys were healthy, but firmly adherent to their investing tissues. The liver, which had hitherto been obscured from view, was only seen by opening the thorax, where it had encroached upon the space usually allotted to the right lung; it was firmly adherent throughout, by its upper surface to the diaphragm, and by its under surface to the ovarian cyst. It was quite healthy, and the gall-bladder full. The uterus and appendages were one mass of cauliflower excrescence, about the size of a fetal head, and covered with thick pus; and on the left side of which was the cyst of a large abscess, whence the pus had escaped, causing the fatal symptoms. The bladder, which contained urine, was much contracted, and studded throughout its interior with the same malignant disease.

Remarks.—There was nothing in Mrs. C—'s aspect to indicate malignant disease; indeed, her early symptoms were mistaken by an eminent surgeon for those of pregnancy, a

belief she was too willing to cherish. She possessed great courage and determination, and was singularly endowed with an instinctive knowledge of the kind of food best suited to her, often making a hearty meal of chops or bread and cheese and porter, very shortly after the operation, to the exclusion of soups and broths, which some kind friends imagined to be the proper diet and "quite good enough for her." From the post-mortem appearances alone, it was quite evident that Mrs. C— was right in following the dictates of Nature, as great inconvenience must have followed the introduction of soup into so contracted a space. Her perseverance was such, that she only relinquished work a few hours before each operation, to resume it again on the fourth or fifth day.

Lower Grosvenor-place, 1858.

NOTES OF A CASE

OF

ATONY OF THE INTESTINAL CANAL,

RESULTING IN

RUPTURE OF THE COLON, PERITONITIS, AND DEATH.

BY N. BETHUNE, M.D.

E. S—, a man of spare habit, aged thirty-two, addicted to intemperance, who had been subject from infancy to frequent attacks of diarrhoea and dysentery, observed that his bowels were gradually becoming inactive about ten days before I saw him on the night of the 6th of May last. He habitually smoked and *chewed* tobacco to excess, often swallowing the saliva. Having an aversion to call in a medical man, he took the case into his own hands, and plied himself with the more ordinary purgatives substances, finally taking a large dose of croton oil; all, however, with no effect, the bowels remaining passive. When I first saw him, he had had no relief for a week at least; yet he was cheerful, free from pain, complaining merely of a sense of distension from the accumulated contents of the intestines; the abdomen was tense and highly tympanitic, and no dulness could be detected in any spot in the course of the alimentary canal to lead to the suspicion that the obstruction was due to impacted faeces; the pulse was unaffected; the stomach very irritable, the ejected matters having at times a faecal odour. Being unable to detect any hernial tumour, there being no fever, no tenderness in any part, in fact, no inflammatory symptoms, castor oil and other purgatives were again administered in succession, but them he rejected by vomiting; calomel, also, in large and small (repeated) doses, with no effect. Full doses of opium at night succeeded in procuring rest for three or four hours, and relieving oppression. Copious injections of tepid water, soap-suds, turpentine, and ox-gall, introduced by means of the long-tube, brought away small quantities of semi-fluid faeces, and were almost invariably followed by free discharges of gas. Still the distension returned, and as the stomach became more settled, strychnine was repeatedly given in minute doses every second hour for three days, with this good result, that the oppression was relieved in a marked degree, while the emetic continued to bring away more or less gas at each administration. Matters continued in this state till the evening of Sunday, May 16th, when, after violent straining at stool, and the exertion of getting into bed, he suddenly complained of pain in the abdomen, which rapidly increased in severity, while the features shrunk, the pulse rose to 140, the skin became cold and clammy, and, after a night of intense suffering, he expired on the morning of the 17th, at five o'clock, the bowels not having acted for eighteen days.

I examined the body twelve hours after death. The abdomen was enormously distended and tympanitic. On opening the peritoneal cavity, a quantity of gas escaped, with a large amount of turbid fluid mixed with faecal matter. The small intestines exhibited the bulk of the normal colon, while the latter showed a corresponding amount of dilatation; both were coated in parts with recent lymph, and were of a dull-red colour. The contents were gas, and a yellowish pulaceous matter, perfectly free from odour. The course of the intestines was traced from the duodenum downwards, and on reaching the bend of the colon, between the ascending and transverse