Mr Abernethy’s Surgical Observations, Jan.

Surgical Observations, containing a Classification of Tumours, with Cases to illustrate the History of each Species; an Account of Diseases which strikingly resemble the Venereal Disease; and various other Cases illustrative of different Surgical Subjects. By John Abernethy, F. R. S. &c. London, 1804. 8vo. pp. 263.

Mr Abernethy’s connexion with St Bartholomew’s Hospital, affords him ample opportunity of extending his observations to many important subjects connected with his profession. His merits as an accurate observer and practical writer, are already well known to the public; nor will the present volume of Surgical Observations derogate anything from the reputation he has already obtained.

The embarrassment and difficulty which generally attend the treatment of tumours, from the want of diagnostic characters by which the different species may be distinguished and named, imperiously called for some arrangement or classification. This defect Mr Abernethy has attempted to supply. It is, however, much to be regretted, that the external characters of tumours could not have been made the basis of the classification. But these are not sufficiently marked, nor are they always indicative of their anatomical structure and particular nature. And thus, the chief advantage of description and arrangement must, for the present at least, be postponed. But the groundwork being once laid, future observation may enlarge our knowledge, and enable us to trace the connexion between the external characters and internal structure of tumours, so that the former may become signs of the particular nature and tendency of each.

The term tumour may have been loosely employed by nosologists; but whether Mr Abernethy’s definition, which restricts the surgical signification of tumours to ‘such swellings as arise from any new production which made no part of the original composition of the body,’ be calculated to convey a more accurate and precise notion, we are very doubtful. If the definitions of former writers have been too vague, this surely is too limited. It excludes (as indeed Mr Abernethy acknowledges) all simple enlargements, and hence many glandular swellings, universally considered as tumours, and demanding the same treatment and operations, as those comprehended in the definition. There are glandular tumours, in which it would be difficult to say what was original, or what the new growth; although indeed, in many cases, ‘the disease of the gland seems to produce an entire alteration of structure.
ture in the part, the natural organization being removed, and a new formed diseased structure substituted in its place. Ossaceous tumours, we may observe, sometimes spring from bone, and fatty ones are found imbedded in the adipose membrane. Here, then, are tumours, new productions, but similar to the composition of the part whence they originate. Every tumour may be said perhaps to be a new production; but this may be either the same or different from the original composition of the body. In definitions, it is prudent, nay, it is necessary to keep all opinion or theory out of sight.

Mr. Abernethy’s definition may probably be derived from his theory of the formation of tumours. He attributes their formation to the effusion and organization of coagulable lymph. It is possible that this may be the origin of some tumours; and that, in this way, an unorganized concrete may become a living tumour, which derives its nourishment from the surrounding parts, but lives and grows by the peculiar action of its own vessels. But the effusion of coagulable lymph is not a necessary, and perhaps not a common step in this process. Many tumours, especially those beginning in glandular parts, owe their very first formation to a diseased action of the neighbouring vessels; the gland is enlarged, its natural functions are deranged, and new parts are secreted. In every tumour, in every case of diseased structure, much more is to be attributed to vascular action, than to the mere organization of effused lymph. But let us suppose a tumour to have this origin, let us grant the fortuitous effusion of coagulable lymph, let vessels shoot into it, and let it be organized; with this organization of the effused lymph the tumour should be completed, it should admit of no farther growth, of no farther change, unless the vessels assume a new action, extend and secrete, and deposit as they extend. It is much more probable, then, that tumours owe their origin to the same actions by which they are continued and increased, than to the simple organization of effused lymph. Mr. Abernethy does indeed acknowledge, that when tumours form and grow, there exists an increased action in the adjacent vessels; and therefore he observes, that our first curative indication will be ‘to repress as much as possible this unusual exertion of the vessels.’ And there are no means, he continues,

* ‘On appele,’ says De La Motte, ‘on appele en Chirurgie Tumeur contre-nature, une eminence au corps, qui interesse ou blessie l’action de quelque partie.’ The definition is not unexceptionable; yet, from the circumstance just mentioned, how much better is it, than that given by Sagar—— ‘Tumores a solidis autchis per succum nutritium copiósicem adventum, &c. in hos converfum!’
tinues, more rational in theory, or more efficacious in practice, than those of taking away the two great causes of animal actions, the blood and heat of the disordered part, by leeches, and by the application of folded linen, wetted with sedative lotions.'

If the growth of the tumour be by these means suspended, the next indication will be, to promote the absorption of the new formed substance, by stimulating applications, by frictions, pressure, electricity, rubefacients, &c.

In his classification of tumours, Mr Abernethy supposes that they may form an order in the class of local diseases in a system of nosology.

The order may then be divided into genera; and the first genus, from its obvious character, may be denominated Sarcoma, or tumours having a firm fleshly feel.

The species enumerated are, Common, Vascular, or Organized Sarcoma; Adipose Sarcoma; Pancreatic Sarcoma; Cystic Sarcoma; Mastoid or Mammary Sarcoma; Tuberculated Sarcoma; Medullary Sarcoma; Carcinomatous Sarcoma.

1. Common, Vascular, or Organized Sarcoma. This is the most simple kind of tumour, and seems to be composed of the gelatinous part of the blood rendered more or less vascular. It is organized throughout, but without any distinguishable peculiarity of structure. When it has attained a considerable size, the superficial veins appear remarkably large.

These tumours have but little sensation. They sometimes, though rarely, suppurate; but grow till the skin ulcerates, and exposes the new-formed substance, which sloughs and falls off, and thus the disease is sometimes got rid of; but such is the constitutional irritation attending this process, and the disgusting stench and frightful appearance of the part, that the surgeon generally recommends, and the patient submits to its removal at this juncture.

A case is subjoined, marking the progress of such a tumour of uncommon size, on the inside of the knee, and covering the tibia, where amputation appeared the only means of preserving life. The tumour, however, after the amputation, was found to have no connexion with the bone or joint on which it lay.

2. Adipose Sarcoma. This species, though generally formed in the midst of cellular and adipose substances, has, like other tumours, according to Mr Abernethy, its origin from coagulable lymph. A pendulous tumour of this kind has been known to grow by a narrow neck from the peritoneum. These tumours are always separated from the contiguous parts, by a thin capsule of common cellular substance. Their adhesion is very slight, the principal
principal connexion being formed by vessels, and these commonly very minute, so that little or no dissection is required for their separation;—no tumours are so easily removed. Sometimes, however, when inflammation has been induced, the capsule becomes thickened, adhesions are formed, and the removal of the tumour is rendered more difficult. The Adipose Sarcoma often attains a very considerable size. A history is given of one weighing between 14 and 15 lib. successfully removed from beneath the fascia of the thigh.

3. Pancreatic Sarcoma. So named from its resemblance in colour and texture to the Pancreas. It is made up of irregularly shaped masses, connected by a fibrous substance of a looser texture. It is sometimes formed in the cellular substance, but more frequently in the female breast. A case is mentioned of such a tumour occurring in the lymphatic glands, beneath the lower jaw. The Pancreatic Sarcoma is commonly indolent, and sometimes lessens in bulk by judicious treatment; sometimes, however, especially in the breast, it is more irritable, is accompanied with lancinating pains, produces an inflammatory state of the skin, and swelling of the axillary glands.

4. Cystic Sarcoma. This species contains cells or cysts. It sometimes occurs as a distinct tumour; but is more frequently met with in the testis and ovary. The sides of the cysts are very vascular. The disease is correctly represented by Dr Baillie: (Fasc. 8. plate 8. fig. 2.) Such a tumour, consisting entirely of an assemblage of cells filled with a watery coagulable fluid, was removed from the face of a boy by Sir Charles Blicke. In the testis, these cysts sometimes contain a caseous substance, of a yellowish cast, and unctuous appearance.

5. Maffoid, or Mammary Sarcoma—Strikingly resembles the mammary gland in colour and texture. It is met with in the midst of adipose tumours, and sometimes as a distinct tumour; sometimes also in glandular parts. In some cases, it is of a malignant nature, degenerating into an untractable sore, and communicating disease to the surrounding parts. Hence, Mr Abernethy has placed this tumour between those which seem to possess no malignity, and those which follow, and which are of a very destructive nature.

6. Tuberculated Sarcoma. It consists of an aggregation of small, firm, roundish tumours of different sizes and colours, connected together by a kind of cellular substance. An engraving of tuberculated liver in Dr Baillie's plates expresses well the appearance of this kind of Sarcoma: (Fasc. 5. plate 2.) The instances met with by Mr Abernethy have been chiefly in the lymphatic glands of the neck. The tumours ulcerated, became painful
painful and untractable sores, and destroyed the patient. This
disease shews a very malignant nature.

7. Medullary Sarcoma. This is the tumour found in the testis,
and distinguished by the name of soft cancer. It is however
very different from cancer in its nature and progress. It is com-
monly of a whitish colour, sometimes of a brownish red; is of a
pulpy consistence, somewhat resembling the appearance of brain.
Not entirely confined to the testis, it sometimes occurs in other
parts. An example is given of such a tumour in the front of
the thigh. Destructive in its nature, it communicates the dis-
ease, and affects the absorbents and lymphatic glands, even
those out of the course of absorption, to a very considerable
extent.

8. Carcinomatous Sarcoma. Without attempting a full or di-

rect history of Carcinoma, Mr Abernethy here presents us
with many valuable observations on this dreadful disease. He
describes its history and anatomical structure, and compares it
with other resembling diseases. With regard to the anatomical
structure of carcinoma, it is very difficult, he remarks, to con-
vey any correct idea by words, or even by drawings. The dis-
eased part is peculiarly hard, and intermixed with firm whitish
bands, as represented by Dr Baillie. These bands sometimes
extend in all directions, like rays from a centre; sometimes
they intersect the tumour irregularly; sometimes they form
cells containing a pulpy matter, of various colour and consist-
ence.

Next to the Sarcoma is placed the genus of Encysted Tumours.
They are allied to the former in appearance, but may in general
be distinguished by a regularity of surface and shape, and a pul-
liness to the touch. The cysts vary in thickness. Sometimes
they adhere to the contiguous parts; at other times, they are so
loosely connected, that, when laid bare, the whole tumour
starts out. That the interior surface secretes the contents of
these cysts, Mr Abernethy thinks is obvious, from the observa-
tion that the cyst of a wen which has burst, or been punctured,
will repeatedly fill with the same substance which has been eva-
cuated. The cysts, however, are sometimes more irritable, and,
when opened, shew little disposition to heal, but shoot out fungus,
and occasion much distress, fever, and fatal irritation. Encysted
tumours have been named from their contents, atheromatous,
melicious, &c.

Cysts, too, sometimes secrete a substance like nail or horn;
which protrudes and hardens. Hairs also grow from their in-
terior surface; a case not unfrequently met with in the ovary.

...
Lastly, particular cysts, resembling those of abscesses, irregular in shape, according to the form of the parts amongst which they are produced, are found containing a kind of serum and hydatids, and sometimes small granular white bodies resembling pearl barley.

Another genus of tumours is the Osseous. They commonly originate from bone. They are found pendulous in the cavities of joints, and occur also, though not often, in other parts. A case is given of a tumour in the ham, composed of coagulable and vacular substance, interspersed with a large quantity of bony matter.

We have thus endeavoured to present our readers with an abstract of Mr Abernethy's classification of tumours. But the original must be consulted for many valuable remarks and instructive cases, which our limits forbid us noticing here.

On Diseases resembling Syphilis.

It were greatly to be wished that, in calling the attention of practitioners to these cases, characters could have been pointed out by which they might be known, and distinguished from the venereal disease. But here, the resemblance is so perfect, that every reader must have pronounced them syphilitic, had he not been informed by Mr Abernethy that they recovered without the use of Mercury.

Chancres of various appearances, followed by bubo, and successively by deeply ulcerated tonsils, copper-coloured blotches, corona veneris, and nodes of the bones, are the symptoms of the diseases now submitted to our consideration as resembling syphilis. The only circumstance in which they seem to differ, is their getting well spontaneously; to which perhaps may be added some anomalies in the secondary symptoms, or in the order of their appearance. Such anomalies, however, are occasionally observed also in the venereal disease itself. Even Mr Abernethy, though he appears often to have pronounced on the character of these diseases with the most perfect confidence, and that too in opposition to the equally decided opinion of other medical men, who asserted their syphilitic nature with a confidence proportioned to their professional skill and accuracy of observation, confesses that he has not been able to discover any appropriate character by which the disease may be detected. The fictitious disease in appearance so exactly resembles syphilis, that no observation, however acute, seems to be capable of deciding upon its nature.
The spontaneous cure, then, is the only criterion by which the fictitious disease can be distinguished from syphilis.

If the diseases, however, so perfectly resemble each other in all other particulars, why consider them as essentially different? Is it then so certain that the venereal disease admits of no cure but from Mercury?

'I have asked the opinion of several surgeons of eminence and abilities,' says Mr Abernethy, 'respecting this question, Whether constitutional symptoms of syphilis do ever spontaneously mend? And no one has decidedly replied in the affirmative, whilst all, without hesitation, agreed that they were generally progressive till checked by the effect of Mercury.' But the question is already begged, by the avowal, that the only criterion of the fictitious disease is its spontaneous cure; for thus, every case which gets well without Mercury, may be said to be not syphilitic.

To judge by appearances, these diseases do not differ from syphilis. Like it, they arise from, and are propagated by, impure sexual intercourse. Their symptoms and progress are the same, or so similar, that they cannot, it is confessed, be distinguished from it. Many, therefore, will still be disposed to consider these diseases as venereal, though cured spontaneously, or without the use of mercury.

At any rate, till some other criterion be pointed out, no useful practical lesson can be deduced from such anomalies; and the safest rule must still be the old one, to classify diseases by their external and obvious characters, where no essential difference can be marked; and, in the present case, to administer mercury till the symptoms yield, or till convinced that no good can be derived from its use. Much less danger, we are disposed to think, will result from this conduct, than from the irresolution and delay which the apprehension of two diseases strikingly resembling each other, yet essentially different, must occasion in the mind of a less experienced practitioner than Mr Abernethy.

These remarks, however, we would wish to be understood as applying only to diseases strictly resembling syphilis; for we are assured that there are many primary sores affecting the genitals which are not syphilitic, which may be often characterised and distinguished from the venereal chancre. Such are the ulcerating phagedenic sores, and those which spread by sloughing. Yet, even here, we cannot always pronounce dogmatically. And our confidence in our diagnosis will be much lessened, if Mr Abernethy's observation be justified, 'that the venereal poison can be conveyed into the constitution, and contaminate it through the
the medium of a sore, the general actions of which are probably not venereal.'

The other surgical observations contained in the present volume, are, Cafes and Remarks on injuries of the head; on Aneurism; on the operation of Puncturing the urinary bladder; on the Tic Douloureux; on the removal of loose substances from the knee joint.

In a former publication, Mr Abernethy had endeavoured to direct the attention of practitioners to some cases of injuries of the head, attended with depression, which, however, did not require the application of the trephine, proving that flight pressure on the brain is not productive of those dreadful consequences commonly apprehended. The opinion which Mr Abernethy then entertained of the frequent application of the trephine, has been confirmed by many cases which have since occurred to him.

By these observations, he does not wish to discourage altogether the operation of trephining, which he acknowledges to be often a necessary and successful operation, but simply to state the circumstances of cases of fracture of the cranium with flight depressions, which do well without elevation; and to show, that where it is not necessary, it must be hurtful, by increasing the tendency to inflammation, the chief danger to be apprehended in such cases.

'Had I been, in the former publication, writing expressly on the operation of the trephine, I should have stated it as my opinion,' he adds, 'that no considerable depression of the cranium ought to be suffered to remain; and that every hazard should be encountered, rather than such a degree of pressure should be suffered to remain, as might be productive of future inflammation and disease, or disturb the functions of so important an organ as the brain. The object of my last publication was to show, as far as my opportunities of observation enabled me, what appeared to be the kind of cases in which it would be injurious to apply the trephine, and what cases would do well without the operation.'

The great secondary danger to be apprehended from injuries of the head, is inflammation; and hence bloodletting, and the other antiphlogistic means have been freely employed in almost every case. Of late, indeed, one exception has been made to this rule; and in the case of what has been called concussion of the brain, the stimulating plan has been recommended. Mr Abernethy, however, in his former Essays, had shown by cases, the propriety, and indeed the necessity, of a free use of the lan...
ee, even in concussion; and he has seen, he now informs us, so many additional cases of the like kind, that he is still more fully convinced of the truth of his former representation, and has been led, in consequence, 'more and more to wonder that a contrary plan of treatment to that which has been so uniformly successful, could ever have been recommended.' As an example of violent inflammation succeeding concussion, and of the extent to which evacuations may be carried in such affections, a case is given, where the patient's life was only preserved by large and repeated bloodletting.

To these observations on injuries of the head, Mr Abernethy has subjoined, as in some measure connected with the physiology of the brain, a remarkable case of lacerated wound of the throat. This man was gored in the neck by a cow. The horn entered by the left side of the cricoid cartilage, penetrated as far as the vertebræ, and, passing upwards on the bodies of those bones, came out behind the angle of the jaw. In this course, it had torn the internal carotid artery, and the hemorrhagy could only be commanded by passing a ligature round the common trunk of the carotid, which was accordingly done about an inch below its division.

The patient soon recovered from the low state to which the hemorrhagy had reduced him, appeared perfectly sensible, and as well as could be expected, considering the great quantity of blood which he had lost. His pulse, in the evening, was moderately full and strong, and not very frequent. Next morning, however, the state of the patient was greatly changed; the pulse 130 in the minute, and hard; the skin hot. He had been delirious during the night, and had suffered repeated convulsions, chiefly of the left side of the body. He now lay insensible and inattentive to surrounding objects. A small hollow bougie was passed from the right nostril into the oesophagus, by which half a pint of milk and water, with fifty drops of tincture of opium were injected. The convulsions were thus quieted, but the right side remained motionless. A blister was applied to the head, and twenty drops of Tint. opii ordered to be given every third hour. The patient's strength, however, rapidly declined; and at 10 o'clock at night he had a severe convulsion, and immediately after died, having survived the ligature of the carotid about thirty hours.

On inspection after death, the brain was found to have suffered a considerable degree of inflammation; there was an effusion of blood on the surface of its convolutions, and a considerable deposition of gelatinous substance between the tunica arachnoidea and the pia mater; water was also effused in the ventricles.
ventsricles. The internal carotid was rent across; neither the
trunk of the eighth pair of nerves, nor the great symphate-
tic, nor those of the tongue, appeared to have suffered in-
jury; and the carotid artery was found to be the only part in-
cluded in the ligature.

The disorder and death of this patient, Mr Abernethy is of
opinion, cannot be attributed to the loss of blood; and as so
little injury appeared to have been done to the nervous trunks,
neither can the symptoms which supervened be referred to ner-
vous irritation. The patient remained tranquil till inflammation
of the brain commenced; and a striking similarity may be re-
marked between the symptoms which took place in this case,
and those which are consequent to concussion of the brain.

"Upon reflection," Mr Abernethy continues, "I can form no
other opinion of the case than that which first struck me, which
is, that though the stopping the supply of blood to the brain did
not for several hours produce any apparent derangement in the
functions of that organ, yet such a state was gradually occasion-
ed by it, and which was attended, like the effects of concussion
of the brain, with inflammation."

What is chiefly remarkable in the history of this case, is, that
the left side was convulsed while the right was nearly paralytic.

"An effusion of blood," our author observes, "in the left he-
misphere of the brain, would affect the opposite side of the bo-
dy in the same manner that cutting off the supply of blood to
the left side appears in this instance to have done." And yet
we may remark, that notwithstanding the ligature of the left
carotid, the circulation, as indeed might have been expected
from the very free anastomosis at the basis of the brain by the
circle of Willis, appears to have been uniform in both hemis-
pheres; for both were equally affected with inflammation, nor
did the vessels of one side seem more turgid and full than those
of the other.

Mr Abernethy has a second time performed the operation of
tying the external iliac artery, with an account of which we are
presented in the volume now before us.

To cut up the abdomen, push aside the peritoneal bag, and
tie the external iliac by the side of the psoas muscle, would seem
at first sight a formidable and fruitless operation. But the cafes
published by Mr Abernethy show that this may be done without
immediate risk; and the last, especially, affords us reasonable
expectation of success in future operations of a like kind; for
the patient survived the operation till the twenty-third day, nor
did the limb appear to have suffered from defective nutrition.

The unhappy termination of the case seems to have been owing

G a
to an extensive collection of blood behind the peritoneum, extending from the diaphragm downwards, and communicating with the aneurismatic sac, from which the blood appeared to have burst in the direction of the interval between the internal iliac and psoas muscles. The operation, we may remark, was too long delayed, from a want of confidence in the powers of the collateral arteries to carry on the circulation; hence the patient was allowed to languish in the hospital during two months, and the operation was not undertaken till the aneurismatic tumour seemed ready to burst, and therefore under the most hopeless circumstances. The patient's sufferings had become intolerable, and the whole limb was largely oedematous.

The urinary bladder may be punctured from different points; from the perineum, from the rectum, and from above the pubes. Mr Home has shown the advantages and safety of the operation from the rectum, which appears the most eligible where the bladder is contracted, and does not rise so as to be felt above the pubes. But there are cases also, in which the puncture from the rectum cannot be safely performed, on account of the enlargement of the prostates, and diseased state of the neck of the bladder. And Mr Abernethy farther observes, that, in some cases, the perception of the bladder from the rectum is so indistinct, that he has been deterred from puncturing it there; and in one instance, having made a division in the perineum, and passed his finger beneath the arch of the pubes, he could obtain no such distinct perception of the bladder as could authorize him to push forward the trocar. He thinks that there is frequently this recession of the bladder from the perineum, which then ascends proportionally higher into the abdomen. His object therefore, here, is to recommend, in such cases, the puncture of the bladder above the pubes. He has performed it in a great many instances, and has never seen any effusion of urine into the cellular substance, or other bad consequences result from the operation; nor, if rightly performed, are such events likely to happen.

The face is the usual seat of Tic Douloureux. In the case given in this volume, however, the disease was in the ring finger of the left hand. The pain recurred at irregular intervals, and extended a considerable way along the nerves of the arm. After the patient had endured this painful affection for eleven years, Mr Abernethy, who was consulted, advised the section of the nerve of the finger originally affected, which was accordingly done opposite to the second
cond joint. The violence of the disease was lessened, but not altogether removed. It has now, however, Mr Abernethy informs us, after nine months, become very trivial, while the natural sense of feeling in the finger, at first destroyed by the section of the nerve, is gradually returning. Thus, though the communication between the originally diseased nerve and the sensorium was interrupted, the general irritable actions which had been excited did not immediately cease, though they gradually subsided. On the other hand, the natural sense of feeling, instantly lost by the removal of a portion of the nerve, was proportionally recovering.

When loose substances are formed in the knee joint, and slip between the condyles of the femur and tibia, they give rise to a train of very distressing symptoms; but, when lodged on either side of the patella, they occasion but little inconvenience. To keep them stationary in this position, a bandage has been recommended, and found useful in many instances; but the bandage is sometimes of no avail, as in the case related by Mr Abernethy, where the bodies floated in a collection of fluid within the joint. They were removed by an operation, and the patient recovered. These bodies are easily brought to the inner side of the joint, and may be fixed by the points of the fingers on the internal condyle of the femur, which, Mr Abernethy observes, presents an extensive and nearly plain surface, which terminates in front, and, at its upper part, by an edge which forms a portion of a circle.—"If the points of the fingers be firmly pressed upon this edge, so as to form a kind of line of circumvallation round these bodies, they cannot pass into the joint in this direction, nor can they recede in any other, on account of the tense state of the internal lateral ligament. Here, these substances are near the surface, and may be distinctly felt; and there is nothing to be divided in order to expose them, but the integuments, fascia, and capsule of the joint." Mr Abernethy therefore prefers this situation to all others; and in the case related, they could not, he observes, have been secured in any other.