ON TAPPING AS A CAUSE OF ROTATION OF THE PEDICLE IN OVARIAN TUMOURS.

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ONE of the most interesting phases in the subject of ovarian pathology is that connected with rotation of the tumour and twisting of its pedicle, accompanied by changes which may take place under such a condition. The following case explains how such changes may be allowed to occur under certain circumstances, and presents a singular aspect in relation to the question of tapping in the presence of a particular condition of the tumour and its surroundings.

Mrs. P—, aged thirty-three, has been married for five years and a half. Had one easy labour a year and a half ago, the child living for a week only. Since this time she has been the subject of a gradually increasing tumour, which was first noticed to commence on the right side, but which has since enlarged so as to occupy the whole of the abdomen. Menstruation has been regular, and the constitutional state of health was always well sustained. This was diagnosed as a large unilocular cyst, with probably no adhesions. The uterus was pressed almost horizontally, and transverse in direction, the fundus being pointed to the left side; it could be moved freely upon the sound, apparently without complication. The case was considered a favourable one for operation, but the patient elected not to undergo any operative measures while her health continued so good.

I lost sight of her for some months, when she sent for me to see her, expressing a wish for an operation to be performed. I visited her on Feb. 16th, when the following condition was present:—She was much more emaciated and feeble, and complained of pain in the abdomen, hips, and back. There was sickness, loss of sleep and appetite; the tongue was red and dry, and there was marked tenderness over the abdomen. The temperature was 101° F.; the pulse 130. The urine, taken by a catheter, was scanty, contained urates, but no albumen.

I hesitated to perform ovariectomy in such a state, and accordingly, on Feb. 18th, I tapped through the abdomen, and took away eight quarts of fluid. This was perfectly clear and limpid, of a pinkish-yellow colour, and serous feel, sp. gr. 1006. The tapping was followed by great relief, the pain subsided, the expression became better, and the appetite returned. The patient came down stairs feeling considerable improvement in her health. A few days after the catamenia appeared, and continued for four or five days without inconvenience.

On March 3rd, a fortnight after the tapping, I proceeded to operate. Ether was given by Mrs. Russell Grant. An incision of about five inches was made in the median line and carefully dissected down to the peritoneum, which was much thickened and vascular; the cyst was found adherent to it anteriorly for a space about the size of the outstretched hand; the adhesions were recent, easily separated, and oozed freely with thick-looking bright-coloured blood. The cyst was flaccid, tough, of a dark, almost bluish-black colour; when punctured, it gave exit to half a pint of fluid like port wine in appearance. It was seized with strong forceps and the finger swept round it; at the upper part it was connected for about three inches with the omentum, and for the same distance with a coil of small intestine, both of which were readily separated. On drawing it gently forwards it was found attached by a long slender pedicle, which was observed to be twisted for two complete turns upon itself, the direction being from within towards the left and over to the right; the part above the twist was discoloured and livid, feeling as if it would give way on the smallest additional force; below it was white and dense. The cyst was throughout of the same mottled dark colour, evidently strangulated by the twisting of its pedicle. A pile clamp was made to embrace the pedicle, and the cyst being cut away at the distance of half an inch, the stump was seared down to the clamp with the thermo-cautery; a silk ligature was tied tightly below the clamp, the ends

being cut short; the clamp was then loosened and the stump returned into the abdomen. After clearing away all remains of bleeding, the wound was brought together with silk ligatures and dressed with lint soaked in carbolised oil, the abdomen was padded with cotton-wool, and a bandage applied. In addition to the peritoneum of the anterior abdominal wall being thickened, vascular, and villous in appearance, the surface of the intestines in the neighbourhood of the wound was darker-coloured than usual, had a sticky feel, and an absence of the shining look of a serous membrane.

The patient has done well since the operation, the wound has healed soundly, and she is able to go about with ease, and is in good health.

The cyst was found collapsed and dull; anteriorly there was an oval space of $5\frac{1}{2}$ in. by $3\frac{1}{2}$ in. where it was adherent to the abdominal wall. The shrinking caused opposing surfaces of the exterior to come into contact; these were united by adhesions which could be tracked through easily with the handle of a scalpel. The interior was corrugated and granular; the site of the former tapping could not be discovered; the whole weighed 1 lb. 9 oz. It would appear, therefore, that after the tapping the cyst collapsed and fell back upon the intestines, and that the rotation must have been effected insidiously without any indication of its occurrence during the fortnight which elapsed from the time of its being emptied. The discolouration of its walls, and the changed nature of its contents, showed the result of the compression its vessels underwent from the rotation of the pedicle. The adhesions formed to the parts mentioned were manifestly recent, and point to a remarkable attempt on the part of nature to deal with a cyst the blood-supply of which was cut off, and which was threatening gradually to become a foreign body. The problem to be solved was an eventful one: whether its vitality would have been sufficiently preserved by such adhesions to allow it subsequently to contract, and, being thus transplanted, become inert, or whether, becoming gangrenous, it would have played the part in complications of a more disastrous character, it is difficult to say, though presumptive evidence would favour the former view. The spontaneous recovery of patients with large movable thin-walled cysts after injury or tapping may be explained by the details of this case. That a subacute condition of peritonitis is not a serious obstacle to operation and recovery is also demonstrated, and, in fact, points to the advantage which is sometimes obtained by the greater toleration of parts which seem to have expended already part of the force which is so ready to come into action injuriously when a higher standard of health is present.

Birmingham.

CASE OF EPILEPTIFORM CONVULSIONS IN GENERAL PARALYSIS OF THE INSANE,

WITH LOCALISATION OF DISCHARGING LESIONS.

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A. S—, aged twenty-nine, was admitted into the West Riding Asylum in December, 1874. The patient was a married man without children, and was stated to have suffered from sunstroke three years prior to admission. He remained unconscious for several days succeeding the attack. He has been insane ever since, although he has at times employed himself at his usual occupations. On these occasions he has been irritable and even violent. The history afforded by his friends was scanty in details, but it was positively asserted that his habits had been temperate.

On admission, the patient complained voluntarily of pain in the head, and was anxious for relief. He could not describe the character of the pain, but attributed it to the sunstroke, and said he had never been the same man since that event. On this subject he became emotional. His memory was fairly accurate with regard to most remote and recent events, but much mental confusion became apparent

when he was pressed with questions. He answered correctly most questions with regard to time. He appeared to have no delusions or hallucinations, and showed an utter absence of excitement. He admits his inability to work as usual. Upon physical examination, he was found to be fairly nourished, but his muscles were soft and flabby. There was considerable motor impairment, and his grasp, though fairly strong, was irregular and jerky. There was marked tremor of the facial muscles and great impairment of articulation, which, under the influence of emotions, rendered him quite unintelligible. He always ground his teeth, and there were chewing movements during the whole examination. Locomotion was impaired but slightly, yet, when asked to stand heel to toe, he staggered and stumbled greatly. The pupil was largest on the right side. Tongue protruded straight, but was jerky and tremulous.

The diagnosis made was "general paralysis of the insane."

Shortly after admission, the records of his case state that he remained quiet, childish in manner, and docile in behaviour. His mental symptoms were not so pronounced as his motor derangements, and the latter were far more marked in—*in fact, very exclusively limited to*—the muscles of articulation, speech being pre-eminently characteristic of the general paralytic. He was generally depressed, however, rather than exalted. Twelve months subsequently his dementia had become confirmed and rapidly progressive, yet his habits had never been degraded.

Two years after admission he was seized with the first series of convulsive affections which he had ever suffered from. He was walking in the asylum grounds when he suddenly fell down and was very generally convulsed. He was ordered an enema of chloral (forty-five grains). The convulsions were but slightly arrested, and two hours later a second enema of chloral (twenty grains) was administered. The convulsions continued throughout the greater part of the day with occasional intermissions, prostration rapidly advancing. The character of his attack was similar to the epileptiform seizures of general paralytics, and was usually that of a very general discharge; but it was impossible not to be struck by the mode of onset of each attack and the peculiar limited nature of the convulsions at this early period. The flexors and supinators of the left forearm were first affected; the corners of the mouth were next retracted; the lips separated so as to expose the teeth; whilst the mouth was slightly opened by each spasmodic twitch. Frequently a series of such attacks lasted from ten to fifteen minutes without implicating other muscles; at other times the head would be drawn to the left side, the eyes turned strongly downwards and to the left, whilst the right attollens auris could be felt in vigorous action, causing a strong twitching of the ear up and down. On other occasions the convulsions would become general, but a primary implication of the above-named muscles ushered in each series of attacks. The patient eventually died from exhaustion, complicated with pulmonary congestion and œdema.

The following is a short abstract from the post-mortem records. Head: No adhesion of dura mater to skull-cap; pia mater finely injected, especially on the right side over

orbital and second and third frontal convolutions, and on the left side over the third frontal. Very slight opacity of the membranes, and but slight wasting of the frontal lobes. On stripping the brain, adhesions were found over the lower

part of the ascending frontal and posterior part of the third frontal of either side. Adhesions of the membranes were also found along the gyrus rectus of the left side and the tips of the temporo-sphenoidal lobes of both hemispheres. The vessels were exceedingly tough, but apparently free from atheroma. No special area of softening on external surface. The grey matter was of fair depth, and pale in both hemispheres, the white matter soft and congested. Nothing special was found on section of the regions corresponding to the adhesions except that on the left side the grey matter subjacent to the adhesions and at the tip of the temporo-sphenoidal lobe had a much deeper colour than elsewhere, and which appeared due to a recent attack of subacute cerebritis. The white matter of the right occipital lobe was most profusely marked with large, coarse vessels. No abnormality was found in the basal ganglia, pons or medulla. Six ounces of bloody fluid escaped on removal of the brain from the sinuses and membranes.

Remarks.

There are several noteworthy features in the foregoing case which will at once attract the reader's attention. There is—1. The mode of onset of the convulsive seizures. 2. The peculiar character of these convulsions. 3. The remarkable symmetry and limitation of adhesions found post mortem.

1. *Mode of onset.*—This has been so strongly insisted upon by Dr. Hughlings Jackson that it would be but futile on my part to dwell upon the subject further than to point out that, had it not been recognised and looked for cautiously, the case might readily have been passed by as one of the usual epileptiform seizures of general paralysis, presenting in the general convulsive discharges but a chaos of motor derangements, out of which no *localising* symptoms could be gleaned. On attentively watching each successive seizure, however, it was readily apparent that *each attack began with precisely the same phenomena*; and that the convulsions, limited in the first place to the *left arm and hand*, eventually implicated the *facial muscles and the attollens muscle of the ear*. This minor discharge occasionally persisted for ten minutes or more, or spread rapidly so as to implicate the body generally. Usually, however, instead of a general discharge, the peculiar limitation to the left arm and face was supplemented, on increased severity of the convulsion, by turning of the face and eyes to the left side, the latter being also drawn strongly downwards. This mode of onset therefore pointed directly to a discharge from grey matter from convolutions in the neighbourhood of the right corpus striatum.

2. *The peculiar character of the convulsive onset.*—The movements of the arm were purely those of supination and flexion, performed with jerky irregular action. The movements around the mouth were peculiar, and strongly reminded one of the movements of the lips in animals about to snap when the canines are exposed by the retracted lips. The teeth were being constantly uncovered by these movements, and the corner of the mouth at the same time elevated and retracted by the zygomatici. The jaws were also slightly separated consentaneously with the above movements, but no movement of the tongue could be detected. Now it will be remembered that Prof. Ferrier has definitely placed the centres whereby these movements are produced in close proximity to each other. A region is thus marked out occupying the lower portion of the ascending frontal, where the second and third frontal gyri impinge upon it. The various motor centres occupying this area in the right hemisphere when stimulated produce the various movements which characterised the onset of our patient's attacks, and were regarded by myself as the seat of the discharging lesion, on the ground that the movements around the mouth are by stimulation of either hemisphere *bilaterally* reproduced.¹ The pricking of the ear was very marked, and occurred only when by the spread of convulsions the head and eyes were drawn to the left side, but the twitchings were limited strangely to the *right ear*.

3. *The symmetry and limitation of adhesions.*—The area of adhesions between the pia mater and cortex, and the subjacent inflammatory blush, clearly and indisputably embraced that portion of the ascending frontal figured in Professor Ferrier's work as (6, 7, 8, 9) in Fig. 63, and, with the exception of the tips of the temporo-sphenoidal lobes and the left gyrus rectus, no suspicion of the slightest adhesion elsewhere could be entertained; even in the line

¹ Dr. Ferrier: *The Functions of the Brain*, p. 143.

usually occupied by the Pacchionian bodies the pia mater was most readily stripped off. The symmetrical distribution of these adhesions on either side was most marked, the one being the exact counterpart of the other. The mode of onset, however, sufficed to indicate which hemisphere was the discharging one, and together with this I took into consideration a fact which has lately attracted my attention greatly. I refer to the pupil of the right eye being far more widely dilated than the left. I have endeavoured elsewhere to show that this dilatation of the pupil is frequently a *localising* symptom; and in the present instance I regarded the dilatation as distinctly pointing to a discharging lesion of the right hemisphere, which the subsequent phenomena and appearances confirmed. The posterior half of the right hemisphere was notably softened, the white matter congested, and the number and coarseness of the vessels, especially in the occipital lobe, greater than I have ever before observed. This was certainly not the case in the opposite hemisphere, and is worthy of note as Dr. Hughlings Jackson has frequently insisted upon the more pronounced dementia attending lesions of the posterior portion of the right hemisphere.

A Mirror

OF

HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

MALIGNANT DISEASE OF THE ŒSOPHAGUS; GASTROSTOMY;
DEATH.

(Under the care of Mr. CALLENDER.)

THE value of the subjoined record—for which we are indebted to Mr. C. B. Gabb, dresser—is not in any degree diminished by the fact that the operation of gastrostomy was not successful. The advocates of this operative procedure may justly urge that, although at the time when the operation was performed the case appeared to be in every respect suitable, the amount of mischief, as shown at the post-mortem examination, was so great as to render recovery impossible. The operation has proved permanently successful with M. Verneuil, of Paris (see the "Mirror" of Jan. 6th last), and was practically so in a case recorded in our "Mirror" of May 15th, 1875, under the care of Mr. Sydney Jones.

Robert B—, aged thirty-nine, a coach-painter, whose general health had always been good, was admitted on the 16th of October, 1876. He first noticed a difficulty in swallowing about February, and since Aug. 12th he had been quite unable to swallow solid food. There was no history of his having taken any corrosive. He had never vomited blood. A small bougie had been passed twice a week for two months before his admission, and on the last two occasions some blood had followed the removal of the instrument. The family history was good. The patient had lost flesh rapidly, for in health his average weight had been 12st.; three days after admission he weighed 8st. 4lb. No tumour or enlarged glands could be discovered in the thorax. The patient was much troubled with a cough, and he had frequent pains at the pit of the stomach.

Oct. 17th.—A No. 9 bougie was passed into the Œsophagus for about twelve inches, when it met an obstruction. No force was used, and the instrument was withdrawn without having entered the stomach. He was ordered to have twice a day an enema consisting of two ounces of brandy, three eggs, and half a pint of essence of beef.

Oct. 18th.—The physical examination of the chest disclosed nothing abnormal. A bougie was passed, and, according to the patient, went through the stricture. Pulse 50; temperature and respiration normal. Two days later a bougie was used, which did not pass the stricture, but on

the 24th a No. 8 bougie was passed, and again on the 26th; both times it was supposed to have gone through the stricture, for the patient was able to swallow better for the next twenty-four hours. An abortive attempt was made on Oct. 29th; this was the last time any instrument was used. On Oct. 26th he was weighed, and had lost 2lb. in a week. His cough became very troublesome. He expectorated large quantities of muco-purulent sputa containing more or less blood. There was considerable pain at the pit of the stomach, which was also felt in the right scapular region. His pupils were unequal, the right being the larger.

31st.—He swallowed part of a sole, the last food he took by the mouth. He threw up three tablespoonfuls of blood. He was ordered four enemata a day, instead of two, as before. These were given fairly hot. He was able to retain them, and seldom had more than one action of the bowels in twenty-four hours. A consultation was held, at which the majority of the surgical staff were present. The opinion was unanimous that the nature of the stricture was malignant. It was also thought to be a favourable case for the operation of gastrostomy. The patient was again weighed on Nov. 3rd, and was found to have lost 8lb. 12oz. in a week. He gave his hearty concurrence to the proposed operation. On Nov. 4th he vomited two teaspoonfuls of blood. The abdominal pain was less. Urine scanty, sp. gr. 1038, free from albumen and sugar; cough urgent.

On November 6th he was quite cheerful, and had had a good night. There was no pain except on coughing. Bowels open. Tongue dry and furred. Pulse 64; temperature and respiration normal. He had been without food by the mouth for seven days. Two enemata were administered during the morning. One-sixth of a grain of acetate of morphia was given hypodermically at 1.15 P.M. At 2 P.M. the patient was placed under the influence of nitrous-oxide gas and ether. Mr. Callender then made the usual incisions, and the peritoneal sac was opened. The great omentum and the edge of the left lobe of the liver presented themselves. The stomach was easily found, and having been drawn down, was stitched with some silver sutures, to the anterior wall of the abdomen. The stomach was then opened (no blood having been allowed to pass into the peritoneal cavity, all bleeding having been carefully stopped as the operation was being proceeded with), and the cut edges of the stomach were then secured to the margins of the abdominal section by eight silver sutures. No evidence of disease could be recognised when the finger was introduced into the stomach. An indiarubber tube three inches long and one-third of an inch in diameter was placed in the viscus and fastened there. The wound was dressed with carbolic oiled lint. The patient was eighty minutes under the anæsthetic, owing to the time given to the prevention of bleeding. Pulse 76, small and regular. At 5.30 P.M. an enema, and at 9 P.M. a hypodermic injection of one-sixth of a grain of morphia were given. At 10.15 P.M. the dressings were changed and the tube removed, as it seemed to be causing irritation. The discharge was copious, consisting of a dark bilious-looking material mixed with a thin reddish fluid; the reaction was acid. Pulse 80, strong and regular; temperature 99.6°. He had not passed water.

Nov. 7th.—He had about four hours' sleep during the night. The wound was dressed at 2.30 and 9.30 P.M. A hypodermic injection of a sixth of a grain of morphia was given each time. Cough troublesome, and he expectorated a large quantity of muco-purulent fluid, free from blood. He passed water at 7 A.M., and complained of much scalding in doing so. Urine very scanty, specific gravity 1035, highly acid. With the exception of feeling faint at times, the man expressed himself as being very comfortable. There was no abdominal tenderness. The tongue rather dry, and coated with a brownish fur. At 3 P.M. the dressings were again changed, and the edges of the wound smeared with oil (this was done each time the wound was dressed). About three ounces of warm milk was passed through a small tube into the stomach, most of which, however, ran out. Pulse 112; temperature 99.6°; respiration 28. At 4.30 P.M. an enema of one-sixth of a grain of morphia was given; 10 P.M. the bowels had been open, and he had been dozing since 6 o'clock; the dressings were changed and an enema given. The wound looked red at the lower margin, where it was probably irritated by the discharge. Pulse 100, less strong; temperature 99.4°; respiration 28.

8th.—2 A.M.: His bowels had been open twice. He