form, might still have been a living man or woman, or child. It has been objected that ether costs more. The expense of one funeral would pay for a deal of ether.

One word about the method of giving ether. Whilst it should be used freely at first, it is not necessary to abuse it. At a meeting of the Société de Chirurgie, a gentleman raised himself (a wonderful gymnastic feat) against the words, "American method" of giving ether. It was nothing but the method of Bonnet of Lyons, who turned on ether in floods, "et foudroyait ses malades". Bonnet had had two deaths. American surgeons call this drowning the patients, and I have often seen young internes sharply rebuked for so doing. One gentleman at the meeting referred to said that, in American hospitals, ether is given by special persons. This is not correct: internes, dressers, or even ward-tenders, often give it.

Lastly, as to what I said about ether in childhood, and proscription of the products of British brains. As to the use of ether in difficult cases of midwifery, I but spoke my own personal convictions; perhaps my countrymen will blame me for what I said in this regard. For England and British brains I cherish a most profound respect. The excellence of those brains is only surpassed by the goodness of English hearts.

Paris, May 1875.

FIBRO-NUCLEATED TUMOUR FROM THE DURA MATER OF THE CERVICAL PORTION OF THE SPINAL CORD.*

By THOMAS S. DOWSE, M.D.,

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I HAVE ventured to trespass upon the time of this Society in bringing before its notice a form of tumour which, from its manner of growth, is of rare occurrence, and which will, I trust, be of interest not only in a medical, but also in a surgical point of view. To the physician, it will be interesting chiefly because of the symptoms of paralysis, which resulted from pressure upon the cord; and to the surgeon, because of its free mobility and non-adhesion to surrounding structures: a condition which might have led a bolder man than myself to attempt its extirpation. Nerve-tumours, we know, may originate in three different ways: 1, from the free surfaces of the meninges; 2, from the perivascular sheath; and 3, from the neuroglia. Those which grow from the dura mater are usually of three kinds; viz., spindle-celled sarcoma, myxoma, and psammoma. I will now briefly introduce to you the chief clinical points in this case.

John Page, aged 34, was admitted into the Central London Sick Asylum at Highgate, August 21st, 1872, and died July 10th, 1874. His father died of phthisis at the age of forty-nine; but, with this exception, the family appeared to be healthy. There was no history of fits, insanity, paralysis, or syphilis; and, until he was thirty years of age, he himself for the most part enjoyed good health. About three years ago, he first noticed an enlargement in the right side of the neck, which gave him no pain, and which was usually considered by the medical men whom he consulted to be an enlarged gland. When he first came under my care, the swelling was about the size of a duck's egg, hard to the touch, and freely movable, lying in the posterior superior triangle. He said that for six years he had felt a weakness in the back, between the shoulders, so considerable that he had bought a band to support himself; and about four years ago he first experienced coldness and numbness at the tips of the fingers. This was at first transitory, but at length became permanent, so that he was unable to pick up a pin or button his coat. This condition could not have arisen from want of muscular digital power, for he could bring the tips of the fingers well together, and was cognisant that they were so in apposition; but, when some foreign body was interposed between the cutaneous surfaces, this impressional cutaneous sense was not conveyed to his brain; hence he could not appreciate it. It was only through the medium of visual sense that he was made acquainted with its presence. If he took up a cup, he grasped it firmly, and held it tightly enough, while he was looking at it; but, immediately he lost sight of it, the grasp became relaxed, and down went the cup. This power of digital co-ordination was in abeyance from the want of cutaneous sense; but he was always helped by the aid of reflected as well as of direct vision: by the use of a looking-glass, for example. In addition to this condition of the hands, there was numbness of the right foot, which he dragged after him in walking. He complained of slight pain between

the shoulders about the fifth dorsal vertebra, not increased by pressure, but augmented by fatigue. From this period, he gradually lost motor power in both upper and lower limbs; so that when admitted, two years ago, into the Hospital for the Paralysed, he was unable to walk, and could not even lift his feet from the ground.

When admitted into the Central London Sick Asylum in August 1872, he had a bad bed-sore, and was greatly prostrate. There was no want of cutaneous sensibility anywhere over the body, except at the tips of the fingers, more marked at the finger and thumb. In describing the symptoms, we will first commence at the

Sensorium.—Upon arriving, he felt stupid and heavy. He did not stagger. The eyes were bright, and there was an intelligent and even intellectual expression of countenance. The memory was good, and his mental powers were in no way affected. All his special senses were perfect. He had no shaking of the head or defect of speech; no divergence of the lingual movements; no dysphagia or dysphonia. Only when standing up or trying to walk was there spastic contraction of the left sterno-mastoid and trapezius muscles, drawing the head over the left shoulder. At ordinary times, inspiration was performed quietly enough; but, when he was not so well as usual, the breathing became jerky; he was unable to expand the chest; the head and shoulders were raised, and the extra-inspiratory muscles were brought into play. There was, in fact, defective *temporary* tone in the intercostal muscles, with some amount of cyanosis, and distressed facial aspect; and it was also quite evident, from his manner of breathing, that the diaphragm was more or less implicated. He said that his spine felt weak; but there was no deformity, and no especial tenderness upon pressure over the spinous processes.

Upper Extremities.—Both had undergone, and were undergoing, muscular wasting. The sense of touch was variable. When he closed the eyes, he sometimes appreciated the drawing of a penholder across his hand and fingers, even to its precise location. At other times, he did not feel it; or, if he did, he was not able to localise it. The movements of the upper extremities were very limited, on account of the muscular degeneration, which was more marked on the extensor than on the flexor side. The left hand was flexed; the fingers not into the palm, but the two distal phalanges upon the proximal. He had no voluntary power to extend the finger; but, when the left leg was automatically flexed, the fingers of the left hand became involuntarily extended. This relaxation of contractility in the fingers was immediately succeeded by contraction, again and again repeated. This co-existence of automatic nerve-force in the upper and lower extremities was a strange physiological phenomenon.

Sphincters and Bowels.—The bowels were usually very constipated, but occasionally relaxed. When this was the case, he had little or no power over the anal sphincter. He occasionally had retention of urine; and he always knew when this would be—not from general malaise, but from the offensive character of the urine.

Lower Extremities.—The muscular and general wasting was not so much marked here as in the upper. The right and left legs were both alike affected, and he had not the least power to stand. There was no anæsthesia. When lying in bed, he was able to draw his legs toward him, flex, and then extend them. He could also cross one leg over the other. Occasionally, they were subject to reflex movements; but reflex conditions were certainly not a marked feature in this case.

From November 1873, the man's condition changed but little. He at times suffered from retention of urine and very urgent dyspnoea. On July 9th, 1874, the day preceding his death, the dyspnoea was unusually urgent, and he became considerably cyanosed. On the night of the 10th, he suddenly expired.

Necropsy, twelve hours after death.—Cadaveric rigidity was marked. The body was fairly nourished, and there did not appear to be any extreme muscular wasting of the lower extremities; but there was some atrophy of the intercostals. Upon removing the calvarium, the dura mater was found to be healthy. There was slight opacity of the arachnoid, with some effusion. The vessels of the pia mater were engorged with black blood. When removed, the brain to all external appearance was healthy enough, as were the arteries, grey matter, and motor tract at the base. There was some chronic thickening of membranes lining the lateral ventricles, with supervascularity and slight excess of fluid. The removal of the cord was effected without hindrance as far as the second cervical vertebra. Here, occupying part of the cervical canal, was a foreign body, which was found to be in connection with the tumour of the neck to be presently described. When the cord and brain were removed, the seat of disease became readily apparent. In connection with the dura mater, posteriorly and laterally to the right, was found an abnormal substance pressing forwards and inwards upon the cord; and in one part especially it pushed the membranes before it to the size of a small bean, pressing forward the posterior nerves

* Read before the Medical Section at the Annual Meeting of the British Medical Association in Norwich, August 1874.

with the sensory ganglion, so that the ganglion could be distinctly seen, with the posterior and anterior nerves in connection with it. The third pair appeared to be thus implicated. This tumour was not adherent to the arachnoid membrane, and was distinct from any positive connection with the cord itself. Yet in this exact situation the cord, to the extent of about half an inch, had undergone change, undoubtedly from pressure, and presented a somewhat similar appearance as a cord would do where a fractured vertebra has been for some time pressing upon it. The cord, for a little distance above and below this, was slightly bulging, as from softening. The membranes were slightly supravascular; but there was no adhesion, nor effusion of lymph, or other sign of inflammatory change.

Tumour.—In reference to the tumour, its connection with the cord was not diagnosed during life; neither was it supposed that it had anything to do with the man's parietic state. It was, it will be seen by the rawing, about the size of an orange, and passed between the second

and third vertebræ. This portion evidently formed its pedicle, and there is not much doubt but that it originated from the connective tissue fibres of the dura mater. It was quite free from any trace of adhesion to surrounding textures outside the vertebral canal. Upon section, it was found to be tough, apparently homogeneous, somewhat elastic, and of a dirty white colour. Under the microscope, it presented a fibro-nucleated appearance; consisting, first, of round, oval, and puriform nuclei, with fine granules; secondly, of a multitude of fibres, which divided and subdivided into finer and finer branches; and these branches were connected with the nuclei and granules, and formed with them a network. Small matter of pigment-granules were scattered throughout the tissue.

ON TAR AND THE IPECACUANHA SPRAY IN THE TREATMENT OF WINTER COUGH.

By WILLIAM MURRELL, L.R.C.P.

THE following remarks on the administration of tar will, I hope, remove any difficulty which Mr. Cheyne and other gentlemen may have experienced in the use of this remedy. In the observations made by Dr. Ringer and myself, the drug used was wood-tar, the *pix liquida* of the *Pharmacopœia*. This was made into pills, each containing two grains, by mixing it, by means of a gentle heat, with a grain of wax and two grains of powdered liquorice root. Some difficulty was experienced in coating these pills, as the spirit used for this purpose dissolved out the tar. In private practice, we have therefore usually employed small capsules, each containing from two to three grains. Larger capsules, similar to those used for copaiba, are also made, but they contain a larger dose of the drug than it is necessary to administer in cases of bronchial catarrh. There are several other preparations containing this drug which are largely used on the continent, and might with advantage be introduced into this country. The *dragées de Christiania au goudron de Norvège* are elegant little bonbons, each containing five grains of tar. Tar-water or "eau de goudron" is also made, which contains two grains in the drachm, and may be taken in sugar and water, or with claret at dinner, the combination being almost tasteless.

The observations on the treatment of chronic bronchitis and winter cough by the ipecacuanha spray were originally published in August last. As a considerably increased experience of this method of treatment, both in hospital and in private practice, has not only confirmed our previous statements, but has added several new points of interest to our knowledge of the subject, a brief *résumé* may prove not unacceptable. The inhalations prove most useful in those cases in which the patient suffers from cough and dyspnoea on exertion during the winter, but is comparatively free from these symptoms in summer. The expectoration is usually abundant, and is often frothy and expelled with difficulty. There is never any true hæmoptysis, although the expectoration may be occasionally streaked with blood after a violent paroxysm of cough. This condition may be accompanied by considerable loss of flesh, lowness of spirits, and other symptoms, which quite incapacitate the patient from following his occupation during the winter months. In these cases, almost without exception, the patient either comes of an asthmatic or phthisical family, or he follows some employment which necessitates his exposure to cold, or wet, or dust. Many of these patients suffer from gout or chronic rheumatism. On making a physical examination of the chest, only a little emphysema may be detected, or there may be sibilus over both fronts and backs, with bubbling rhonchus at the bases. It is very necessary in these cases to ascertain the absence of organic cardiac mischief. A patient, who last year suffered from bronchial catarrh, and was greatly benefited by the ipecacuanha spray, applied for relief this winter. The old treatment was adopted with but little benefit; and, on a more careful investigation of the case, it appeared that the patient had, during her absence in the summer, suffered from rheumatic fever, and that the dyspnoea was due to mitral regurgitation. The spray has proved most successful in those cases of winter cough in which the dyspnoea is the prominent symptom. In true neurotic asthma, however, little or no benefit is derived from its employment, and it may even increase the frequency and duration of the paroxysmal attacks. The spray has been used with advantage in a few cases of phthisis, both in the early and in the advanced stages, but our experience upon this point has been limited.

The method of giving the inhalation may be now considered. In our earlier experiments, Richardson's double-balled spray-producer, such as is used for ether, was employed; but during the past winter the number of patients under treatment at the hospital has necessitated the employment of Siegle's steam spray-inhaler. The ipecacuanha wine was used either pure or variously diluted, the most usual strength being one part of the wine to one or two of water. The use of undiluted wine occasionally produces dryness of the throat and nausea, the latter symptom most frequently occurring in those cases in which the patient is not careful to expectorate the mixture of saliva and condensed spray which accumulates in the mouth. The quantity of wine used at each inhalation varied from a half to two drachms; in a few cases as much as an ounce was given, but with no advantage over the smaller quantity. The Richardson's spray-producer atomised one minim at each squeeze of the ball, so that about 150 squeezes were usually given when a mixture of one in two was employed. The Siegle's apparatus, when fully at work, vaporises a drachm in about three minutes. The inhalations were given daily, the patient usually requiring ten or twelve.

The benefit derived from the spray, though often prompt, is in many