

Tumours of the Brain in the Sane and the Insane. By R. BOYD, M.D. Ed., F.R.C.P. London.

(Continued from Vol. xviii., p. 536.)

The following twenty-two cases of Tumours on the Brain occurred in the St. Marylebone Infirmary, including eight scrofulous and four cancerous.

SCROFULOUS TUMOURS.

In 206 cases of pulmonary phthisis, 132 in males and 74 in females, published in the "Ed. Med. and Sur. Journ.," I found scrofulous tumours and tubercles in the brain in two males and two females.

Male, aged six years (534). Pulmonary tubercles, combined with tabes and hydrocephalus, and miliary tubercles on the *pia mater* at base of cerebrum. Congestion of blood in cerebral veins; redness of the membranes; convolutions of brain flattened; about two ounces of clear fluid in the ventricles. For three days before death there was great torpor and drowsiness.

A stableman, aged 25 (547). Phthisis, combined with delirium a week before death, when he became violent, and was removed to the insane ward. A flat scrofulous tumour, size of a shilling, on the posterior portion of *falx cerebri* on right side. Tubercles in both lungs and in liver.

Female, aged eight years (659). Scrofulous tubercle in the posterior and upper portion of the left *corpus striatum*, but not involving the white central fibres. Convolutions of brain flattened; about four ounces of fluid in the lateral ventricles. Tubercles and cavities in lungs; ulceration in ilium.

Female, aged 55 (708). A tumour, size of a filbert, from *dura mater*, about the centre between cerebral hemispheres. Tubercles in both lungs; aneurism of the thoracic aorta. (See Case 5, "Lancet," vol. 1, 1840-1.)

Tubercles in the brain were subsequently found in four other cases, two in males and two in females.

Male, aged five (780). Admitted with tabes mesenterica; twenty-two months before death enlargement of the cervical and inguinal glands, and latterly a troublesome cough. A scrofulous tumour, size of a filbert, in the posterior portion of

the right cerebral hemisphere. Small tuberculous cavities in lungs; scrofulous mesenteric glands.

Male, aged 13 (781). Scrofulous tumour in the cerebellum, size of a filbert, at the posterior part, at the junction of the lobes; fluid in the sac of the arachnoid. For several years a patient in the infirmary for scrofulous disease of the left wrist and elbow. The knees were contracted, the feet œdematous, body emaciated; the intellect clear to the last.

Female, aged seven (782). Scrofulous tumours on each side the *sella turcica*; one tumour in the left cerebral hemisphere, above the lateral ventricle. About two drachms of fluid in ventricles; brain unusually pale. Tubercles in the lungs and on the peritoneum; enlarged mesenteric glands and scrofulous hip joint. No history of case during life.

Case 783. A female child, aged 12 months. Paralysis, combined with hydrocephalus, a scrofulous tumour, softening in the brain, and pulmonary tubercles. The child was six months and one day a patient in the infirmary before her death. She was admitted with pneumonia, of which she got well in about three weeks. She had subsequently an attack of ophthalmia, from which she also recovered. Ten weeks after admission strabismus of the left eye was observed, which was quickly followed by inability to raise the eyelid; the other eyelid drooped a little; the pupils were dilated. Hemiplegia of the right side came on after a fit, and the mouth was drawn to the opposite side. The right arm was kept perfectly close to the side, but the forearm might be raised without her expressing pain. There was feeling in the limbs, but loss of motion.

During the last two months she was able to move the fingers of the affected side, which she could not do at first. She slept well at night; but lost flesh gradually.

After the fit, convulsions occurred about once a week, and continued for a quarter of an hour; the toes and fingers flexed; the legs straight.

During the last five weeks the convulsions became more frequent, almost every day, and for the last two days the fits were almost continuous.

The body was examined 22 hours after death.

Head.—The lateral ventricles were distended, and contained between two and three ounces of clear fluid; there was more fluid than usual in the spinal canal. There was a cavity which would contain a split pea in the posterior portion of the left cerebral hemisphere, and another and still larger

cavity in the left hemisphere of the cerebellum; there was softening of a portion of the brain around both cavities. On the right side of the *pons Varolii* was a scrofulous tumour the size of a walnut. Weight of the brain, $30\frac{1}{4}$ ounces.

Chest.—There were numerous tubercles in both lungs in various stages towards softening, but no tubercular cavities; weight of the lungs together, $5\frac{3}{4}$ ounces; the heart, 1 ounce.

Remarks.—In the four last cases tubercles were found in other parts of the body beside the brain; there were tubercles in the lungs in three, in the mesenteric glands in two, in the peritoneum in one; ulceration of the joints in two. The tubercles were situated in the cerebrum in two, and in the cerebellum in one, and on the *pons Varolii* in one.

The tubercles were confined to the *pia mater* in three out of the four examples referred to in the note; there was a tubercle in the left *corpus striatum* in one, No. 659. Tubercles were found in the lungs (P. phthisis) in all four, in the mesenteric glands in three, in the spleen in two, in the liver in two, and in the peritoneum in one.

Of the eight cases, four were males and four females; the ages from four months to 13 years, except one male, No. 547, aged 25 years.

Age.—Tubercle of the brain usually occurs before puberty, between the ages of three and seven years; according to Dr. Green, who has published an account of 30 cases in the *Med. Chir. Trans.*, vol. xxv., p. 218, between the ages of 19 months and 12 years. The disease seldom occurs in adults; there is one adult among the eight here mentioned, and Abercrombie mentions two instances in men, one of 34 and the other 36 years (*Diseases of the Brain*, 3rd edition, p. 168 and 170). In old age the disease has not been observed.

Seat of Tubercle.—According to Cruveilhier (*Anat. Pathol.* 18 Liv., p. 2), there is no part of the brain or spinal marrow in which tubercle has not been found; he saw only two cases in which the tubercles were confined to the brain; he found the *pia mater* frequently the seat of the disease, and both he and Abercrombie found tubercle more frequent in the cerebellum than in the cerebrum. According to Andral and Green, the cerebrum is the part most commonly affected. Dr. Hope, in his *Morbid Anatomy*, p. 298, states that tubercles are commonly generated in the *pia mater*, and that they have a tendency to grow inwards.

In all the cases published by Dr. Green, in the cases here related, and according to general experience, the tubercles

were not confined to the brain, but existed in other organs; the greater development, however, in the brain in several leads to the idea that the disease commenced in the nervous system.

Tubercles often occur singly in the brain, frequently there are two or three, and as many as twenty have been observed. Their size varies from that of a millet-seed to the size of a hen's egg. It is usually that of a pea. A scrofulous tumour occupying almost the entire of the left lobe of the cerebellum is figured in Dr. Hooper's *Morbid Anatomy of the Human Brain*, Pl. xi.

Tubercles in the brain are sometimes encysted, and, like tubercles in other parts of the body, are of different degrees of consistence, being sometimes hard and sometimes soft. (See fig. 259, Dr. Hope's *Morbid Anatomy*.)

The portion of the brain around the tubercle is often diseased, frequently softened, at other times it appears to be quite healthy.

Symptoms.—Sometimes like those of encephalitis or of acute hydrocephalus; headache is the most constant symptom. In some cases convulsions and paralysis, often diversified and irregular in succession, have been observed, as in case 783. Cerebral tubercles have been found in very considerable numbers without any cerebral symptoms, as in case No. 781.

Duration of the disease.—This is exceedingly variable. Abercrombie on *Diseases of the Brain*, 3rd edit., p. 165, relates a case in which the attack lasted but five weeks. There is one by Mr. Dunn in the *Med. Chir. Trans.*, Vol. xxv., p. 218. The illness was of six weeks' continuance. In one before referred to, No. 783, the cerebral symptoms first became evident sixteen weeks before death.

A case is related by Cruveilhier (in the work before referred to) of a soldier aged 21 years, who had been imprisoned for two years, during which time he was sullen and silent, but irritable when spoken to. He had no venereal appetite; his appetite for food was great, often excessive. From the prison he was admitted to the hospital of Val de Grace, and died in three months after. On the upper surface of the left hemisphere of the cerebellum were two tuberculous masses each the size of a pigeon's egg. There were also tubercles in the lungs. A similar case is figured in Liv. II., Plate 6, of Cruveilhier's work, and also one in which the *pons Varolii* or annular protuberance is the part affected.

Microscopical appearances.—In the case already referred to,

No. 534, there were tubercles in the *pia mater*, peritoneum, and lungs. They were examined by Mr. Gulliver, who found the tubercles of the *pia mater*, peritoneum, and lungs, in this case of the same character as in many others that he had examined, viz., composed of corpuscles, giving the idea of blighted cells, generally about $\frac{1}{4000}$ th of an inch in diameter, oily like molecules, commonly from $\frac{1}{3000}$ th to $\frac{1}{8000}$ of an inch in diameter, and some granular matter. In crude tubercle, the proportion of the molecules and granular matter was greatest, and there was besides a quantity of irregularly shaped flakey particles. In the tubercles of the *pia mater* the corpuscles were connected together by most delicate and apparently fibrinous fibrils, which was also sometimes the case in miliary tubercles of the lungs.

The molecules above mentioned are of a fatty nature, like the nuclei of primary cells generally occurring in health and disease, as shown by Mr. Gulliver in his Notes to a former part of these contributions (Edin. Med. and Surg. Journal, Vol. ix, p. 158-164, and in Med. Gazette, June 21, 1843-44, p. 411.) The subject is interesting, because, before those observations, we seldom heard of fatty degeneration of any organ but the liver; whereas he has shown that it is common in the lungs, kidneys (in Bright's and in other diseases), testicles, &c.; and Dr. Johnson, in a paper read before the Royal Medical and Chirurgical Society, Nov. 11, 1845, a report of which is in the Lancet, 1845, Vol. ii, p. 565, has since detected these fatty nuclei of cells in Bright's disease of the kidney. As to the precise site of pulmonary tubercle, Mr. Gulliver found it both within the air cells and in the filamentous tissue between and on the outside of them.* Mr. Rainey has made observations to the same effect, adding that the deposit begins within the air cells, and afterwards extends to their outside.†

CANCER. (TWO MALES AND TWO FEMALES.)

Case 784. A coachman, aged 50 years, married. Cancerous tumour on the *dura mater*, complicated with softening of the brain; pneumonia and diseased liver. Admitted to the Infirmary twelve days before his death. Hemiplegia of the right side had existed for six months; after admission he had several convulsive fits; twitchings of the muscles of the face;

* Ed. Med. and Surg. Journ., Vol. ix., p. 161.

† Rainey on the Minute Structure of the Lungs, Med. Chir. Trans., Vol. xxviii.

the face was flushed. He was dull in comprehending, and slow in answering questions. Seven days after admission he became suddenly worse, and was never able to speak afterwards.

Head.—The structure of the brain softened and torn in removing the *dura mater*, which last was thickened over the posterior half and outer side of the left cerebral hemisphere; several schirrous tumours of various sizes, from a pin's head to a pistol bullet, were adherent to the thickened *dura mater* and imbedded in the brain, which was softened all around, and like cream cheese in colour. The right cerebral hemisphere and remainder of the brain quite healthy; about one ounce of clear fluid in the lateral ventricles. Weight of the brain, 43 $\frac{3}{4}$ ounces.

Case 785. A male, aged 52 years. Cancer of the cerebellum, complicated with abscess in the brain and cancer of the left lung and liver. He was not a patient in the Infirmary, but had been confined to bed ill at home for twelve months before his death.

Head.—The *dura mater* adherent to the anterior portion of the left cerebral hemisphere; on raising it the under surface was red, and about a teaspoonful of purulent matter was found beneath. A second abscess, filled with purulent matter, about two inches long and more than one inch wide, was found on the upper and outer side of the left lateral ventricle. There was purulent matter with surrounding redness in the substance of the *hippocampus major* on the left side. On the anterior and outer portion of the right cerebral hemisphere the *dura mater* was adherent and unusually red at one point, the size of a sixpence, the surface of which was covered with purulent matter.

There was a diseased mass attached to the outer side of the cerebellum, the size of a pigeon's egg. The membranes around very red, covered with purulent matter. In one part of this mass was a hard cancerous portion the size of a musket bullet.

Chest.—Pleuritic adhesions at the upper lobe of the left lung only, which lobe contained a cancerous tumour the size of a large orange, extending from the root of the lung; there was a softening of the centre of the tumour. Weight of the lung, 21 $\frac{1}{2}$ ounces; the right lung, 11 $\frac{1}{2}$ ounces; and the heart, 9 ounces.

Abdomen.—In the right lobe of the liver was a cancerous tumour the same size, and soft in the centre, as the one in the lung.

Mr. Gulliver, by examination with the microscope, found the matter in the lung, liver, and cerebellum to be identical, and of a cancerous nature.

Case 786. Charwoman, aged 70 years, widow. Cancer of the brain, lungs, left kidney, and left renal capsules, combined with hydatids in the liver.

Ten weeks a patient in the Infirmary; she had incontinence of urine for three weeks before her admission; urine alkaline, but contained no albumen. The aspect of the patient bore evidence of her suffering from malignant disease. There was a hard circumscribed abdominal tumour to be felt nearly the size of a newly born child's head; the bowels being either in a relaxed or confined state produced no effect on the size of the tumour. The body was examined twenty-one hours after death.

Head.—The *dura mater* was adherent to the anterior portion of the cerebral hemispheres; the convolutions flattened; in the anterior portion of the right hemisphere there was a firm round tumour, two inches in diameter, of a pink colour externally, yellowish green internally, and white at the centre, where it was softened. The portion of the left cerebral hemisphere anterior to the left lateral ventricle formed a brownish mass, attached to the membrane covering the roof of the left orbit by a dark root three-quarters of an inch in diameter. The brain immediately around the diseased mass was in a pulpy state; the lateral ventricles contained about one ounce of clear fluid, which was found, both by heat and the addition of nitric acid, to contain albumen. The weight of the brain, $45\frac{3}{4}$ ounces.

Chest.—Pleuritic adhesions on both sides; the upper lobe of left lung was firmly adherent to the second rib, which broke in the removal of the lung, being very brittle, as has been frequently observed in cancer. The superior third of the upper lobe of the left lung was occupied by a white scirrhus tumour; in the upper portion of the lower lobe there was a white tumour the size of a pigeon's egg, in a softened state; and in the lower portion of the same lobe another tumour, about one-third the size, in a similar state. The right lung presented on the external and posterior surface four firm projecting cancerous tumours, the largest one about two inches in diameter.

A model of the lungs in wax was made by Mr. Tuson, and preserved in the museum of University College.

The bronchial glands in the vicinity of the left apex were enlarged and cancerous. The right lung weighed $20\frac{1}{2}$ ounces; the left, 33 ounces; and the heart, $9\frac{1}{2}$ ounces.

Abdomen.—Liver large; a white circle of chalky matter, the size of a teacup, which surrounded a mass of hydatids near the surface of the right lobe.

The liver weighed 57 ounces; the stomach, 5 ounces; the pancreas weighed $2\frac{1}{2}$ ounces; and the spleen, 12 ounces; the right kidney enlarged, minute cells on the surface; weight, $8\frac{1}{2}$ ounces. No trace of the left kidney, the situation occupied by a yellowish green cancerous mass, which weighed 33 ounces; part of the capsule of the kidney found very much thickened, the part modelled and preserved with the lungs; the left renal capsule occupied by a firm cancerous mass; the right renal capsule weighed 2 drachms and 40 grains; and the uterus, $1\frac{3}{4}$ ounces. Weight of the body, 73 pounds; height, 5 feet 5 inches.

Female, aged 40 (60). Paraplegia, contraction of lower limbs. Caries of nasal and malar bones left side. Emaciation. *Dura mater* strongly adherent to skull at posterior part of right hemisphere. The brain beneath, for three-quarters of an inch, very firm, carcinomatous; attached to it externally a cluster of cysts containing clear fluid, forming together a tumour, size of a pigeon's egg. A similar appearance, but smaller in size, on the right side. Atrophy of the brain; weight, $27\frac{1}{2}$ ounces; heart small, $7\frac{1}{4}$ ounces; liver large, 56 ounces.

Remarks.—The four cases of cancer occurred in persons of 40 years old and upwards. In the first one the *dura mater* was the seat of the disease, there was softening of the brain, and cysts were found in the liver.

In the second the cerebellum was the part affected, the *dura mater* was adherent, and there was pus in the brain; there was also cancer in the left lung and in the liver. Cancerous matter from the cerebellum, lung, and liver, was subjected to a microscopical examination by Mr. Gulliver, and proved in all four to be identical; fatty molecules, either free or included as nuclei of the cancerous cells, were very abundant.

In the third case, the woman of 70, the cerebrum was affected with cancer, the *dura mater* adherent, and the brain around the cancerous mass in a pulpy state; the lateral ventricles contained albuminous fluid. Both lungs, the bronchial glands, the left kidney, and the renal capsules were affected with cancer. The liver contained hydatid cysts.

Duration of the disease.—The slow progress of the disease was well exemplified in the first case; hemiplegia had existed for six months; the existence of the tumours was the only

cause revealed for that unequivocal symptom. In the second case the illness was of twelve months' duration; and in the third of more than three months' duration.

Symptoms.—These are usually of gradual development, determined by the situation and size of the tumour, as well as by the direction in which the pressure is exercised, greater in proportion as it impinges on the centre and base of the brain; the sensibility of the skin is sometimes increased, sometimes diminished; and convulsions, paralysis, and stupor are the usual accompaniments; acute inflammation, fluid in the ventricles, or most frequently softening of the surrounding portion of the brain, are the usual terminations. If the patient has been for a considerable time confined to the recumbent position in bed, pneumonia is a common result, in this as well as in other diseases attended with much debility. (See "De Dolore Capitis, Anatomiae Practicae Boneti 1700, Lib. 1, Tom. 1, Obs. 67-71," Scirrhus tumours on membranes of brain, scirrhus pia mater. In the same vol. additamenta after page 77, De Reliquis Affectibus Soporosis, &c., Obs. 20, Hardness of brain, Obs. 21, Scirrhus tumour. Morgagni, Book v., Let. lxii. a. 15, Scirrhus of cerebellum).

The fact of cysts having been found in the liver in two out of the four cases of cancer is worthy of observation. In two cases there were cancerous tumours in the lungs and in other organs.

Cancerous tumours of the meninges are figured in pl. 1, 2, and 3, Liv. 8, Anatomie Pathologique by Cruveilhier, who divides them into two classes, external and internal; after combating the opinions of Louis and the brothers Wenzel, that the external layer of the *dura mater* was primarily affected; as well as the opinion that the bones of the cranium were the primary seat of the disease, which was supported by Siebold, Walther, and Graff, he agrees with Ebermaier, and divides them into external and internal, as before mentioned.

The external cancerous tumours, according to Cruveilhier, make their way through the bony parietes after the same manner as an aneurism: while the internal cancerous tumours, which are much the most common, increase in the opposite direction,—ultimately compress the brain and become imbedded in its structure, the *dura mater* at the same time having become thickened and adherent; this was particularly well marked in the first of the cases here related.

The second of the cases (No. 785) appeared to be one of

those in which the cancerous tumour had its origin in the subarachnoid cellular tissue, which is not an unusual seat of the disease.

In the Supplement to Abercrombie on the Brain, edit. 3, p. 433, *et seq.* are to be found cases of schirrus of the cerebrum and cerebellum, viz., cases 5, 11, 15, 32, and 38.

In Dr. Walshe's Book on Cancer, London, 1846, from p. 487 to p. 523, will be found Abstracts of Cases of Cancer of the Brain and Membranes, from the writings of Andral, Calmeil, Broussais, Louis, Graff, &c.

Andral states that the disease is one of slow formation, and occurs at all ages. Out of 45 cases, it occurred twice in infants of 2 years, once at 3, once at 4, once at 7, once at 11, once at 12, once at 14, once at 17, three times between 20 and 30, eight times from 30 to 40, eleven times from 40 to 50, nine times from 50 to 60, five times from 60 to 80. (*Cours de Pathologie Interne*, 2nd edit. Bruxelles, 1837.)

OTHER TUMOURS. (1 MALE AND 6 FEMALES.)

Case 787. A male, inmate of the workhouse, aged 33 years. Paralyzed for some years; died three days after his admission to the Infirmary, very much emaciated; he had hemiplegia of the left side, and passed his motions involuntarily.

Head.—On the posterior portion of the right cerebral hemisphere there was a tumour which weighed 6 ounces; there was also a small tumour which weighed $\frac{1}{2}$ ounce, on the opposite side, in the left cerebral hemisphere; weight of the brain, 45 ounces.

Female, aged 95 (154). Bronchitis, natural decay. A tumour, size of a musket bullet, attached to the posterior portion of the *dura mater*, with a corresponding depression in the brain, serum on its surface, as is usual in the aged.

Case 788. A prostitute, aged 26 years. Tumours of the *dura mater*, complicated with softening of the right cerebral hemisphere.

Admitted to the infirmary six days before her death, in a state of stupor, attended with syncope; pulse feeble; pain in the head; pupils dilated. She died in convulsions, similar to apoplexy; there was no paralysis.

Head.—The *dura mater* was firmly adherent to the upper and posterior portion of the right cerebral hemisphere, and had three tumours attached to the under surface, occupying about three inches in circumference of that membrane, and

imbedded in the structure of the brain to the depth of half an inch. The brain around the tumours softened, of a smooth white appearance, like thick cream. Weight of the brain, $47\frac{1}{2}$ ounces.

Case 789. A female, aged 49 years. Tumour on the *dura mater*, complicated with a granular state of the great omentum. The body brought for burial; nothing known of the case during life.

Head.—Congestion of the brain; a small tumour, size of a pistol bullet, attached to the under surface of the *dura mater*; there was a corresponding indentation on the surface of the brain. Weight of the brain, $40\frac{1}{2}$ ounces.

Chest.—Slight pleuritic adhesions of the upper lobes of the lungs; earthy matter in the apices, and a puckered state of the pleura, probably the result of small tuberculous cavities which had healed and closed up. Weight of both lungs, $25\frac{1}{2}$ ounces; the heart 7 ounces.

Case 790. A charwoman, aged 59 years. Tumours of the falx and tentorium imbedded in the cerebral hemispheres, with softening of the brain, combined with pulmonary phthisis, jaundice, and softening of the liver. More than ten weeks a patient in the Infirmary, and ill four weeks previous to being admitted.

At intervals during her illness she became insensible for a time, and then rallied again; towards the end these attacks of insensibility became of longer continuance, and the urine and fæces were passed involuntarily. Hemiplegia of the right side came on one month before death. The body was examined 39 hours after death.

Head.—There was softening of the centre of both cerebral hemispheres, in which were found two tumours, one on each side, adherent to the falx and to the tentorium below, imbedded in the substance of the hemispheres; the largest of the tumours was the size of an orange, and on the left side; the tumours when divided appeared like melanoid matter mixed with fibrous, and were in one part yellow, and in another reddish. Weight of the brain, $47\frac{1}{4}$ ounces.

Chest.—The right lung only adherent to the parietes; the pleura thickened over the apex, and a tuberculous cavity beneath; a portion of the lower lobe of the same lung in the second stage of pneumonia; weight, $19\frac{1}{2}$ ounces. The left lung natural; weight, $12\frac{1}{2}$ ounces; the heart, 8 ounces.

Case 791. A female, aged 60 years. A tumour on the membranes of the brain, and an increased quantity of fluid

in the ventricles. She died in a chronic ward in the work-house, in a fatuous state. Occasionally she suffered from pain in the head and face, and twitchings of the muscles of the face. She had also been subject to convulsions.

Head.—The lateral ventricles of the brain contained about two ounces of fluid. Adherent to the *dura mater*, on the right side of the *sella turcica*, was a tumour the size of an almond, of a reddish colour, and firm fibrous structure. Weight of the brain, 37 ounces.

Case 811. A laundress, aged 50 years. Apoplexy, combined with a tumour on the *dura mater*, and hemiplegia on the right side. Two days before her admission to the Infirmary she was seized with a fit. About half an hour before the seizure she complained of giddiness. She became comatose soon afterwards, from which state she never recovered, and died the day after her admission.

Previous to this she had two attacks of apoplexy, the first one two years before, attended with hemiplegia of the right side. For several years she had been subject to convulsions, frequent flushings of the face, and pain in the head.

Brain.—The right cerebral hemisphere obviously larger than the left; the convolutions flattened; the arachnoid preternaturally dry. The right lateral ventricle contained a large clot of blood, which was found to extend beneath the right *corpus striatum*. There was an oblong cyst, with rusty coloured walls nearly an inch long, in the left *corpus striatum*. (This was probably the remains of the first apoplectic attack, as well as the cause of the hemiplegia.)

A tumour, the size of a walnut, was attached to the *dura mater* on the outer side, above the centre of the cerebral hemisphere. There was a corresponding depression or cavity for this tumour in the convolutions beneath. Weight of the brain, 42½ ounces.

Remarks.—In the young man's case the tumour in the right cerebral hemisphere was as large as an orange; hemiplegia of the left side had existed for some years, from which it is probable the tumour was of very slow growth.

Perforating tumours of the cranium have been known to be of very long duration; one is mentioned by Graff of 37 years', and another by Louis of 40 years' standing.

In five females the membranes were firmly adherent to the tumours; very probably had their origin in the membranes, as has been frequently observed: Hooper's *Morbid Anatomy of the Brain*, plates 6 and 7. In the Supplement to Aber-

crombie on the Brain, p. 435, *et seq.* are several cases, including firm, soft, chalky, cheesy, fatty, spongy, reddish tumours, of various sizes in different parts of the brain; also hydatids, and in Hooper's Morbid Anatomy, pl. 10 and 13. In the Dict. de Med., Tom. xi., p. 470, 482, various tumours of brain and membranes are treated of; and in Dr. Copland's Dictionary of Practical Medicine, Part i., p. 207, 223-25. Cruveilhier, Anat. Pathol., 2nd Liv., p. 6. Boneti, Anatomia, Lib. i. Tom. i., Observ. 56, 61, to 64, 70, additamenta, de Phrenitide, &c. Ob. 7, 35, p. 379, additam. Ob. 3.

Female, aged 33, married (746). About 18 months before death she was suddenly seized with giddiness and pain in her head, which has continued more or less ever since. Amaurosis and hemiplegia of the right side. In a ward for chronic cases in the workhouse. Became delirious three days before death, and was admitted to the Infirmary in a state of collapse.

Head.—Cerebral convolutions flattened; about five ounces of fluid in the lateral ventricles; optic thalami and optic nerves atrophied. The lower portion of the left *corpus striatum* was semi-transparent, and contained granules, size of a pin's head, much firmer than the natural brain structure. Between the under surface of the brain, between it and the base of the skull, were several granules, in a false membrane, similar to those in the *corpus striatum*. Brain, 43 ounces; other organs natural. Weight of the body, 118 pounds; length, 5 feet 5 inches.

Female, aged 70 (815). Admitted to the Infirmary eight days before death. Had an apoplectic fit six days before admission; an opium eater. Hemiplegia of left side; a tumour in brain; enlargement of heart; autopsy 37 hours after death. Weight of the body, 110 pounds; length, 5 feet 5 inches.

Head.—A tumour, mixed colour, red and grey, size of a musket bullet, in the anterior portion of the right cerebral hemisphere, above the roof of the ventricle. A clot of blood, about one ounce in weight in the posterior portion of the left hemisphere, the brain around eroded. Weight, 44½ ounces; head enlarged, 13½ ounces; other organs natural.

Of these three last cases, one was recorded as a case of hydrocephalus, from the large quantity of fluid in the brain; it was a chronic case, and most probably the tumour was the origin of the disease. The second was a case of pleuritic and chronic bronchitis, and the last was a case of apoplexy, which may have been induced by the tumour, but the immediate cause was enlargement of the heart.

Female, aged 88 (473). In a state of garrulous fatuity; admitted to the Infirmary from the workhouse, ten days before death, for dropsy, chronic bronchitis, &c.

Head.—Atrophy of cerebral convolutions, and fluid on surface of the brain; a light brown coloured mass, the size of a boy's marble, attached to each choroid plexus, the one on left side also to the floor of the ventricle; these tumours had a crystalline appearance, and were found to consist of cholesterine.

Of these 22 infirmary cases, 7 were in males and 15 in females.

The tumours which were adherent to the *dura mater* were probably of slow growth, and occurred in six females, one of whom lived to the advanced age of 95. Scrofulous tumours in the brain occurred in six cases in children, who seldom become insane, and in 2 per cent. of the phthisical cases. Only one case required to be transferred to the insane ward, and one was fatuous.

Uniformity in Public Asylum Reports. By J. A. CAMPBELL, M.D., Assistant Medical Superintendent, Garland, Asylum, Physician to the Carlisle Dispensary; and J. TODD, Clerk and Steward, Garlands Asylum.

The subject of a uniform system of asylum statistics has occupied the attention of some of the most eminent alienists in this country, among whom we may mention Dr. Thurnam, Dr. Conolly, Sir Charles Hood, Dr. Bucknill, Dr. Robertson, and Dr. Maudsley. In a very able paper on this subject, published in the January number of this Journal for 1861, Dr. Robertson gave forms of Medical and Financial Tables, and made suggestions as to the Domestic Statistics for an Asylum Report which are now very generally adopted in substance in the best English Asylum Reports.

In October, 1865, the Association of Medical Officers of Asylums and Hospitals for the Insane published in this Journal the Report of a Committee appointed in 1864 for the purpose of drawing up a series of tables, as a basis for a uniform system of asylum statistics. They presented six medical statistical tables as the result of their labours. In the October number of the Journal for 1867 the second report of this committee appeared, with an increase in the