

ART. XI.—*Collection of Fluid in the substance of the right Lobe of the Thyroid Body.* By J. MASSEY, Esq. Surgeon, Nottingham.

THE subject of the present case is a man 30 years old, whose health has been tolerably good, having never required medical aid, except for the present disease, which he states has existed at least ten years. When first noticed by him there was a little enlargement on the right side of the windpipe, about the middle of the neck, which gradually increased, and after five years duration was about one-half its present size. At this period he first applied for relief. I then examined, and considered it an enlargement of the right lobe of the thyroid body; directed six leeches to be applied occasionally, and to rub in, night and morning, *Ung. Potass. Hyd.* and take the solution of iodine three times a day. There was no fluid perceptible at the period. He continued the use of the remedies for about three months, after which he says the swelling was softer, and somewhat reduced. It was not painful, and gave him but little inconvenience; and he allowed its increase without any further treatment till the present time.

October 30th. The tumour is situated over the right side of the thyroid cartilage, extending a little above, and for some inches below it,—the longest diameter being obliquely from before backwards, passing under the sterno-mastoid muscle externally. There is no pain on pressure, nor does he complain except from its inconvenience in size. It measures round the neck over its most prominent part eighteen inches. There is evident fluctuation, which is most apparent at its anterior and inferior surface. Here it is more prominent than elsewhere. There is also a pulsation communicated throughout its extent from its contiguity to the carotid artery, from which circumstance it has been by some considered aneurism; but this pulsation is not perceptible, after carefully removing the tumour as much as possible forward from the artery. His complexion is sallow; says he has never had jaundice, though there is now a slight bilious tinge of the conjunctiva. The bowels for some time have been very costive, motions frequently scybalous, of a brownish colour, but never like pipe-clay; urine high-coloured, but never marked his linen; his habits have been temperate; his breathing is difficult, accompanied with a wheezing sensation, much increased on exertion, particularly stooping; and he feels as if he has a ligature round his neck. There is dryness of the throat with a little cough. He has vertigo, frequent palpitation, and profuse perspiration on increased exertion.

I directed him to renew the use of the iodine treatment, which he continued till November 27th 1840. At this time

there was no perceptible alteration in the tumour. I therefore introduced an exploration needle, at the point where the fluctuation was most evident, and evacuated by it about five ounces of fluid, having the appearance of very thin bile, of an olive-brown colour, with an oily crystalline deposit on its surface. This almost completely reduced it to its natural size.

December 1st. After the needle had been used, the wound immediately closed. To-day the swelling has increased to about one-half the size it was before the puncture. I determined to let it accumulate in larger quantity, and then freely to lay open the sac, and keep it discharging by pledgets of lint introduced, secured by adhesive straps.

4th. The tumour has increased to its former magnitude. I therefore made an opening into the sac, four or five inches in extent, by means of a sharp-pointed bistoury, and evacuated at least five ounces of the same kind of fluid as before. (This was the second fluid, vide analysis, in which was a quantity of blood, escaping from the incision made in the sac and adjacent parts, which was not in the first quantity taken, November 27th.) The finger introduced into the sac could be passed above the thyroid cartilage, and downwards, very nearly to the sternum, and outwards under the sterno-mastoid muscle. The thyroid body was converted into a large cyst, containing the fluid; a pledget of lint was introduced into it, secured by adhesive straps. A very small quantity of blood was afterwards taken from his arm for analysis.

5th. Wound discharged very freely during the night. On removing the dressings about four ounces of fluid, as before, escaped, of a deep-red colour, from being mixed up with a quantity of blood. Has very little pain; dressed as before.

6th. There is more swelling of the parts, which is probably from increased vascular action; discharge is less bloody, escapes very freely; bowels costive.—*Cap. Pil. Cal. gr. v. statim, et postea Pulv. Jalap. Co. ʒi.*

7th. Discharge is exceedingly offensive, and averages throughout the day, he says, about eight ounces in quantity.

9th. Wound daily dressed, discharges freely.

14th. The discharge is more purulent, less in quantity, still very offensive. There is more swelling of the thyroid body and adjacent parts, than immediately after the first evacuation of the fluid. Bowels very costive, it being now more than four days since they were relieved. Repeat the purgative, and take three times a day *Sulph. Quin.* three grains; *Sulph. Magnes.* half-a drachm; water one ounce and a-half; apply over the pledget of lint a linseed meal poultice.

17th. The discharge daily diminishes, is now more sero-purulent; bowels torpid, motions brown; appetite good; the breathing is much more free; the palpitations and cough are very much better; and the sensation as of a ligature round the neck is not now per-

ceptible. *Capt. Pulv. Jalap. Co. ʒi. mane p. r. nata.* Continue the tonic, and have daily injected into the sac some of the following solution :

R. Potass. Hyd. ʒi ; Iodini gr. iii. ; aq. distillat. ʒxxvi. M. ft. Injectio. Afterwards apply a linseed poultice.

22d. The injection has been daily used ; discharge has considerably diminished ; there is now no bilious tinge of the conjunctiva ; bowels open ; there is very little more fulness than natural ; the neck measures at least two inches less. Continue as before.

28th. Still improving ; discharge is very trifling, more serous. His general health is much improved, and he will probably be quite well in a few days ; bowels are still torpid. Continue as before.

As we are but very imperfectly acquainted with the functions of the thyroid body, any pathological phenomena, in reference to the morbid alteration of its structure, or its abnormal secretion, will be acceptable, as a means of elucidating its actual use, and importance in the animal economy.

Fatty matter, as well as urine, and its peculiar principles, have been detected in unnatural localities ; and that other organs and tissues beside the liver may acquire the power of forming and separating cholesterine, and some of the other principles of bile, from the blood in large quantity, will be fully corroborated by the present case.

It is probable that the enlargement of this body primarily consisted in a derangement of its cellular structure, with an increased and vitiated exhalation into the cells, and their subsequent partial or general dilatation and thickening. The previous morbid exciting cause still continuing, an increased secretion into the cells with their further dilatation and rupture was the result ; so that the lobular structure of this body, in consequence of the additional accumulation, ultimately became converted into a large sac, which contained the adventitious fluid.

The accompanying analysis of the fluid and blood is made by my much esteemed and highly talented friend, Dr Wright,* in whose accuracy, founded on his extensive chemical knowledge, I have the utmost confidence.

First portion of fluid, removed November 27th.

Slightly alkaline, specific gravity, 1.0242	
Water,	905.140
Mucus,	19.830
Albumen,	5.210
Gelatine,	11.100
Albumen, combined with soda,	8.350
Cholesterine,	10.640

* For an account of his discovery of the presence of alcohol in ripe fruits, vide *Lancet*, September 29, 1838 ; also his valuable analysis of the ergot of rye, and detection of its active principle, vide Vol. liii. of *Edin. Med. and Surg. Journal*.

Oily matter,	-	-	-	-	5.200
Colouring matter soluble in water and alcohol,	-	-	-	-	8.250
Biliary matter,	-	-	-	-	9.730
Chlorides of sodium and potassium,	-	-	-	-	6.210
Carbonates of lime and soda,	-	-	-	-	4.380
Iron,	-	-	-	-	.250
Loss,	-	-	-	-	5.710
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Second portion of fluid, removed December 4th.

Alkaline, and containing hydrosulphuret of ammonia—
specific gravity, 1.0356

	Composition.				
Water,	-	-	-	-	896.310
Mucus,	-	-	-	-	34.270
Albuminate of soda,	-	-	-	-	7.920
Fibrine,	-	-	-	-	1.840
Cholesterine,	-	-	-	-	9.560
Colouring matter soluble in water and alcohol,	-	-	-	-	16.340
Gelatine,	-	-	-	-	10.830
Resin, not affected by nitric or muriatic acid,	-	-	-	-	5.820
Chlorides of sodium and potassium,	-	-	-	-	7.460
Phosphates of lime and soda,	-	-	-	-	3.210
Iron a trace.					
Loss,	-	-	-	-	6.440
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Blood taken December 4th, Specific Gravity, 1.0435

	Composition.				
Water,	-	-	-	-	810.520
Fibrine,	-	-	-	-	2.890
Albumen,	-	-	-	-	43.740
Colouring matter,	-	-	-	-	104.950
Crystalline fatty matter, probably cholesterine,	-	-	-	-	12,620
Oily matter,	-	-	-	-	6.350
Biliary matter,	-	-	-	-	5.820
Salts,	{	Chlorides,	} soda and lime,		
	{	Phosphates,			
	{	Sulphates,			
Loss,	-	-	-	-	4.800
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The different results of the analyses of the fluid, taken at two different periods, viz. 27th November and December 4, may probably be accounted for, by a quantity of blood being mixed with the last taken, as well as the system being under the influence of medical treatment. The first fluid removed contained no blood.

The peculiar composition of the fluid is remarkable; for though each constituent of bile is occasionally found in other organs, as the kidney, appendages to the uterus, &c., I believe there is no case on record in which a secretion like the present has been found connected with the thyroid body. The questions in reference to the case which present themselves are;—

Whether the bilious tinge of the conjunctiva depended, wholly or in part, on absorption of the fluid from the sac? Or is it more probable that it depended entirely on the condition of the liver?

It is a remarkable fact, that, as soon as the fluid was completely evacuated, the yellow conjunctival tinge disappeared.

Did the palpitation and cough depend upon the pressure of the tumour on the pneumogastric nerve, and on the cervical branches of the sympathetic?

Nottingham, December 29, 1840.

ART. XII. — *Cases of Cerebral Disease*.—By BENJAMIN BELL, Esq. Fellow of the Royal College of Surgeons.

CASE I.—A respectable tradesman, 50 years of age, tall, rather spare, and of dark complexion, enjoyed good health, till the spring of 1838, when he suffered much from pain in the stomach, loss of appetite, and other symptoms of dyspepsia. During the ensuing summer he got completely rid of these complaints. His appetite became remarkably good; he grew perceptibly stout; and every one about him took notice of his improved appearance. He continued in this state till October, when his friends began to observe something unusual in his manner, accompanied by a marked deterioration of his memory. They remarked that he had a disinclination to meet even those with whom he was most familiar, and would sometimes cross the street to avoid them; while he was extremely apt to forget the every-day duties connected with his business, making mistakes altogether at variance with his former accuracy and precision.

I had occasion to see him several times in the earlier part of January 1839, and was struck by his unusual loquaciousness, having previously found him a man of few words, retiring and reserved. He now talked with more energy, emphasis, and excitement of manner, than the subject of our conversation seemed to demand; and, at the same time, went repeatedly over the same ground, in the course of a few minutes. I thought no more about this change in Mr R.'s demeanour, till a medical friend, who also had occasion to transact business with him, made a similar observation in the following April. He found him then exceedingly