## BRITISH MEDICAL ASSOCIATION.

*Annual Meeting, July*, 1896.

### SECTION OF PATHOLOGY AND BACTERIOLOGY.

#### A Discussion on the Pathology of Exophthalmic Goitre.

Dr. G. R. Murray: Although changes in the nervous system have been often observed in this disease, they are so inconstant in presence and so diverse in character when present as to give no clear support of a nervous origin of the disease. Experimental and pathological disturbance of parts of the medulla no doubt produce many of the symptoms, but against these facts must be set the foregoing statement. On the other hand, the speaker knows of no case in which *post-mortem* examination of a patient dead of exophthalmic goître has revealed a normal structure of the thyroid. Just as the disease is the antithesis of myxœdema, so the microscopic appearances in the former are the antithesis to the fibrosis, the consequent degeneration and paucity of secreting elements seen in the thyroid characteristic of the latter disease. The thyroid in Graves' disease has, indeed, precisely the appearance (figures given) found in compensatory hypertrophy following partial removal of normal thyroid, an appearance indicating over-activity in secretion, together with the development of new secreting tissue. This fact, together with the development of the symptoms of Graves' disease due to excessive taking of thyroid extract, and the disappearance of such symptoms in exophthalmic cases treated by partial ablation or iodine injections, points to over-secretion and excessive absorption of normal or abnormal thyroid products as the essential etiological factor in exophthalmic goître.

Mr. Victor Horsley exhibited *Micro-Photographs*, showing compensatory hypertrophy, and supported the opener.

Mr. Walter Edmunds confirmed Dr. Murray's views as to the microscopic evidences of hypersecretion, but he considered that in Graves' disease the latter was compensatory, and, therefore, *not* the primary lesion. Myxœdema and Graves' disease were not antithetical, for (1) in the acute form in dogs they resembled one another—tremors and attacks of dyspnœa occurring in both. (2) The exophthalmos was not due to excessive absorption, for injection of the juice in monkeys did not produce it, though the symptom was readily caused by cocaine. (3) The theory did not explain the occurrence of one-sided exophthalmos and goître. (4) In cases where myxœdema followed Graves' disease a period of good health should supervene; whereas, on the contrary, cases were reported where the two appeared to overlap. (5) Thyroid feeding in Graves' disease did not increase the symptoms. On the other hand, enlargement of the thymus, with signs of functional activity, were reported. The pathology must be partly nervous and partly humeral, with possibly a derangement of the general metabolism as the primary lesion.

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Prof. HAMILTON spoke of hypertrophy after partial removal, and of the numerous cases in which the thymus was enlarged.

Prof. ADAMI mentioned how frequently in the *post-mortem* room local hypertrophies were found in the thyroid, as well as variations in the character of the secretion of the vesicles.

Dr. ABRAM supported Dr. Murray.

Dr. ROBERT HUTCHINSON, dealing with the chemical aspect of the question, maintained that the sole active element was the colloid material. Baumann's thyroidin was merely an artificial derivative of this. He had failed to confirm Fränkel's views as to the presence of an alkaloidal substance. (1) Was there over-secretion of colloid, or (2) qualitative alteration in the secretion? Morbid anatomists were agreed that there was no increase of colloid in the thyroid, nor was there evidence of unusually rapid absorption from the sacs. With regard to the second question, the speaker had treated two patients with extracts of a large goître from a typical case of Graves' disease. No palpitation, exophthalmos, or goître was produced, but a reaction occurred exactly similar to that resulting from healthy sheep's thyroid, which they were already taking for skin disease and obesity respectively. Similarly, in a dog after removal of the thyroid, only slight rise of temperature and pulse rate resulted from large doses of the abnormal gland. So far, then, it appeared that the secretion was not abnormal in character. Further, Graves' disease and myxœdema were no more antithetical than was the latter to any fever accompanied by increased metabolism, and no arguments were to be deduced from such a comparison. He considered the disease to be essentially due to altered tissue-metabolism, possibly of central nervous origin. The results of partial ablation in Graves' disease did not preclude this view, for if the tendency to acceleration of tissue-metabolism—a well-established property of normal thyroid secretion—was removed by partial ablation, it was evidently possible that even a functional loss of control on the part of the nervous system might fail to suffice to start that train of metabolic changes which led to the symptoms of Graves' disease.

Dr. ABRAHAMS pointed out that, according to Gerhardt, cases occurred without any thyroid changes, while the spleen and blood-forming glands were enlarged. Gerhardt considered nerve vascular changes to be antecedent to gland change, and in confirmation of this the speaker had seen marked improvement produced by the vaso-constrictor action of suprarenal extract. Martins asserted that the colloid was diminished in quantity and always abnormal in quality. The speaker compared the condition to a toxæmia, such as lead poisoning or uræmia.

Dr. MURRAY, in reply, said he was not satisfied as to the co-existence of myxœdema and Graves' disease. He asked if Prof. Gerhardt's remarks referred to microscopic and not merely clinical appearances. In collating all the cases the balance was in favour of regarding thyroid feeding as harmful in Graves' disease.

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## SECTION OF DISEASES OF CHILDREN.

("Brit. Med. Journ.," Sept. 12th, 1896.)

### What are the Elements of Success and Failure in Tracheotomy in Children?

Dr. Hector Cameron commenced his answer to this question by expressing the opinion that, though early tracheotomy—before, that is, the lung and the organism was impaired by dyspnœa—was imperative, nevertheless the hopes of success were greater in cases operated late in the course of the disease (not of the dyspnœa), when, in fact, though recently complicated by stenosis, the disease was commencing to subside. Speaking of details of the operation and after-treatment, he agreed with Giraldés in regarding the depressed vital condition as the main cause of tracheal ulceration, for which an ill-fitting tube was, as a rule, held responsible. Surgical emphysema, and the pneumo-thorax which Champneys' experiments show to be secondary to the former, were due, as a rule, to the tracheal incision not corresponding in position to the main wound, the result often of rotation of the viscus when the sharp hook was employed. Prolapse of the thymus into the wound seemed to have no untoward significance. It was readily kept within the thorax by the tube. Return of fluids by the wound during swallowing might or might not cause serious trouble. It was certainly not due to tracheo-œsophageal fistula, as might be imagined. It occurred when the tube was out as well as in, and was therefore not due to muscular embarrassment caused by the instrument. The two constant causative elements present were breathing by the wound in the trachea, and a duration of some days since the operation. The probable explanation was loss of sensitiveness and alertness of the larynx. Semi-solid food, or the prone position, sufficed to rectify the condition. For tracheal and bronchial extension of membrane, as well as cervical cellulitis, the original severity of the attack was in the main responsible.

Mr. Tubby unfavourably criticized the sharp hook and the tent. He recommended the insertion of Baker's rubber tube after twenty-four hours, and the removal of this on the third or fourth day.

Dr. Mansel Sympson considered that if dyspnœa continued unimproved for two hours, in spite of the tent and steam kettle, tracheotomy should be performed. Death in the majority of a series at St. Bartholomew's Hospital was due to downward extension of membrane.

Dr. Rankin advocated calomel; one grain hourly.

Dr. Ashley Cummins was in favour of the routine use of the warm spray, but not of the tent.

Dr. Adolph Bronner believed that in almost all cases a trial should first be made with intubation. Antitoxin prevented the formation of large pieces of membrane and aided its separation. Antiseptic measures in dressing were desirable. The outer tube should be fenestrated above, so that its removal was not necessary when testing the possibility of laryngeal breathing.

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Dr. ROBERTSON had seen excellent results with perchloride of iron spray.

Dr. CRAWFORD RENTON had the highest opinion of intubation as a preliminary measure.

The PRESIDENT (Dr. Finlayson) greatly objected to the steam kettle and tent, as much reducing the vitality of the patient. He had no belief in a membranous croup apart from diphtheria.

Dr. CAMERON, in reply, deprecated the tent and recommended large sponges, used with an antiseptic, and changed every twenty minutes.

### PAPILLOMATA OF THE LARYNX IN CHILDREN.

Dr. HUNTER MACKENZIE, after quoting various authorities with regard to prognosis of recurrence after thyrotomy, gives a decided opinion that this measure is "distinctly contra-indicated." With regard to endo-laryngeal operations, he concludes that "experience shows that . . recurrence usually takes place." He believes intubation to be here, as in all chronic stenoses, contra-indicated. One case, however (Baldwin), appears to have been cured thereby. The danger of the method was proved in Lennox Browne's case of hæmorrhage in a child of three. Tracheotomy alone remains, not only as the palliative, but the permanent radical measure. Several cases of permanent cure have now been reported. The growths, it appears, become detached, and may be found in the sputum. (Specimen of sputum shown.) Absence of irritation probably accounts for this atrophy. The usual length of time during which the wearing of a tube is necessary seems to be from six to twelve months.

Dr. COLEY mentioned a case in which the trachea was blocked by papillomata the whole way down.

Dr. MANSEL SYMPSON related a case in which the growths disappeared for a time after tracheotomy, but recurred.

Mr. A. POWER noted the analogy to the cure of urethral warts after lateral lithotomy.

Dr. BRONNER had seen cure after wearing a tube for two years. The tendency to recurrence increased with age.

Dr. MACKENZIE, in reply, stated that the growths in the trachea were often congenital and due to syphilis. *Ernest Waggett.*

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## AMERICAN OTOLOGICAL SOCIETY.

(*From Vol. VI., Part III. of "Transactions."*) *July 14th*, 1896.

Dr. ARTHUR MATHEWSON, *President.*

Dr. E. B. DENCH. *Thrombosis of the Lateral Sinus following Suppurative Otitis Media; Operation; Cure.*

A youth of eighteen, who five years previously suffered with acute otitis media, had now pain in the same ear, extending back over mastoid, with nausea and vertigo, and recurrence of discharge. On the fifth day the

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