

Set 55

MICHIGAN PATHOLOGICAL SOCIETY

Diseases of the Thyroid

May 17, 1952

Moderator - Allen Graham, M. D.

Case No. 1

GRAVES' DISEASE, WITH PAPILLOMY IMPERPLASIA -

Submitted by: Dr. Ducey

This 14 year old white female was admitted January 13, 1952 with a classical syndrome of Grave's disease, including some exophthalmos, marked loss of weight and strength, mild hypertension and a BMR of 51%. Had received a thiouracil drug for eight months prior to admission and Lugol's solution for three weeks prior to admission. Observed in hospital for six weeks before thyroidectomy was deemed feasible. Postoperative course not eventful and patient was discharged ten days after surgery, feeling much better. Surgeon estimates he left about 100 grams of thyroid tissue in situ.

Surgical specimen weighed 512 grams, one lobe measuring 13 x 9 x 7 cm.

Case No. 2.

ADENOMATOUS GOITER

Submitted by: Dr. Ducey.

This 45 year old white female was admitted on February 29, 1952 for removal of nodular thyroid considered to be multiple adenomas; there were minimal signs of hypertension, B.P. normal; also all laboratory work. BMR not estimated in hospital and report of same not available. Patient discharged five days after thyroidectomy in excellent condition.

Surgical specimen weighed 15 grams and resembled lateral lobe and isthmus. Two soft yellow nodules were present in the lower pole of the lateral lobe, one of these containing turbid fluid and amorphous debris.

Case No. 3.

GRAVES' DISEASE, BEFORE AND AFTER TREATMENT. Submitted by: Dr. Brines.

This 38 year old negro female was admitted in September 1950 with complaints of anorexia, weight loss, nervousness, palpitation and shortness of breath of 2 years duration. There was slight bilateral exophthalmus and a diffusely enlarged thyroid gland. B.P. 180/95; BMR plus 42%, and the white blood count was 6,900 with 49% lymphocytes.

3A. Biopsy October 7, 1950 - before treatment. Treatment was with topazole (10 mgm q.8 h.). She responded well to therapy and on January 22, 1951 a subtotal thyroidectomy was done. She received no pre-operative iodine medication.

3B. Tissue obtained during thyroidectomy.

Case No. 4.

FIBROUS THYROIDITIS, WITH SQUAMOUS METAPLASIA -

Submitted by: Dr. Kaump.

This 30 year old white male had always been in good health. During routine physical examination it was noted that the thyroid was hard, enlarged and non-tender. The BMR was minus 41 and the cholesterol 346 mgm/100 ml. Because of a clinical diagnosis of scirrhus carcinoma the thyroid was completely removed. The gland was symmetrical, enlarged, pale, firm and fibrous. During the four years following the operation the patient has remained well while taking thyroid extract.

Case 5. Lymphatic Thyroiditis

Submitted by: Dr. Gould.

This 11 year old white girl was admitted on April 10, 1950. She was brought to the hospital by her family because of gradual increase in size of the thyroid gland, observed during the previous four years. There had been no associated symptoms such as dysphagia, hoarseness, tremor, restlessness or somnolence. The physical examination was negative except for diffuse enlargement of the thyroid gland with prominence of the right lobe; the gland was firm in consistency and contained no nodules. EKG and x-ray films of chest, bone and skull were negative. Direct laryngoscopy was negative. Blood cholesterol was 163 mgm/100 ml. BMR readings plus 5, plus 5, minus 12 and minus 12%.

Tissue from the thyroid gland was removed for biopsy on May 11, 1950 because of progressive enlargement. Recently the basal metabolic rate fell to minus 21 and minus 23%. The patient is now well and taking thyroid extract, gr. 1/4 daily.

Case No. 6. "Plasma Cell Thyroiditis"

Submitted by: Dr. Frost.

This represents material from a case of a 33 years of age white female who had noticed progressive enlargement of the thyroid gland during the previous year with a recent onset of some difficulty with respiration. The gland was uniformly enlarged. Except for this finding, the physical examination and laboratory examinations, including a BMR, were within normal limits. The gross specimen was a gland removed by total thyroidectomy weighing 55 grams. On section, the cut surface had a uniform, pale, yellow, coarsely nodular, firm, cut surface.

Case No. 7. *Winkler and Thyroiditis, Quasi-Haematomatous, PWS ? Occult Carcinoma*  
Submitted by: Dr. Frost

The patient is a 36 year old white female with a history of increasing hoarseness and chronic cough of one year's duration. There was a slight enlargement of the left lobe of the thyroid gland. There was no clinical evidence of hyperthyroidism. Laboratory examinations, including a BMR of plus 1, were all normal. The specimen consisted of one lobe of the thyroid which measured approximately 6 x 2.5 x 2.5 cm. and weighed 33 grams.

- 7A. On section the cut surface was pale and of a firm woody consistency. Within the cut surface there was a 3 cm. egg-shaped nodule which was somewhat more firm than the remainder of the cut surface.
- 7B. Approximately one year later the patient began to notice progressive enlargement of the remaining lobe and because of the questionable character of the original specimen, the remaining thyroid tissue was removed.

Case No. 8 Hashimoto's Disease

Submitted by: Dr. Brekke

The patient is a 48 year old, white woman, whose only complaint was a feeling

Case No. 8 - Continued

of pressure due to progressive enlargement of thyroid over a five year period. Physical examination negative except for thyroid enlargement, most marked in the left. BP 120/90.

At operation 4/5 of left lobe of thyroid, isthmus and part of right lobe removed. The specimen weighed 22.5 grams and there was no gross nodularity. The cut surfaces presented a uniformly firm pale-gray appearance.

Case No. 9. HASHIMOTO'S DISEASE.

Submitted by: Dr. Brines.

This 49 year old negro female was admitted to the hospital complaining of a swelling in her neck for 2½ years without symptoms of hyperthyroidism. The thyroid was diffusely enlarged, firm and symmetrical. BMR determinations were minus 5% and minus 19%. The thyroid weighed 120 grams and was uniformly and symmetrically enlarged. The surface was smooth and was reported to be not adjacent to adjoining neck structures.

Case No. 10. ADENOMA

Submitted by: Dr. Gore.

This 67 year old white male had been aware of a mass in his neck for the past 6 months. There were no toxic or obstructive symptoms. Physical examination revealed considerable enlargement of the right lobe of the thyroid. The gland was soft and mobile.

At operation a well encapsulated 6 cm. nodule was removed from the anterior portion of the right lobe of the thyroid. The nodule was fleshy in consistency, composed of pale tan glistening tissue. Centrally the mass was irregularly excavated by hemorrhage.

Case No. 11 ADENOMATOUS GOITER

Submitted by: Dr. Martineau.

Patient is a 44 year old white housewife who has had pulmonary tuberculosis since December 1946. She was readmitted to the hospital in January 1950 because of a Pott's disease involving T 11 and 12 and a pulmonary tuberculosis, 2B, unfavorable. The patient has had an enlarged nodular thyroid for many years. She had no "thyroid" symptoms on admission. After admission, the following signs were noted: weight loss 14 lbs., emotional instability (cries easily), coarse tremor. She was given 150 mgm. daily of propylthiouracil for 3 months starting 4/31/51. This was followed by iodine. BMR's were as follows: Nov. 19, 1950, plus 15; Mar. 19, 1951, plus 27; April 19, 1951 plus 25; May 28, 1951 plus 26; July 10, 1951 plus 18. A subtotal thyroidectomy was done on 11-2-51. Her post-operative course was uneventful and she was discharged improved on 11-20-51.

The specimen consists of 2 pieces of thyroid tissue weighing together 45 gm. and measuring 7 x 5 x 3.5 cm. The surface is coarsely nodular. On cut section many nodules measuring up to 0.8 cm. in diameter are seen. Some of these nodules

Case No. 11 - continued

are cystic and contain blood. Many are surrounded by scar tissue. There is one large encapsulated tumor measuring 4 x 3 x 3 cm. surrounded by a thin capsule of fibrous tissue. The tissue in the nodule is brownish, somewhat translucent and shows areas of scarring and cystic degeneration.

Case No. 12 THYROID COLLOID ADENOMA.

Submitted by: Dr. Gardner

This 42 year old white female had been in excellent health but had a goiter for 15 years, which had slowly increased in size, unassociated with a period of rapid growth. Otherwise, this tumor was asymptomatic; signs and symptoms of hyperthyroidism were absent. Physical examination disclosed a 7 cm. globular enlargement of the right side of the thyroid without fixation to the skin. Cervical lymph nodes were not remarkable. Laboratory data disclosed RBC 4.24, Hb. 11.3 gms WBC 8500, with normal differential. BMR minus 3. Blood cholesterol 180 mgs. Sedimentation rate 16 mm. in 1 hour. Alkaline phosphatase 4 K.A. units.

At operation the enlarged right lobe and isthmus of the thyroid gland was removed. The tumor consisted of a single spheroid mass which weighed 88 grams and measured 6 cm. in diameter. The external surfaces were relatively smooth and pinkish-gray in color. Section disclosed a solid tumor with a light yellowish-pink color in which there were areas of hemorrhagic degeneration. Apparently, the tumor was completely encapsulated and identifiable thyroid substance was not found. Zones of calcification and cyst formation were absent.

Case No. 13 ADENOMATOUS GOITER, HYPERTHYROID - Submitted by: Dr. Humphrey.

Patient is a 37 year old white unmarried male who went to a chiropractor one week before his hospital admission and was told he had a large neck and should see a doctor. The doctor to whom he went diagnosed a nodular thyroid and had him hospitalized for surgery.

On admission BP was 120/80. There were no symptoms of thyrotoxicosis. A subtotal thyroidectomy was performed on 11-19-51 and a total of 28 grams of thyroid removed. Grossly, this was multiloculated with areas of hemorrhagic degeneration.

Case No. 14 FOLLICULAR CARCINOMA.

Submitted by: Dr. Gore

Patient is a 23 year old white male college student in apparent good health. Had been aware of a lump in his neck for 3 years. On physical examination, the nodule was found to be hard and slightly movable; it measured 1.5 x 1.5 cm. and lay in the left lobe of the thyroid.

At operation the thyroid gland was found to be quite adherent to the trachea and strap muscles. Numerous hard lymph nodes were present both above and below a hard poorly circumscribed 2.5 x 1 x 1.5 cm. nodule of grayish-white tissue in the left lobe.

Case No. 15 COLLOID ADENOMAS -

Submitted by: Dr. Kasper

Patient is a 31 year old white female telephone supervisor, with complaint of swelling in left side of neck since November 1951. She was well until November, 1951 at which time she developed some enlarged lymph nodes in left side of neck. After several days these decreased in size, but the patient noted a lump on the left side of the "Adams Apple". Saw her physician who mentioned possibility of thyroid tumor. Was tested with radioactive iodine which revealed 2 active areas, one on each side. Patient has not been nervous or had increased sweating or other unusual symptoms. Surgery was recommended.

Physical Examination: No exophthalmus or lid lag. Trachea in normal position with no tug. Bilateral enlargement of thyroid, more on left side with small faintly palpable nodule, about 1 cm. Not hard, situated near isthmus. BMR plus 5. N.P.N. 34.5 mg. Blood sugar 105 mg.

Gross description: Two portions of thyroid tissue, each measuring 4 x 3 x 2 cm. Each is of dull reddish-brown color and slightly lobulated. Both reveal small circumscribed pale foci. A whitish, denser area is situated at the periphery of one portion. It measures about 8 mm. in greatest dimension.

Case No. 16 TRIBECULAR & MICROFOLLICULAR ADENOMA Submitted by: Dr. Christopher.

Patient is a 46 year old white female with chief complaint of painless growing nodule in the right side of the neck since 1947. For the past year she has been sluggish, without pep and finds that her memory is not as good as it was. She has gained 20# in the past year. Menopause in May, 1950. Father died of intestinal carcinoma.

Physical examination revealed a well nourished, well developed, white female. There was a smooth, non-tender, firm 6 cm. nodule in the right lobe of the thyroid and fixed to the trachea. BMR minus 11%.

On 11-19-51 thyroid adenoma was excised. Surgical specimen consisted of an ovoid, well-encapsulated, pinkish, yellowish-gray thyroid gland adenoma, 6 cm. in diameter. On section, the cut surface was of granular consistency, hyperplastic and contained colloid material. In the central portion of the adenoma there was found a firm, brownish nodule, 4 mm. in diameter. The periphery of the adenoma showed fibrosis with congestion.

X-ray examination of the chest was negative.

Case No. 17 METASTATIC PAPILLARY CARCINOMA -

Presented by Dr. Black.

A 24 year old housewife was first seen in April 1951. At that time she presented herself because of a mass in the right cervical region near the angle of the jaw. She stated that this mass had been present for about 4 years and that while a student at Michigan State College she had consulted the Health Service who advised her that if the mass became larger it should be removed. She felt that at the time of her visit to us it had been recently enlarging. She had had a recent sore throat and the dentist felt at first that an infected tooth might

Case No. 17 - continued

be responsible for this lymphadenopathy. However, after treating the tooth he reversed his opinion. At the time of her visit the urine was normal, the hemoglobin was 16 grams %, white count 7,400 and the sedimentation rate 21 mm. in 1 hour. The glands were removed for biopsy on 1 June 1951.

Case No. 18

Submitted by: Dr. Gould.

Patient is an 82 year old male who complained of loss of appetite and "gagging" sensation upon ingestion of solid food, for 6 months. During the previous 2 years he had experienced a deep skeletal aching pain that involved the legs and knees; he also had aching in the neck and a diffuse headache. He had lost 34 lbs. in the previous six months. He had had chills and night sweats on 3-4 occasions during the past 4 months; nocturia 3-4 times, and diminished caliber of urinary stream.

P.E.: Temperature 98.6°, pulse rate 96 per minute, B.P. 126/82, Respirations 16. Well preserved, elderly white man, marked tremor of the upper extremities, fully oriented and did not appear acutely ill. Lungs clear, heart enlarged to the left. A soft apical systolic murmur and an aortic systolic murmur were heard. In the right upper abdominal quadrant there was minimal tenderness to palpation. The inferior border of the liver was palpable 2 f.b. below the right costal margin. The lower pole of the spleen was palpable and slightly tender. The prostate was moderately enlarged.

Hospital Course: Several days after admission patient began to experience chills and fever. He had severe leukopenia, the count being as low as 500 per cu.mm. of blood. He suddenly developed urinary retention for which transurethral resection of the prostate was done on Sept.27, 1951. He was discharged on Nov. 15, but was readmitted to the hospital on Jan. 26, 1952 for custodial care. On Feb. 11, 1952 his temperature was found to be elevated to 100.2°. Auscultation of the chest revealed diminished breath sounds and rales over the left base posteriorly. The patient expired on February 12, 1952,

Case No. 19 MYXOMA, INFLTRATED BY MALIGNANT LYMPHOMA - Submitted by: Dr. Gould

Patient was a 79 year old white male admitted on January 23 and expired on February 10, 1952. He had had back pain since opening a window four weeks previous to admission. The pain increased in severity and one week after the onset of pain he was taken to the hospital where x-ray examination revealed a fracture of the first lumbar vertebra. He gave a history of loss of weight during the preceding year. Physical examination revealed an emaciated elderly white man with low back pain which was aggravated on motion. No palpable lymph nodes were found. There were no skin lesions. Hb. 8.5 grams, RBC 3,900,000, hematocrit reading 30, Bence-Jones protein negative, acid phosphatase 1.3 King-Armstrong units, basic phosphatase 2.0 Bodansky units, total protein 6.0 grams, serum albumin 4.7, serum globulin 1.3. Barium enema and "upper gastrointestinal series" were negative. Supportive treatment was given but the patient became progressively weaker and expired.

Case No. 20 DOUGLASS' DISEASE.

Submitted by : Dr. French.

The patient is a 55 year old male who entered the University Hospital with swelling of his right knee in December 1951. A single, large, non-tender, firm nodule was found in the left lobe of the thyroid gland. It has been present for three years. He had been hospitalized in 1941 and 1943 for diabetes mellitus.

A thyroidectomy was performed and part of an adenomatous gland weighing 45 grams was removed. The left lobe was adenomatous, and the right lobe contained the tissue submitted for the seminar.