SOCIETIES' PROCEEDINGS

ROYAL SOCIETY OF MEDICINE—SECTION OF LARYNGOLOGY.

November 7, 1930.

President—Mr. FRANK A. ROSE, F.R.C.S.

Discussion on Precancerous Conditions of the Larynx.

DR. CHEVALIER JACKSON (U.S.A.)—This subject is of the utmost importance from the viewpoint of the study of the problems of ætiology, prophylaxis and treatment of the "dire disease," as the late Sir Henry Butlin called cancer of the larynx. The subject might conveniently be considered under the subheadings of (1) the word; (2) the condition; (3) the question as to whether such a condition is recognisable; and (4) the treatment.

(1) *The word* is faulty; much time has been wasted in discussions from lack of beginning with a definition; the participants were not talking about the same thing. If we use the word to mean a stage always traversed in the transition from the normal to the neoplastic, it is doubtful that we have sufficient evidence to justify its use. If we use the word as meaning only a soil favourable to the development of cancer, little fault can be found and discussion will be useful.

(2) *The condition* of the tissues previous to the development of cancer might hypothetically be described as a preparation on the part of the cells to do something not already done. Metaphorically, it might be described as a large number of the citizens across the border leaving their regular daily routine and mobilising preparatory to invasion. Similar misbehaviour on the part of the cells that have not yet crossed the border is often seen adjacent to an area where invasion constituting cancer has already begun. Occasionally it is seen without any subsequent invasion. Any inflammatory or irritative condition in the larynx might be called precancerous, but such use of the term would be a very loose application indeed.

(3) *Is it recognisable?* Perhaps very rarely, as a histologically proven fact. To ask the histologist to tell us, from the examination of dead removed cells, what adjacent living, unremoved cells are going to do, is asking much, yet occasionally this has been done on the basis of probabilities. An illustrative example was published by me in the *Proceedings of the American Laryngological Association* for 1922. Sir St Clair Thomson, Mr. Herbert Tilley, the late Mr. Hunter Tod and myself, from mirror examinations, believed that the condition in the larynx of a man aged 42 years was suspicious. Histological examination

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press

by Dr. James Ewing demonstrated a cellular structure to which the term *precancerous* could conveniently be applied, inasmuch as the deeper cells were misbehaving and showed a sudden transformation of the normal to hyperplastic and atypical epithelial pegs, but they had not yet invaded the submucosa. Dr. Ewing added the comment: "This is the stage in which to treat cancer of the larynx, not after it gets well advanced." Laryngofissure, with moderately wide removal, completely cured the condition, and the patient is in good health with a good voice, after fourteen years. In contrast with this case are those in which a chronic laryngitis is followed by a stealthily developing cancer after many years, as long as thirty in some of my cases. A precancerous stage may exist in such patients but clinically it is unrecognisable.

(4) *Treatment.*—The clinical indications for treatment are clear, though not always easy of accomplishment. Every curable disease of the larynx and upper air passages should be cured, and all incurable conditions should be ameliorated so far as possible. Avoidance of all forms of laryngeal irritation is imperative. Vocal rest and avoidance of alcohol and tobacco should be insisted upon. At the first sign of cancer a biopsy should be made; further treatment should be based upon histological findings.

Sir St Clair Thomson said that he, too, would ask the question: Was there such a thing as a recognisable precancerous condition of the larynx? We had to distinguish between predisposing conditions and precancerous conditions. The only predisposing conditions known were sex and age. He had never convinced himself that there were local predisposing conditions. He had not met with cancer of the larynx more frequently in voice-users than in others, or in those subject to chronic laryngitis, or to cough, or in those who had suffered from innocent growths, or in those who had undergone frequent endolaryngeal manipulations. He had not been impressed with the idea of syphilis, tobacco or alcohol being factors in a precancerous condition, though they were so potent in causing chronic laryngitis. In ten out of his eighty cases of laryngofissure the patients had been women and they had never smoked or touched alcoholic liquors. Of course it might be quoted that in extrinsic cancer, the post-cricoid form chiefly, it had been repeatedly noted by independent observers that many of those poor women had complained of some swallowing difficulty for years.

It was somewhat risky to argue on grounds of analogy, but many years ago the question was raised of a pretuberculous condition, but that had now, he thought, been abandoned. The analogy was not a suitable one, because tuberculosis resulted from a definite infecting organism. No organism, no tubercle. In the case of the breast there was the analogy of the early condition of the nipple. One knew about

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press

the lip condition in smokers, and about the conditions in chimney-sweep's cancer; but did malignant disease in the rectum occur more frequently in those who had rectal troubles, such as hæmorrhoids? Had members not been struck with the fact that cancer of the œsophagus did not occur particularly in people who had had trouble with mouth or pharynx, or other supposedly predisposing conditions? He had read that cancer of the stomach did not affect the dyspeptic person, but rather came "like a bolt from the blue."

As to innocent neoplasms, though it was right that, as Dr. Chevalier Jackson has wisely said, every person of middle age, with a lesion in the larynx, should be suspected to have malignant disease until proved otherwise, yet such a condition might be innocent. He saw a man, aged 62, who for two years had had a typical cupped infiltration in the centre of one cord. He had pus in one antrum, and was referred to his laryngologist for treatment and further observation. Two months later he came almost free from catarrh and with a voice almost normal. Where the cupped condition had been there was a small fibroma. But he lived many years, and when he died it was from a different disease.

Out of eighty laryngofissure cases he had twice made a mistake in diagnosis. The first was in the case of a patient who, at the age of 51, had been husky for eighteen months. She tried treatment by silence for a month. The lesion was not suitable for the removal of a piece for biopsy, and, after some hesitation, a laryngofissure was decided upon. The larynx was opened, Mr. Colledge assisting, and he (the speaker) then pointed out the use of the finger as a test. This growth was soft to the touch, and he therefore felt that he had made a mistake; still, because of the patient's age, the growth was removed. The pathologist reported that there was no evidence of carcinoma anywhere. Several plasma cells and some infiltration were found. Was that a precancerous condition? Perhaps some day the pathologist might be able to distinguish between an innocent and a precancerous condition.

The second error in the series of eighty fissures had consisted in mistaking tuberculosis for cancer.

He would now show a slide illustrating the case of a patient who had been husky for six months. On one cord there had been a typical malignant growth, and on the opposite cord a curious condition like a plaque. He (Sir St Clair) had felt so suspicious that the man had malignant disease on the opposite cord that, when dividing the thyroid cartilage he had kept well over to the less affected side. Macroscopic sections showed typical malignant disease all along the diseased side. On the opposite side the condition which had looked suspicious was declared to be innocent. That patient remained well several years afterwards, though with a somewhat narrowed glottis.

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press

In another case the patient, aged 62, had evident syphilitic scars on his tongue, though the Wassermann reaction was negative. He neither smoked nor took alcohol and his teeth were perfect. He was treated with large quantities of mercury and iodides, and had been seen by specialists in Berlin, Paris, Spain and other places. He presented the condition depicted in the slide [shown]. Professor Sebileau in Paris told him not to have it touched then, but to have it watched, as it might one day become malignant. After two years of watching the man's voice became so impaired (preventing him from carrying on his business) that he (Sir St Clair) began local removal, through the mouth, and finished it two years ago. The voice was now normal. Had that been a precancerous condition?

His (the speaker's) view was that no final conclusion on the matter had yet been reached. But, as a celebrated Frenchman had said, it was much better to discuss a subject without coming to a conclusion than to come to a conclusion without discussing it.

Mr. LIONEL COLLEDGE—Sir St Clair Thomson has told us exactly how our knowledge stands, but I feel that his cancerogenic inhibition would leave the mystery for ever unsolved. I ask your leave, therefore, to offer some speculative suggestions on how cancer originates in the larynx, and I apologise if it is not all strictly relevant to the larynx. At any rate it will not take long.

M. Auguste Lumière, in a small book entitled *Le Cancer-Maladie des Cicatrices*, has put forward the hypothesis that the common epithelial cancers originate in scar tissue. This excludes from consideration tumours which originate in embryonic rests, for example, inclusions in branchial arches, and the sarcomas originating in connective tissue. It includes all the epitheliomas as encountered ordinarily in the pharynx, larynx, œsophagus and on the tongue. If any advance in this branch of knowledge is to be made at present it is more likely to be found in studying the pathogenesis of particular groups of tumours than of tumours as a whole. It is unlikely, for instance, that a teratoma of the testicle and an epithelioma of the lip have an identical pathogenesis. It is therefore justifiable and necessary to limit ourselves to the discussion of epithelioma and even to a particular area.

The transition from simple papilloma into epithelioma can now be followed experimentally by the production of tar cancer, so that the true precancerous stage can be studied microscopically. The chief manifestations are epithelial hyperplasia with irregularity in the size, shape and staining properties of the cells affecting the Malpighian layer. There is also hyperkeratosis and the keratinised layer sends prolongations into the Malpighian layer. There is also increased mitosis, but the basal layer remains intact and the stage is genuinely precancerous.

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press

Professor Benjamins therefore claims that when a piece of tissue from a vocal cord shows such characters it is to be considered in a precancerous stage, since experimentally these characters have been demonstrated to be precancerous. How is the precancerous condition produced?

The part played by chronic irritation has been for many years vaguely but widely recognised and Lumière notes no less than 44 different types of epithelial tumour in which this can be traced as a predisposing cause. It is not necessary to enumerate these, but if we accept this as an hypothesis two questions at once demand an answer: (1) Is this chronic irritation with the production of scar tissue an essential preliminary to the production of an epithelioma? (2) Why do some scars undergo a cancerous degeneration, whilst others remain free from such proliferative change?

In the first place there are a number of situations in which epithelioma does not occur unless it is definitely preceded by chronic irritation and scar formation. The epithelioma which is seen in Kashmir as a result of a chronic burn on the abdominal wall from the use of braziers is the classical instance.

It is suggested that if we could only demonstrate it, the presence of a scar is a necessary preliminary in every case. It used to be considered that about 5 per cent. of gastric cancers were preceded by gastric ulcer, but the Mayos have shown that 70 per cent. have supervened on a previous simple ulceration.

It may be the case, therefore, that a pre-existing scar is necessary to the production of every epithelioma, and if it cannot always be demonstrated the evidence of it may well have been destroyed by the growth. Also, the first condition for its demonstration is to look for it, and this is not always done. This argument requires to be elaborated in greater detail but it is a reasonable hypothesis that a scar is not merely a predisposing cause but an essential preliminary condition.

Secondly, why do some scars become cancerous? Where scar formation is beyond question a predisposing cause—as in the case of epithelioma appearing in the cicatricial tissue resulting from a burn—the wound has been slow in healing or perhaps from prolonged suppuration has never healed at all.

Thirdly, the cancerous change does not occur as soon as the wound or ulcer has healed. Twenty or thirty years must usually elapse, so that it is the age of the scar rather than the age of its host which is important.

The scar, if healed, must eventually be subjected to some secondary injury such as a blow or a fresh erosion.

This continuous but varying stimulus to cell formation produces

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press

a local tendency towards multiplication of cells, which revert towards the embryonic condition, but the differentiation does not go so far as this; they merely become rejuvenated, retaining the characters of the mother tissue. Thus metastases retain these characters. This may explain the failure of microbic and parasitic theories to account fully for all the phenomena of cancer. It does explain the age incidence of cancer and is compatible with various other points such as the constant areas which include the sites of origin and variations in radio-sensibility.

Professor Alfred Denker has reported the case of a man fifty years of age who was brought to his clinic suffering from severe stenosis of the larynx. He had attempted suicide twenty years before by cutting through his larynx with a razor. The wound healed eventually, leaving some difficulty in breathing, but he was able to do light work. For three months the difficulty in breathing had increased. There was a scar in the front of the neck firmly adherent to the cricoid cartilage. The vocal cords were almost fixed in the middle line and appeared heavily infiltrated and thickened. After a low tracheotomy a piece of tissue removed for examination showed carcinoma. Total laryngectomy was performed and it was found that the trachea was extensively invaded with growth, so that the upper part was resected in addition to the larynx. From subsequent examination Borst considered that the cancer definitely arose from the scar tissue.

[Mr. Colledge showed the larynx of a patient who had been gassed during the war and never recovered his voice. In 1925 a laryngofissure was performed but a recurrence proved by biopsy soon occurred and the whole larynx was removed ten months later. On the screen, the larynx was seen from below. The stenosis from scar formation, in which the recurrent epithelioma was situated, was well demonstrated.

Mr. Colledge also showed a picture of the œsophagus of a man who had suffered from achalasia for twenty years. About six months before his death he had a hæmorrhage, complained of pain in the side and began to lose weight, while the liver enlarged. At the necropsy the liver had weighed eleven pounds, owing to secondary deposits. The picture showed a huge epithelioma grafted on the dilated and diseased œsophagus.]

Nevertheless, even when all the conditions enumerated are present, the scar does not necessarily degenerate into an epithelioma. Is there, in addition, any general or constitutional factor necessary to convert the local process? Slosse and Reding have shown that in persons afflicted with cancer there is an abnormality in the regulation of the blood sugar, tending towards hyperglycæmia. This hyperglycæmia is independent of the situation of the tumour and of its histological nature, and there is evidence that this abnormality is a precancerous condition and is common also in the relatives of persons with cancer.

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press

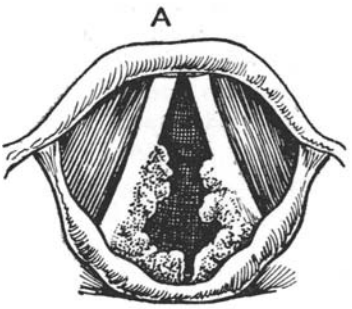
Slosse and Reding have found also that an abnormally high alkalinity of the blood is common in persons with cancer.

It is put forward, therefore, with due acknowledgment to M. Lumière, as a basis for discussion, that the conditions predisposing to cancer of the larynx are: (1) The presence of scar tissue. (2) That the scar has been a long time forming or has never completely healed. (3) That it is many years old. (4) That some secondary injury or irritation occurs. (5) That some general factor is also present, probably a high content of sugar in the blood and an excessive alkalinity.

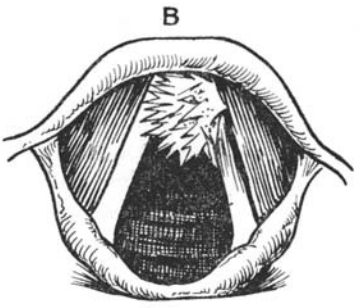
Mr. E. D. D. Davis showed drawings and microscopic slides of six cases to illustrate precancerous conditions of the larynx:—

(*A*) S.—A typical pachydermia in a man aged 57. Owing to laryngeal obstruction and the probability of malignancy, a laryngofissure was performed and the growth freely removed.

Section: Simple proliferation of the surface epithelium.



A typical pachydermia.



A papilloma in a man aged 64.

This patient was under observation for three years and no evidence of cancer appeared. He was thought to have pulmonary tuberculosis, but the tubercle bacilli could not be found in the sputum. Wassermann reaction negative.

(*B*) A white stalactitic papilloma of anterior third of left vocal cord in a man aged 63. Hoarse six months. Growth removed by laryngofissure, July 1923. Patient still well and no recurrence for seven years.

Section: Papilloma.

(*C*) A wet specimen of the larynx of an infant aged 20 months, with a single papilloma growing from the anterior third of the left vocal, and almost identical with that in *B* (above).

(*D*) A man aged 66. Warty growth of the middle-third of the right vocal cord. Hoarse two months. Growth removed by laryngofissure, December 1923. No recurrence. Patient alive and well.

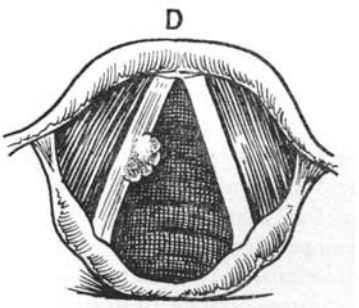
Section: Papilloma becoming malignant.

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press

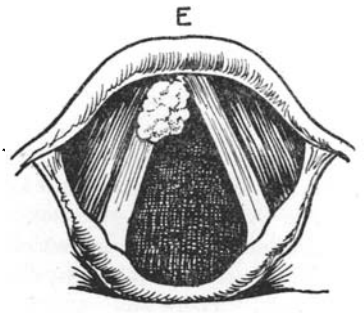
(*E*) A snow-white warty growth of the anterior third of the right vocal cord in a man aged 64. Hoarse twelve months.

Section after laryngofissure: Papilloma becoming malignant.

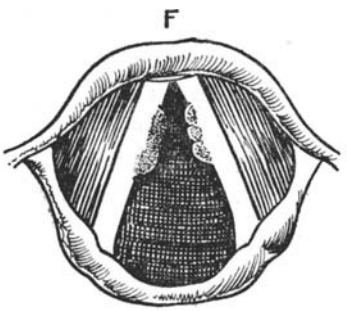
This is a type of case in which it is difficult to obtain a satisfactory pre-operative diagnostic specimen for microscopy. The piece of tissue removed, owing to the hardness of the growth, does not go deep enough for diagnosis. The same is true of a flat deep growth of a vocal cord.



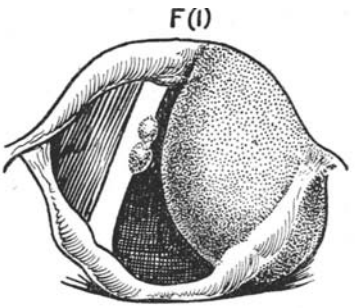
A papilloma becoming malignant.



A snow-white warty growth.



Symmetrical granulomata of the vocal cords.



A deep-seated adenocarcinoma.

(*F*) Section of a deep-seated carcinoma from a female, aged 47. First seen with symmetrical granulomata of the middle thirds of the vocal cords. Tuberculosis and syphilis excluded. Pathology and diagnosis obscure.

Condition in spite of treatment remained unchanged for eight years; then a smooth, solid tumour of the left ventricular band and the arytæno-epiglottidean fold appeared.

The tumour was removed by hemilaryngectomy and found to be an adenocarcinoma.

Patient died fifteen months later from a recurrence of the growth in the neck.

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press

Mr. Davis said that it was not claimed that these specimens showed precancerous conditions; only Specimen *D* might be called precancerous.

Specimen *F* was shown to illustrate a type of clinical case in which a deep-seated adeno-carcinoma, probably commencing in the mucous glands and deeper structures of the larynx, resembled perichondritis. These growths frequently soften and become necrotic, as happened in this case which was thought before operation to be a case of perichondritis. The mucous membrane of the larynx was intact and the growth did not burst through the mucous membrane.

[Mr. D. F. A. Neilson here showed a coloured drawing of a similar case. He removed the papillomatous growth by laryngofissure a few months ago.]

He has seen five cases of this type of deep growth, the diagnosis of which was difficult because the laryngeal mucosa appeared to be normal.

The symmetrical granulomata probably had no connection with the deep-seated carcinoma which developed seven or eight years later.

Specimen *E* was a papillomatous growth which was not very malignant. There was no recurrence in this case for thirteen months; the patient was then lost sight of and could not be traced. It would be useful to know whether such cases were malignant and if recurrence took place.

Mr. Herbert Tilley said that his views on the subject were indefinite because he had often seen unilateral lesions which appeared to be benign, and yet a long clinical experience prompted the suspicion that they were probably early instances of carcinoma. He was accustomed to teach students that, in such doubtful cases, the diagnosis would generally be tuberculosis, syphilis, or malignant disease; if the first two could be excluded, it would be wise to act on supposition of the third.

It was sometimes argued that because a certain definite symptom, *e.g.* hoarseness, had been present for two or three years, it was unlikely that the lesion could be of a malignant nature. But he had seen cases of obvious carcinoma—and quoted two examples—which had long histories of loss of voice, and the appearance at operation, as well as microscopic sections of the growths removed, amply confirmed the diagnosis of cancer. Were the earlier phases in such cases precancerous? In Mr. Neilson's case—which he (the speaker) had seen—the microscopic sections did not show the usual features of a squamous-celled carcinoma. Nevertheless, clinical experience would probably be unanimous that such a condition would—sooner rather than later—undergo malignant transformation, and that the best treatment had been accorded to the patient if the laryngeal lesion were regarded as of a "precancerous" nature.

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press

Mr. HAROLD BARWELL said that, from the clinical standpoint, he thought there was no such thing as a precancerous condition of the larynx. Sir St Clair Thomson had said that in the majority of cases of the vocal cord which he had seen, the larynx had apparently previously been perfectly healthy. Mr. Colledge had shown a case in which cancer was engrafted on a scar in the larynx, but that was a case of exceptional rarity. Mr. E. D. Davis had shown a case which was reported as papilloma becoming malignant; but it would be as suitable to call it a case of cancer with a papillary excrescence imitating, in its early stages, an innocent growth. If one could see the base of it one would probably find that it was cancer from the beginning. We had all seen, and watched for years, cases of chronic laryngitis and of pachydermia. How many of them had become malignant?

There could be no doubt that irritation was a cause of cancer, in the larynx as elsewhere, but in the majority of cases a chronically irritated larynx did not become cancerous, so there was, no doubt, a further unknown factor. Probably some constitutional factor was of importance, and this was shown occasionally by cases in which the successful removal of a cancer was followed by a fresh primary cancer in another part of the body.

Therefore he considered that, from the clinical point of view, the Section was discussing what was non-existent.

Mr. J. A. GIBB said that a few years ago he had asked himself the question: Why should certain cells, under mutation, suddenly take on a rapid mitosis? A surgical colleague supplied him with a small scirrhous cancer of the breast. With the collaboration of an analytical chemist he sought for lecithin lipoid from the cells. From a small portion of the growth $\frac{1}{4}$ gr. of pure lecithin lipoid was extracted. Lecithin lipoid was found in the normal cell as a mere trace; it was necessary for the life and movement of the cells. It was present in greater proportion in certain glands such as the suprarenal, thyroid, ovary, and pituitary, and its presence was necessary for the performance of normal function of those glands.

It had occurred to him that as lecithin lipoid was present in the cells of new growth those cells would be hypersensitive to any form of irritation and would take on abnormal change in the form of growth. An examination of the cells of a sarcoma yielded a higher percentage of lecithin than cancer, and a wart showed a still higher percentage.

It had further occurred to him that the most important metabolic gland was the suprarenal, and that as the active principle in this case was lecithin lipoid, the important factor in these cases of cancer which had a lowered resistance was some toxic effect on the suprarenal gland whose consequent lack of function might result in an excessive

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press

formation and deposit of lecithin lipoid in the cells, thus making the cells more sensitive to irritation. Mr Colledge had mentioned that hyperglycæmia was found in cancer cases, and that bore out his (the speaker's) view with regard to the suprarenal gland. The chemist had prepared for him some lecithin lipoid, extracted from the cancer, in pure olive oil in suitable doses, in ampoules.

He, Mr. Gibb, had performed diathermy for cancer of the tongue, and the condition remaining had been foul and septic; half of the tongue had been removed. He had injected the patient with the lecithin lipoid taken from the carcinoma of the breast, and afterwards the tongue condition improved amazingly, the sepsis cleared rapidly, and the man left hospital with a smooth clean scar.

The chemist had since been extracting lecithin lipoid from eggs, and this had been used with benefit. He, Mr. Gibb, suggested that when a cancer was removed the adjacent cells should be examined for lecithin lipoid as that might be a guide as to the possibility of recurrence. Moreover, it might be taken as a suggestion of a pre-cancerous stage.

Mr. MUSGRAVE WOODMAN said that there were two points to be considered, one pathological, the other clinical. One of the sections exhibited showed an epithelioma which did not break through into the deeper layer, but there was a collection of round-celled infiltration immediately below the unbroken processes. He asked how that could possibly be distinguished from chronic irritation. From the clinical side, one heard the expression "precancerous condition," but did it exist? It was known that in chronic interstitial glossitis, irritation went on a long time before epithelioma developed. Many cases of growth of the larynx started *ab initio* as a growth, without previous irritation. Therefore, by the term "precancerous" he suggested that what was meant was a chronic irritation, which merged into a growth. It was not a common occurrence.

CASES.

Papillomatous Condition of Vocal Cord. Case for Diagnosis.—C. A. SCOTT RIDOUT, M.S.

E. M., married woman, aged 47, first seen 9th July 1930, complaining of "husky throat" for about a year; much worse last few weeks. On examination: Right vocal cord thickened, granular, moves well. Physician's report: "*Nil* in chest." Wassermann reaction, negative.

27th August.—Papillomatous appearance of right vocal cord very marked; portion removed with forceps.

Pathological Report.—Section does not show any evidence of a malignant tumour. [Section shown.]

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press

Further progress: Apparently improved, but (8th October) right vocal cord is still distinctly thickened and papillomatous in appearance.

The opinion of the Section is requested as to diagnosis and further treatment.

Sir ST CLAIR THOMSON said that pathologists were not infallible. If this were his own case he would suggest taking another specimen, deeply, and even then if that were negative, he would still have a laryngofissure carried out.

Mr. TILLEY said he would advise laryngofissure without hesitation.

Sir JAMES DUNDAS-GRANT said that there was a tendency to the formation of a cup in the anterior part of the growth, which in his opinion was an epithelioma.

Mr. RIDOUT (in reply) said he was in favour of removing the cord, and if the patient would allow it he would do so.

Swelling in Left Pyriform Fossa. Case for Diagnosis.—LESLIE POWELL, M.B.

F. G., female, aged 49, complains of difficulty in swallowing during last five months. No vomiting. Always thin, but recently some wasting.

Swelling of left half of larynx, not involving vocal cord. Cord sometimes fixed but has been seen to move. Swelling varies in size and some pus comes from left pyriform fossa. Speech normal; no pain.

Sir JAMES DUNDAS-GRANT said the disease had apparently extended to the posterior wall of the pharynx.

The PRESIDENT said he thought the consensus of opinion was strongly in favour of this being epithelioma.

Dr. LESLIE POWELL (in reply) said that when he saw the case and arranged to send it up, no ulceration could be seen. Pus had escaped, and the swelling had varied in size; he had wondered whether it was a tuberculous abscess. The vocal cord was normal and was moving fairly freely.

Dr. JOBSON HORNE said he did not regard the condition as malignant; it seemed to be suppurative.

Specimen of Larynx with Pachydermia and Subglottic Epithelioma.—V. E. NEGUS, M.S.

The patient was an old actor, aged 80, with a history of hoarseness for some years. He had been examined by Mr. Harmer in 1923, when the larynx was normal.

Examined on 25th December 1929, because of severe dyspnœa and bronchitis; marked pachydermia involving both vocal cords was seen and a large subglottic swelling, apparently of malignant nature, was present.

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press

Tracheotomy was performed four days later; the trachea had to be opened hurriedly, high up through the growth, but, after admission of air, a cannula was inserted lower down a few minutes later.

The patient died, 1st January 1930, from pneumonia. Post-mortem examination showed the presence of an epithelioma separated by a definite interval from the areas of keratosis on the vocal cords.

Specimen of Tongue, Pharynx and Larynx, showing complete disappearance of an extensive Carcinoma after the use of Radium.—HAROLD KISCH, F.R.C.S.

Patient, male, aged 66, attended hospital on 30th December 1929, complaining of complete disability to swallow solid or liquid. There was a history of increasing trouble during the last four months. On examination, the back of the tongue, right side of the pharynx, and the larynx were found to be involved in an extensive ulcerating growth. Patient was admitted to hospital and a feeding tube passed into the stomach. Portions of the growth were removed for examination and proved to be carcinoma. All the septic teeth were removed, and on 9th January 1930, radium needles were inserted into the tongue and upper part of the pharyngeal portion of the growth. The dose given was 1320 mg. hours, the needles being 1 mg. each. By 19th January the patient was able to swallow comfortably and the growth on the tongue had disappeared. Growth could now be seen occupying the right pyriform fossa and that side of the larynx was fixed.

12th February 1930.—The preliminary stages of a lateral pharyngotomy were performed, but the pharynx was not opened. Radium needles were inserted, and a total dose of 1848 mg. hours given. Patient was discharged 6th March 1930, apparently quite well and swallowing perfectly.

He was seen again 6th October 1930, feeling ill, and having an enlarged gland in the neck on the right side. He was admitted for treatment of the gland, but was found to have broncho-pneumonia, from which he died on 10th October 1930.

Sections of the gland are being prepared. Sections of the original growth were shown, together with a section of a papilloma, with an implantation carcinoma, removed from the left tonsil.

Further Report of Cases Previously Shown.

Carcinoma of Larynx treated with Radon Needles.—W. STEWART, M.B.—A. M., male, aged 38. Shown previously in June 1929.[1] The growth was then considered to be carcinoma of left vocal cord. The cord was fixed.

[1] *Proceedings*, 1929, xxii. 1559 (Sect. Laryng. 77). "Ulceration and fixation of left vocal cord."

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press

17th July 1929.—Six 2 m.c. radon-needles 0.3 mm. platinum screen applied through a window resection of left thyroid ala. Tracheotomy at end of operation. Radon needles removed on eighth day. Profuse purulent discharge from wound. Tracheotomy tube kept in two weeks. No biopsy was made.

The growth rapidly disappeared. There has so far been no sign of recurrence. The left cord moves freely. There is a moderately strong, somewhat husky voice.

Laryngeal Growth.[1]—L. GRAHAM BROWN, F.R.C.S.—P. S., male, aged 52, shown a year ago at a meeting of this Section. Consensus of opinion was that it was a case of chronic hypertrophic laryngitis.

In the year's interval there is an obvious increase in the amount of hypertrophied tissue, in spite of medical treatment with mercury and potassium iodide.

A section of the tissue examined a year ago showed squamous epithelial cells in which the nuclei varied in size and shape, a few mitoses being present.

Is this a precancerous condition?

Mr. E. D. DAVIS (in the absence of Mr. Graham Brown) said that the Wassermann reaction was negative in this case, and no tuberculosis was present, as far as could be ascertained. There was no doubt that the growth was increasing. It had been thought to be pachydermia, but part of the section was papillomatous.

Sir ST CLAIR THOMSON said that when this case was shown before, some members had thought that the condition was malignant, but he (Sir St Clair) had suggested that it was a form of hypertrophic laryngitis, and now, after a year, he still thought so. He could not think that malignant disease would spread all round the endolarynx, in the posterior two-thirds, without causing more distress than this patient suffered, or a deeper invasion of the cartilage. His only suggestion now was that a further biopsy should be made, because of the possibility of the case having become tuberculous.

Mr. HERBERT TILLEY said he would be surprised if a further section did not suggest malignancy: he felt convinced that that was its nature.

Epithelioma of the Vocal Cord treated with Radium.[2] HAROLD KISCH, F.R.C.S.—Patient, aged 62, was shown at the November meeting, 1929. There is no recurrence of the growth. The dose was 600 mg. hours.

[1] *Proceedings*, 1930, xxiii. 515 (Sect. Laryng. 17).
[2] *Proceedings*, 1930, xxiii. 375 (Sect. Laryng. 7).

https://doi.org/10.1017/S0022215100035751 Published online by Cambridge University Press