SOCIETIES' PROCEEDINGS

THE SCOTTISH OTOLOGICAL AND LARYNGOLOGICAL SOCIETY

The Thirty-eighth Meeting of the Society, held in the Ear, Nose and Throat Department of the Victoria Infirmary, Langside, Glasgow, on Saturday, November 25th, 1933

President—DR. G. B. BRAND

Résumé of Paper by J. A. Munro Cameron (Glasgow) :

Nasal Polyps with special reference to the polyp of Allergic origin

DR. CAMERON classified nasal polypi, in accordance with their histological appearances, as :

1. Simple mucous polyp.
2. Cystic polyp.
3. Glandular polyp.
4. Amyloid polyp.
5. Eosinophile polyp.

The eosinophile type, he considered, was always the result of allergic conditions of the nose. It differed from all other polypi in the predominance of the eosinophile cells and also in the degree of oedema of the matrix. It was found, as a rule, in patients who had suffered from asthma, hay fever, vasomotor rhinitis ; sometimes in food-sensitive and aspirin-sensitive cases, and in recurring polyps associated with other allergic manifestations.

The cells of the polypus, apart from the fibroblasts in the matrix, were eosinophile and plasma cells with a small proportion of lymphocytes. Two varieties of eosinophile cell were commonly encountered :

(a) A cell with bi-lobed nucleus and coarse oxyphile granules, indistinguishable from the eosinophile leucocyte of the blood stream, and (b) a mononuclear type with very fine granules, of the same size as a plasma cell.

This latter type was conceivably a tissue cell, altered and adapted to meet a chemical change in the tissue.

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In a rapidly growing polypus, the former was the prevailing eosinophile cell; in the more chronic or slowly developing polypus, the mononuclear form was commoner and was often to be seen in equal proportions with the plasma cell.

Dr. Cameron suggested that all polypi should be examined after removal, and if found to be of eosinophile type, treatment for the underlying allergic basis should be instituted.

DISCUSSION.

Dr. ADAM: When Dr. Cameron told me about this paper I looked up some of my records and I found that there were about 14 per cent. of cases in which polypi occurred in about 1,500 asthmatics. These usually contain eosinophils, other types of polypi are very apt to contain basophils. In fourteen aspirin sensitive cases all but two had polypi and six of them had sinus infection, which is an important thing to know from the point of view of treatment, that is, that the antra are very apt to be affected in these cases. The eosinophils in the blood in these cases was, on an average, about 12 per cent. Until I heard Dr. Cameron I was inclined to class polypi in four ways—the ordinary inflammatory polyp; the œdematous polyp due to pressure between the outer wall and the septum, the recurrence of which one cannot prevent unless the pressure be removed, then there is this eosinophil type. I had one patient who never had asthma except when she took aspirin. Her first attack followed her first dose of aspirin. She had polypi and it was for that reason that she first consulted me. Two grains of aspirin produced tremendous rhinorrhœa. I had another patient of the same type who had been operated upon elsewhere, when her sinuses were exenterated, etc. A quarter grain of aspirin made her unconscious for a quarter of an hour. She had been given aspirin before I saw her and she remained unconscious for two days. If Dr. Cameron can tell me how to get rid of such aspirin sensitiveness I would be grateful. I think that we should be very careful in giving aspirin to any patient with high eosinophilia. I could not understand the fourth type which Dr. Cameron has explained, and that was the adenomatous type. I have just seen a case which I think must be of this type; they have polypi on the septum. It is not absolutely necessary to have microscopic sections to determine these allergic cases. Eosinophils can be found in the smears from the nasal secretion.

Dr. A. B. SMITH: I think we are all indebted to Dr. Cameron for bringing this work before us. I have been staining two or three sections recently from nasal polypi and should like to ask Dr. Cameron what he finds in choanal polypi. I have also seen his sections under the microscope and noticed that they are very

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beautifully stained : I would like to know what stain he used. The other day I was speaking to Dr. Biggart, who is taking Dr. Reynold's place in Edinburgh, and he gave me a reprint entitled *Some Observations on the Eosinophil Cells*. He apparently finds numerous eosinophils in practically all pathological tissues, especially in an inflamed appendix. An inflamed appendix of five days' history shows more eosinophils than nasal polypi. It seems there is probably a great deal which we do not know about eosinophils in ordinary pathological tissues.

Dr. J. S. FRASER : Surely the presence of large numbers of eosinophils in the polypi is easily explained. The blood in these cases contains far more than the ordinary proportion of eosinophils. The white cells which pass out from the blood vessels into the tissues must obviously contain the same proportion.

From the point of view of treatment, these cases are extremely difficult. Dr. Turner will remember cases, especially in comparatively young subjects, in whom there was not so much polypi as a pale, œdematous condition of the nasal mucous membrane—the " asthma nose ". There is a pale " peach bloom " appearance on the turbinates and septum. Definite nasal polypi such as one finds in pronounced cases of ethmoidal suppuration are not common in cases associated with asthma. After the application of cocain and adrenalin this œdema goes down to a very considerable extent. Even if by operation one removes quite a big piece of the inferior turbinate, opens up the antrum and curettes out the mucous membrane, still when one sees the patient again two or three years afterwards one can hardly believe that it is the same patient. On anterior rhinoscopy before the application of cocain and adrenalin, one can hardly believe that a part of the inferior turbinate has been removed. A few minutes after the cocain and adrenalin has been used the case might almost be one of atrophic rhinitis without fœtor.

It is very simple to say you " must employ general treatment in these cases " : what is this treatment ? I find that physicians in the Royal Infirmary, Edinburgh, who have interested themselves in the treatment of these allergic conditions have almost given up the use of the skin reactions. They find that they do not get any information of importance. I have had patients who have been examined in America and they bring one sheet of paper with 120 different kinds of pollens and another 150 different kinds of foods and on each list there may be ten or twelve marked to show that the patient is sensitized to certain substances. Unless we can be more definite than that, we are not going to do any good at all. I would like to hear that there is a somewhat simpler method of treatment than avoiding a dozen kinds of food and passive immunization of ten or twelve varieties of pollen.

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Dr. ADAM : I am very pleased to hear from Dr. Fraser that the Edinburgh physicians have given up skin testing. I gave it up long ago, but it is sometimes useful. Two years ago I had a man who had very bad asthma. After treating him without very much benefit I resected his septum, which needed it. He was well for six weeks and then became ill again. He went for a holiday to England and kept well there but had bad asthma when he came home. I tried again to treat him. Again he went to England and he had no asthma. When he came back I tested his skin to two things ; he kept a parrot and he thought eggs upset him, and his skin reacted to egg and parrot's feathers. We got him to banish the parrot and he has had no asthma for two years, yet he can eat eggs with impunity. About the general treatment, I would suggest to Dr. Fraser that he may do worse than give his patients a blue pill each Saturday night and a dose of mag. sulph. the next morning.

Dr. MUNRO CAMERON (in reply) : I quite agree that a tissue eosinophilia is found in many circumstances and is difficult to explain. In the series of cases, however, that I have brought before you eosinophilia seemed to be so definitely related to a particular type of polyp as to put it into a class by itself.

The slides were stained with hæmatoxylin and eosin.

The choanal polyps I have examined in this series belonged to the adenomatous type.

I am glad to hear Dr. Fraser's comments and in general I agree with all he has said. Skin tests, are, I think, being given up. To answer his question on the treatment of patients would require a lecture by itself, but I might suggest that by a diet and exercise, and careful purging, something can be done to lead allergic patients into the paths of physiological normality. I would like, however, to point out to Dr. Fraser that the exodus of eosinophil cells from the vessels through the polyp is not quite so simple as he appeared to suggest, for while many of these patients have an increased blood eosinophilia, a good many of them, and especially the food sensitive group, have not.

Dr. BROWN KELLY : Dr. Munro Cameron's paper confirms what I have often told patients, namely that their poylpi will recur as long as they have paroxysmal sneezing and rhinorrhœa. I pointed out long ago that persons suffering from vasomotor rhinitis may, at intervals of years, develop in succession turbinal swelling, turbinal hypertrophy, and polypi. One of the most troublesome problems with which one has to deal is the nasal hypersensitiveness in the young, especially in boys. Until they are over ten years of age they are constantly catching colds which tend to pass to the chest. They usually improve when sent to a boarding school where they get plain food and plenty of exercise. This hypersensitiveness is often inherited and is met with especially in only children.

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CASES

Otomycosis—Aspergillus Niger.—GAVIN YOUNG.

CASE III.—Miss B., private patient, not shown, æt. 26. Seen 15.5.33, complained of earache, deafness and discharge in the right ear of several weeks' duration. Lead acetate drops were prescribed by her own doctor.

The meatus was filled with soggy, epithelial débris, with blackened areas. The tympanic membrane was reddened, but intact. The first diagnosis was otitis externa, the black spots were thought to be due to Ph. Acet. Ung. Resinol prescribed. At the next examination there was no improvement. The débris was examined and spores and filaments were identified. The condition cleared up at once under treatment with absolute alcohol drops, and there has been no recurrence of symptoms.

Slide shown.

Erythema Multiforme of Mouth and Throat, becoming Pemphigoid.—A. BROWN KELLY.

CASE IV.—F., 56. The illness began at end of *July* as an acute inflammation of the tongue. A week later there was soreness in the cheeks and below the tongue, accompanied by an appearance of a yellow membrane with a red margin. The blood count and general condition were satisfactory but for the presence of Hodgkin's disease. In the interval that has elapsed the eruption has extended to the palate, gums and lips.

Present condition.—There are patches of thin membrane and bare raw areas inside the cheeks and lips. The tongue presents inflamed areas with prominent papillae. There is a little membrane on the palate, especially at the sides of the uvula, and on the tonsils. The posterior pharyngeal wall is normal. There is membrane in both pyriform sinuses. No skin manifestations. Coloured sketches of the patient's palate and tongue, also of the palate in a case of pemphigus were shown.

Case of Pemphigus.—G. B. BRAND.

CASE V.—Mrs. B., in Ward.

Lupus of Nose, Adjacent Face, Gums, Hard and Soft Palate, Larynx. Cured by Diathermy, Rhinoplasty. —J. ADAM.

CASE VI.—C.R., aged 30. Lupus began in the nose at the age of 7, in the lip at 20. Treated at various hospitals between 1915 and 1924. When seen in 1924, the point of the nose was gone, down to the nasal bones, the upper lip was thrice its normal thickness and the skin of the face adjoining was also affected. The gums and most

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of the palate from the incisors to the uvula were involved, as was the larynx, slightly. Treatment by diathermy puncture was begun in 1924, over fifty punctures being made. Improvement was steady. Plastic operation had to be postponed owing to granular conjunctivitis, pannus and corneal ulceration in 1926, and again in 1928, and owing to synovitis of the knee in 1929. In 1930 flaps were turned in from the naso-oral grooves but failed from want of cover. In 1931 the usual tubed flap from the forehead was turned down and, later, cartilage grafts were implanted in the dorsum and alae. Three attempts to form a columella failed, owing to extensive scar tissue in this region, excision of which would probably have led to greater deformity.

Photographs.

Ulcerative Stomatitis.—G. B. BRAND.

CASE XII.—Mrs. R.F., aged 32. Ulcerative stomatitis for six years. First seen on *October 18th*, 1932. Patient has got quite well during pregnancy, but the condition always recurs. She has small herpetiform spots going on to superficial ulceration in the insides of cheeks, lips, tongue, pillars of fauces. The case has been thoroughly investigated by the Skin Department. Nothing abnormal has been found in any of secretions or excretions. Treated with Mammagen tablets (G. W. Carnrick) for about nine months.

DISCUSSION.

CASES IV, V AND XII.

The PRESIDENT: I am indebted to Dr. Herbert Brown, the skin specialist, for the case of pemphigus, No. V.

Dr. EWART MARTIN: Is pemphigus becoming more common than it used to be? I think that case of Dr. Brown Kelly's is also now a pemphigus. As students we were taught that pemphigus was extremely rare. In the last year I have seen two cases. I saw the first case about fourteen months ago and I thought that it was a specific infection, and funnily enough she had a weak positive Wassermann, but treatment over a period of three weeks had no effect. The patient then developed eye trouble and the Eye Department at once diagnosed pemphigus. They tell me that in the Eye Department it is not uncommon and they have no difficulty at all in the diagnosis. The question of course is, what is the treatment? Is there any or is it a fatal disease?

Dr. ADAM: I wonder if there is any link connecting these cases with a granulocytosis? One would like to know about the polymorphs.

CASES IV, V AND VI.

Dr. BROWN KELLY (in reply): Apart from evidence of slight anæmia the blood count was normal. No eosinophilia. The case has been regarded as one of *erythema multiforme* because of the simultaneous presence of various lesions. Owing to its protracted course and resistance to all treatment hitherto employed, we fear that it may be

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a pemphigus. No vesicles have been seen in the mouth, still, these may have escaped notice as they may last only a few hours. Several years ago I had a case which in its early stages resembled this one but, after eight months, vesicles appeared on the palate and, later, on the skin ; the disease passed to his eyes, causing blindness, and to his œsophagus, producing dysphagia. He died after suffering from this disease for over six years.

The PRESIDENT : The strange thing about this case is that during all her four pregnancies she was quite free from the disease. She states that she is tired of the cure ! We put her on Mammagen tablets and she has certainly been better during the last nine months than she has been for some years.

Dr. HOWIE : I asked her about the question of heartburn during her pregnancies and she said she suffered very severely. This might indicate a temporary hyperchlorhydria. She states that her " thorough investigation " did not include a test meal. I suggest that this might be a case of peptic ulcer due to deficiency of hydrochloric acid. I have seen several of these conditions clear up very quickly after hydrochloric acid by mouth.

CASE VI.

Dr. ADAM : I may say that I am not showing this case because of the rhinoplasty but because of the result of the diathermy in the treatment. What tempted me to put forward the case was Sir St Clair Thomson's remarks at the February meeting of the Laryngological Section, Royal Society of Medicine. This case had been treated for years before I saw it without any benefit, and there is no doubt whatever that the diathermy cured it.

Dr. GUTHRIE : What interested me in this case was the rhinoplasty, although Dr. Adam says he did not show it from that point of view. With your leave, sir, I should like to show one or two lantern slides.

Dr. Guthrie then showed slides and described cases.

Dr. Guthrie referred to the difficulty of reconstructing the nasal columella which Dr. Adam appeared to have experienced, and showed a series of lantern slides illustrating various methods of making a new columella.

When total rhinoplasty was necessary, the terminal part of the forehead flap was, of course, the columella, and being far removed from its blood supply it might readily slough. This occurred in a case seen by the speaker.

The patient was a ticket collector who, falling against a live electric rail, sustained a severe burn which destroyed the entire nose. After excision of fibrous tissue, reconstruction was practised in the approved fashion and was ultimately successful, despite the sloughing of the columella. This might have been avoided by folding the columella upon itself and not anchoring it to the upper lip until a week or ten days had elapsed.

Dr. Guthrie also demonstrated a case of destruction of the columella caused by lupus. Reconstruction was effected by local flaps from the lip area and the sides of the nose.

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This method was also successful in a case of nasal syphilis, although syphilitic noses are notoriously difficult to reconstruct on account of the dense fibrous tissue often present and the poor vitality of the flaps.

Dr. ADAM (in reply) : " The real difficulty in this case was in getting a columella on account of the extent of the scar tissue. Dr. Guthrie has said that the columella is easy to form, but the difficulty here was to get it to take root." Dr. Adam then drew the process on the blackboard, and described it.

Rodent Ulcer of the External Nose.—W. S. SYME.

CASE VII.—A.T., male, aged 60. First seen on *August 28th*, 1933, complaining of a disfiguring swelling over the right nasal bone. There was no pain and no interference with the general health. It was thought at the time that this was a simple sebaceous cyst, but the history of recent increase in size with slight bleeding of the surface and hardening of its edges, suggested a malignant change. On *September 11th* the growth was removed surgically under local anæsthesia. Biopsy showed it to be a rodent ulcer. Is recurrence likely ? Is further treatment desirable in the meantime ?

DISCUSSION.

The PRESIDENT : The case appears to be perfectly well at the moment. There is a healthy scar, and he should be kept under observation without further treatment in the meantime.

Dr. DONALD : I must ask Dr. Syme if there had been a long history before he operated and what the condition was like when he saw it and whether he withdrew any cystic fluid.

Dr. SYME (in reply) : I saw this case first of all on *August 28th*, 1933, and at that time it had the appearance of an ordinary sebaceous cyst, but what made it seem suspicious to me was the fact that it was covered with a little blood clot, as if there was an incipient bleeding. For this reason I thought biopsy would be the best way to clear up the doubt and when the growth was removed by dissection, biopsy was carried out. The first time I saw the case was in *August*, although the patient gave a history of having a swelling of some size, recently increasing, for the past two years.

Case of Fibro-adenoma of Nose.—D. STRANG.

CASE VIII.—Baby, Mary A. A swelling of the right side of the nose was noticed a few hours after birth. This has been growing moderately rapidly and now shows marked deformity.

DISCUSSION.

Dr. J. S. FRASER : Was a section of this available ?

Dr. STRANG (in reply) : There was a pathological section, but it was not shown to-day.

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Dr. BROWN KELLY: I think that this case resembles two cases reported by me in the *Journal of Laryngology*, July, 1918, under the title "Congenital Appendages or Teratoid Tumours of the Nasal Septum".

Giant-celled Epulis.—D. STRANG.

CASE IX.—J. McA., æt. 17. The tumour, on admission of the patient in *May*, involved the whole of the maxillary region. 24.5.33. Tumour removed. 6.6.33. The patient developed scarlet fever. Re-admitted on 16.8.33. Swelling almost as large as before. 17.8.33. The cavity was reopened and scraped. 7.9.33. Radium was inserted for eight days. Nine 1 mg. needles were used.

DISCUSSION.

The PRESIDENT: I was present when Dr. Strang operated and the upper teeth on the left side were quite mobile, owing to the destruction of the superior maxilla. The case is looking very well now, but it looked as if the boy were going downhill altogether when he came up for operation.

Dr. BROWN KELLY: I wish to ask if it was an epulis or a cyst.

The PRESIDENT: The tissue was examined twice and it was an epulis—giant-celled epulis—on both occasions. The case was clinically like a sarcoma, but there was no evidence of that in the sections.

Tertiary Specific Perforation of Soft Palate.—G. B. BRAND.

CASE X.—Mrs. C., aged 34. First seen in *February*, 1933, complaining of "sore throat" of four weeks' duration, which had resisted treatment. Feeding was difficult because of regurgitation through the nose. There was a massive typical specific perforation in the soft palate, the uvula being attached by a narrow strip of tissue on each side.

The PRESIDENT: This patient did not turn up. As a matter of fact the perforation is healed. I wanted to show the case because, in our clinics, these cases are not common nowadays. They usually go now to the V.D. clinic and the reason I wished to show it was to impress on the younger members the necessity for giving iodides internally and inunctions of mercury. This treatment must be very vigorous in order to minimize destruction.

Cerebral (Temporo-sphenoidal Lobe) Abscess. Death.—GAVIN YOUNG.

CASE XIII.—M. M'E., female, æt. 23. Admitted 21.5.33, complaining of drowsiness and discharging ears. 1920. Simple mastoid operation which healed well. *November*, 1932. Bilateral otitis which dried up shortly. 1.5.33. Severe pain in the right ear with discharge, pus forming in the old scar which was opened and drained

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by the patient's own doctor. 11.5.33. Pain and discharge in the left ear. 17.5.33. Vomiting, frontal headache and drowsiness. Temp. 101° F., constipation. 21.5.33. On admission, patient looks ill but alert. Small discharging sinus behind right ear. The right tympanic membrane shows a small dry perforation in the posterior-superior quadrant. Left tympanic membrane—no perforation. Schwabach increased on both sides. Left pupil larger than right; both react, no diplopia, no strabismus, no nystagmus. Pulse 52. Temp. 101° F. 23.5.33. Patient more alert, general condition much improved. Facial paralysis apparent, upper eyelid and forehead not involved. Drs. Gracie and Gaylor in consultation. 24.5.33. Dr. Gracie examined the blood count, 10,500 whites. Cerebrospinal fluid under slight pressure but clear; pleocytosis 94 round cells per c.mm. Immediate operation advised. Mastoid opened, cavity fairly healthy, sinus exposed and found to be healthy. Tegmen removed, bulging dura incised, sinus forceps introduced, evacuating an ounce and a half of thick non-odorous pus.

The cavity was packed. Pulse after operation 130.

25-30.5.33. Patient *very well*. No headaches or sickness. Pulse 72. Daily dressings.

31.5.33. Patient drowsy. Pulse 40-50, no headaches, some sickness. Cavity explored for loculi without result. Coma, convulsions, Con. Mag. Sulph. given. 1.6.33. Some pus found in fresh pocket. Patient still drowsy but pulse better. Right ophthalmoplegia. Died. No *post mortem* examination. Pus from abscess contained Streptococci. Points of interest, (a) abscess in an acute otitis; (b) sole localizing sign facial paralysis, upper neurone type.

DISCUSSION.

Dr. GAVIN YOUNG: She died, I think, of encephalitis.

The PRESIDENT: An interesting case from the symptom point of view.

Nystagmus of Palate and Pharynx.—W. S. SYME.

CASE XI.—Mrs. McK., aged 46. First seen on *October 5th*, 1933. Complaining of sore throat for years, with huskiness, and pain in the left ear. She stated that there was a clicking sound coming from the throat which was audible to others. No diseased condition was seen in the nose, sinuses, pharynx or larynx, but there was a rapid movement of the soft palate and pharyngeal wall, especially to the left side. Since then it has been thought that the movement had become bi-lateral. The Wassermann reaction was negative. Dr. T. K. Maclachlan reported that this was probably a neurotic condition accentuated by the menopause, providing the Wassermann reaction was negative. He did not find any other disorder of the central nervous system and suggested that the best

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line of treatment was reassurance and simple sedatives. He is keeping her under observation.

DISCUSSION.

Dr. BROWN KELLY : I should suggest that the affection in this case is clonic spasm of the soft palate. I asked the patient to breathe through the nose while the throat was being examined, whereupon the movements ceased. On being told that she was not to repeat them she became hysterical. Nystagmus of the palate is different. The movements are much finer, constant, involuntary, and produce no noise. The affection may be unilateral or bilateral and may also involve the posterior wall of the pharynx and larynx. It is caused by central nervous disease. The late Dr. W. G. Porter reported a case in detail. I had a case in which, at the necropsy, widespread interference with the blood supply to the cerebellum due to syphilitic changes was found.

Dr. J. S. FRASER : I also think there is a strong hysterical element in the case. I looked at the tympanic membranes while the " clicking " was going on but could not see any movement of the drumhead.

Cerebellar Abscess—Recovery.—GAVIN YOUNG.

CASE XIV.—D.A., male, æt. 22, admitted 3.9.33. Discharge from the right ear, headache and sickness. Double otitis from infancy till 1930. Submucous resection, 7.8.33. Reported fit O.P.D. 22.8.33. 29.8.33. Pain in right ear with discharge for two days which gradually disappeared. Occipital headaches.

1.9.33. Sickness and giddiness, not tending to fall more to one side than the other. 3.9.33. Admitted. Patient looks toxic. Pulse 52. Temp. 98·6° F. Right tympanic membrane—central perforation, some discharge. No mastoid tenderness. Cerumen in the left meatus. Slow nystagmus to both sides. Pupils equal and react, no definite papillœdema, but some blurring of the discs (Dr. Gaylor). No facial paralysis. Schwabach increased on both sides. Definite dysdiadokokinesia. Right hand. No local muscular weakness. Nothing else to note. Mastoid opened, Schwartze operation performed. Some pus in cells, not extensively diseased. Sinus healthy. Lumbar puncture, cerebrospinal fluid clear, under slight pressure.

4 and 5.9.33. Still giddy, nystagmus to right. 5.9.33. Dura of posterior fossa exposed, mesial to the sinus, incised and cerebellum explored. One ounce of non-odorous pus evacuated. Drained by gauze through a Souttar's tube. 18.9.33. Wound stitched. 20.10.33. Reported O.P.D. Wound dry, no nystagmus, no ataxia.

Right Cerebellar Abscess, with Unusual History. —G. B. BRAND.

CASE XV.—A.J., female, aged 15. Admitted to Medical Ward *April 28th*, 1933, as an urgent case, with headache, sickness and

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vomiting. Temp. 98° F. Pulse 88. *History.*—For the past year she has had a tired, lazy appearance, and no wish to mix with people of her own age. Three weeks ago, the right ear became painful and discharged pus. The ear has been dry for a week. There is no pain, and the hearing is good. Four days ago the patient started being sick with severe vomiting, a great desire to drink, and also complained of severe frontal headache, starting on the right, and spreading to the left.

Present condition.—Somewhat pale. Well nourished, lies quietly in bed, and answers quickly and intelligently.

Physical examination.—Nothing to note, except that the tongue is furred. Pupils equal, and active to light and accommodation. No nystagmus. High degree of myopia. Superficial and deep reflexes present and equal on both sides. Plantar response, flexor.

30.4.33.—Severe frontal headache to-day. W.B.C. 10,400. Movements of eyes towards the right side limited. 2.5.33. *Report of Eye Specialist.* Paresis of both external recti, full movement to temporal side defective, both sides. Superior recti and convergence also defective. Fundi normal, except for myopic changes. 2.5.33. Cerebrospinal fluid, increase of cells, no organisms. Cultures sterile. 2.5.33. Slight weakness left facial nerve. Aural examination. Both drumheads intact. Recent scarring both sides. Hearing normal. No nystagmus, slight pointing error to lateral side with right hand. No dysdiadokokinesia. 3.5.33. W.B.C. 8,400. Transferred to Ear Ward to-day, with a diagnosis of cerebellar abscess on the right side. Athetotic movements on right side of the body with choreiform movements of face. Also slight paresis left side of face. Tendency of head to fall towards the left. No giddiness. Still pointing error and dysdiadokokinesia present. 4.5.33. A Schwartze operation was performed on the right side. Drumhead incised, no pus. No pus in mastoid, but unhealthy granulations in several large cells. Antrum small, large tip cell with œdematous lining. Sinus exposed, healthy. Dura of posterior fossa laid bare, incised, and an abscess was found at a depth of about 2 c.m. The pus was thick, creamy and not foul. More than half an ounce was evacuated.

Pathological Report.—Polymorphs and Streptococcus Viridans. Convalescence was uninterrupted and the patient was sent to a Convalescent Hospital on 21.6.33.

Discussion.

Cases XIV and XV.

Dr. J. S. Fraser: The interesting thing in this case is the fact that the tympanic membranes were intact and that there was little or no disease of the mastoid cells. What was the route of infection? I suppose one occasionally gets a blood infection; brain abscess in cases of pneumonia without otitis media must come by this route. The

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other point is bacteriology. In a case like this, if the infection came from the mastoid one would have expected the pneumococcus mucosus. However, I see it was the streptococcus viridans.

The PRESIDENT: There was one point about this case: The report from the eye specialist said that "papillœdema and high myopia is a very great rarity" and the authority for that is an American ophthalmologist, Ward Holden.

C.S.O.M. Mastoiditis. Bacteræmia. Recovery.
—T. O. HOWIE.

CASE XVI.—A. McK., female, æt. 21. Admitted 29.7.33. *History.* Chronic discharge from the left ear. Fourteen days ago pain and headache developed, discharge diminished 28.7.33. *Examination.* C.S.O.M. in the left ear with tenderness over the left mastoid. Considerable complaint of left sided headache. No nystagmus. Temperature 103·6° F. No rigors. *Operation.* 31.7.33. Schwartze. Mastoid acellular, antrum at ¾" from surface. Lateral sinus far forward appears healthy. Tegmen antri eroded, dura healthy. 3-6.8.33. Temperature ranging 102-103° F. Lungs normal, no rigors, leucocytes 20,000. Blood culture staph. albus in subculture. 10.8.33. Wound reopened and sinus laid fully bare. No evidence of phlebitis. Few infected cells towards tip cleared. 13.8.33. Temperature has remained high, cellulitis of right orbit has developed. Temperature now drops to normal, with the exception of one rise on 19.8.33. Orbit explored by Dr. Conway (Ophthalmic Surgeon Vic. Inf.) on 15.8.33, but no pus found until dressing 18.8.33.

27.8.33. Coma followed by eight epileptiform convulsions, lumbar puncture revealed cerebrospinal fluid slight positive pressure, slightly turbid, reduced Benedicts, cells 6 per c.mm. lymphocytes. Culture sterile. Had minor similar attacks over next ten days. ? hysterical. Now well.

DISCUSSION.

Dr. HOWIE: The interesting point in this case was a persistent high temperature, with no obvious lateral sinus disease. The blood culture may be taken with a grain of salt, but she certainly had a bacteræmia. She was very well herself, yet her temperature persisted in remaining high and she developed this cellulitis of the orbit, after which her temperature returned to normal. The question is whether it was not a fixation abscess.

Dr. GAVIN YOUNG: I wonder if this is not a lateral sinus phlebitis with phlebitis of the cavernous sinus. The curious thing was that the orbit was explored on the 15th but no pus was found on the dressing until the 18th.

Dr. ROSS SOUPER: Was the pus from the orbit examined bacteriologically ?

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Dr. FRASER: If Dr. Howie will look up Dr. Logan Turner and Dr. Reynolds' book upon *Intracranial Pyogenic Diseases*, page 124, he will see a case in which the patient had a cavernous sinus thrombosis on the side opposite to the diseased ear. It is interesting that the patient recovered. The case was very briefly commented upon in a paper published by Dr. Milne Dickie and myself in the *Journal of Laryngology and Otology*, 1912, xxvii., 135.

Dr. HOWIE (in reply): I felt that the blood infection probably arose from the disease in the upper part of the mastoid. The sinus was so apparently healthy and there was a good deal of necrosis of the tegmen.

Case for Diagnosis.—G. B. BRAND.

CASE XIX.—G.C., male, aged 66. First seen by exhibitor on *October 16th*, 1933. Hoarse for about nine years. The patient is a seafaring engineer, and has never stayed ashore for treatment. He saw Dr. Dan MacKenzie in London four years ago, but went off to sea instead of waiting for treatment. About two months ago he lost his voice practically altogether. He was seen by Dr. T. O. Howie, who removed pieces of a multiple growth from both cords. *Pathologist reports* simple papilloma.

The Wassermann reaction has not been done so far. *Examination.* Right vocal cord very injected with rough edges, and there are some white excrescences just below the left cord. Movements of cords are restricted. *Slides shown.*

DISCUSSION.

Dr. MARTIN: Would it not be as well to get the Wassermann reaction done in this case? We have had one similar case which we showed three years ago before this Society. A year after we showed the case the patient developed sudden difficulty in breathing due to a rapid extension of the disease with no apparent œdema. We removed some pieces and the pathological report was non-malignant, but in doing a tracheotomy we found a small gland which definitely showed carcinoma. I think this case should be kept under observation.

The PRESIDENT: This was a case for diagnosis. The patient has been hoarse for about nine years. There have been several examinations of the tissue which have all been certified as papilloma.

Dr. J. S. FRASER: The case seems very well.

The PRESIDENT: The patient is very much better but he is not well yet. I was very suspicious about the right cord. During the time we have been watching him the right cord has been restricted in its movements. I did not look at it to-day. He has improved very much during the last two or three weeks.

Case for Diagnosis, Paralysis of Right Vocal Cord and Right Side of Soft Palate.—GAVIN YOUNG.

CASE XX.—Mrs. L., æt. 30. Complained of huskiness and regurgitation of fluids through nose of several weeks' duration.

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Examined 27.8.33. The right vocal cord is paralysed, also the right side of the soft palate, with ? pallor of paralysed part of palate. She had a fit of coughing to-day, could not inspire air and was cyanosed. Headaches and sickness in mornings recently. Ophthalmic examination negative save for ? left pupil larger than right. Examination of other cranial nerves negative. No spontaneous nystagmus. No deafness. No alteration in co-ordination. Wassermann reaction, blood, and cerebrospinal fluid negative. X-ray of chest and barium drink negative.

DISCUSSION.

Dr. GAVIN YOUNG: I would call it a basal condition.

Dr. ADAM: I would suggest that there is a good deal of pus in the right side of the nose. Were the sinuses X-rayed in this case ?

Dr. GAVIN YOUNG: I will have the sinuses X-rayed and see if there is anything in the region of the sphenoid and will report on the case again.

Acute Suppurative Frontal Sinusitis.—G. B. BRAND.

CASE XXI.—W.M., male, aged 18. Admitted 12.12.32. Temperature 105° F. Pulse 140. Red œdematous swelling of the right eyelid and extending above the right eyebrow. *History.* Had a severe cold in the head 7.12.32. 11.12.32. Had discomfort in and around the right eye, rapidly developing into severe headache, and rapidly increasing the swelling.

Examination. The right nasal cavity contained some blood clot. Mucous membrane in ethmoid region very congested, but no sign of pus. The right middle turbinate was cocainized, and pushed over towards the septum, when there was a flow of creamy pus from the middle meatus. Aspirin and menthol steam inhalations given. 13.12.32. Better to-day. Temperature 103·8° F. Pulse 128. The anterior end of the right middle turbinate removed, and free drainage of pus obtained. Given Diasulphannin, internally, and an adrenalin spray two hourly. 14.12.32. Much better. Temperature 100·4° F. Pulse 98. Draining well through nose. 19.12.32. Continuing a temperature up to 101·8° F. Incision by Dr. Dykes, just below the eyebrow, and a large quantity of pus evacuated. Cavity packed. 5.1.33. Temperature and pulse practically normal since 21.12.32. The frontal sinus was opened and drained. (Dr. MacKinnon.)

23.1.33. *Eye Examination.* Diplopia on looking upwards and down, and to right. Behaviour of images points to paresis of right superior rectus and right superior oblique muscle. Fundi are normal.

DISCUSSION.

The PRESIDENT: I brought this case up, not to show a comparatively good result, but to emphasize the fact that in fulminating cases of frontal

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sinusitis the best surgical treatment is to improve the drainage by doing as little as possible. This boy was admitted desperately ill. He was having rigors and there was grave toxæmia. The landmarks of the right ethmoidal region were blotted out as the result of the œdema. I cocainized the ethmoid region and pushed the middle turbinate towards the septum, thereby releasing pus. He had a better night, his rigors stopped, and two days later the anterior end of the middle turbinate was removed to improve drainage. He gradually got better, his temperature becoming normal on *December 21st* and the frontal sinus operation was done on *January 5th.* He is now quite well except that he has a diplopia on looking upwards and downwards, but that is getting better.

Dr. BROWN KELLY: It is a very fine result. The nose is clean.

Three Cases of Carcinoma of Œsophagus. Treated by Radon.—Gavin Young.

CASE XXII.—Mrs. D., æt. 56. Admitted 4.11.32, complaining of difficulty in swallowing solid food, of two years' duration. Loss of weight for past eighteen months. X-ray examination, barium. Narrowing near the cardiac end of gullet. Œsophagoscopy, fungating growth 11½″ from teeth. Treatment. Under œsophagoscopy, stricture dilated with bougies. Souttar's tube inserted loaded with radon contained in a gold capillary tube. Patient was fed fluids orally and per rectum during the five days of treatment. 10.1.33. Œsophagoscopy, no ulceration observed, though some narrowing. 12.1.33. X-ray report, narrowing at the lower end of gullet. The narrow part seems smooth-walled. 1.4.33. The patient can swallow solids with ease. Weight up, nutrition good. 14.10.33. Little difficulty in swallowing, still putting on weight.

CASE XXIII.—Mrs. R., æt. 37. Admitted 15.2.33. Complained of pain in the chest and difficulty in swallowing of three weeks' duration. Can take only very soft food. General condition fairly good. X-ray examination, barium obstructed about 7th dorsal vertebra, with apparently a fairly considerable mass pressing on the gullet at that point. Œsophagoscopy. Ulcerated growth on the left posterior wall about 12″ from the teeth. Lumen not unduly narrowed, but some spasm present. 16.2.33. Rubber tube fitted with radon inserted and left for ninety-six hours. 1.4.33. Eating ordinary food and putting on weight. Looking well. 9.10.33. Patient reported. Very well, eating ordinary food. Barium drink passed easily.

CASE XXIV.—Mrs. K., æt. 50. Admitted 1.2.33. Complained of difficulty in swallowing of two months' duration. Food goes down and seems to stick, then there is a tendency to vomit. No

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pain, liquids go down fairly well. No loss of weight apparent. General condition good. X-ray examination. Barium shows obstruction upper part of gullet. Œsophagoscopy. Small ulcerating growth on posterior part of gullet, 10″ from the teeth. 2.2.33. Large sized Souttar's tube loaded with radon inserted for ninety-six hours. 9.3.33. No pain on swallowing. Taking solids. Barium drink and X-ray, very little obstruction. 11.5.33. General condition excellent. Swallows food easily. 2.10.33. Œsophagoscopy. Some local ulceration, possibly slough rather than growth. Barium X-ray. Barium passed freely down gullet. Slight narrowing at site of old stricture. Patient states that she is swallowing more easily than ever. These cases are selected and are shown not as cures but as cases that have been definitely benefited, even if only temporarily.

DISCUSSION.

CASES XXII, XXIII AND XXIV.

Dr. GAVIN YOUNG: As I have said, the cases are selected and shown because one's treatment in the past in cancer of the gullet has been so disheartening that I felt that anything which gave any benefit was worth reporting and I should be glad to hear if anybody else has anything to say about it. I should say that I am indebted to the city of Aberdeen for the radon.

Dr. MARTIN: I would like to ask Dr. Gavin Young why he used radon here instead of radium ?

Dr. GAVIN YOUNG: With radium we had had too intensive a result, tremendous formation of scar tissue and a very much worse stenosis of the gullet. Our results have been very much better with radon. I omitted to put in the dosage. We use an ordinary Souttar's tube with a gold container down the centre, and it leaves just sufficient room for food to pass.

Dr. H. Ross SOUPER: Is there any particular advantage in having a Souttar's tube rather than a rubber tube ?

Dr. GAVIN YOUNG: It is sometimes difficult to get a rubber tube into position.

Dr. EWART MARTIN: This is a gold tube and also a rubber tube.

Dr. GAVIN YOUNG: Our radium man passed the Souttar's tube as being satisfactory and certainly the results have been satisfactory.

Dr. BROWN KELLY: I have used Souttar's tube with the needles between it and the rubber covering but, probably owing to the wrong dosage, without the hoped for results. On the other hand, Souttar's tube has proved very helpful in enabling the patient to eat and to avoid the discomfort from saliva. Fifteen months is, in my experience, the longest period which a patient has lived with a tube in the œsophagus. At the upper end of the gullet radon seeds can be very beneficial.

DR. H. Ross SOUPER: I think the best method is to put in radon seeds directly into the growth through the œsophagoscope. In Aberdeen, we do this work in conjunction with the Radium Officer, and first used radium made up either round a Symond's gum elastic tube or,

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latterly, round a Woodman's hexagonal rubber tube. These are relatively easy to place in position in the malignant stricture through a 13 mm. tube. I have not tried Dr. Young's method, but the best result we have had so far is undoubtedly by implanting radon into the tumour. (Details of a case were given.) May I suggest that Dr. Young will, at a later meeting, report on these three cases, which have a most encouraging early result, and that he might give us details of the dosage.

Dr. J. P. STEWART: My experience of the implantation of radon seeds directly into the growth has, on the whole, been very satisfactory as far as the local results are concerned. One of my most successful cases was when the tumour was situated in the lower third of the œsophagus and I have no hesitation in saying that tumours in this region react very well to radon seeds. Nowadays with such a superb range of instruments there is no difficulty in getting access to the tumour. Difficulty in diagnosis should not be experienced when there are any associated symptoms, as without some good reason no person is going to have a casual look round the œsophagus on the off-chance of detecting early tumour growth. In other words, endoscopy is only an aid to diagnosis.

Dr. BROWN KELLY: I should have said that at the upper end of the œsophagus the radon seeds are very useful. I think Dr. Keith Robertson could tell us about a case.

Dr. KEITH ROBERTSON: I was thinking of that case. Dr. Brown Kelly very kindly came down to Greenock and inserted radon seeds in a case I had. The tumour was in the upper end of the œsophagus. When the woman came into hospital she could hardly swallow liquids. Two or three weeks after the radon she was swallowing almost anything, certainly in a few weeks she was swallowing meat and potatoes and was so well that she remained too long away from our observation. It was well over a year when she returned with a recurrence. Again it was treated with radon seeds with almost a like result but the recurrence occurred quicker. The woman died later. For immediate effect it was most remarkable. Dr. Brown Kelly put in the radon seeds in the first place and I put them in myself on the second occasion. The relief was so immediate that I was very struck with it.

Cancer of Hypopharynx.—J. ADAM.

CASE XXV.—Francis M., aged 33. Admitted to Stobhill Hospital 5.11.32. Complaint—Hoarseness of six months' duration with dysphagia about one month. Could not swallow porridge. Patient habitually consumed thirty cigarettes and two glasses of whisky daily. Extensive carcinoma of left hypopharynx, involving the arytenoid and epiglottis, the latter is infolded so that the glottis is readily seen. Some stridor, marked hoarseness, left arytenoid and cord fixed. Much glandular swelling on left side. The patient was given the choice of operation or deep X-ray therapy, and chose the latter, which was given at first every few days, latterly at much longer intervals. 8.12.32. Glands no longer palpable. After this the hypopharyngeal growth disappeared, the voice improved, and

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swallowing became normal. The left cord has remained fixed throughout. 6.11.33. Swallowing normal. No palpable glands. ? Slight recurrence.

Large Epithelioma of Left Pharyngeal Wall and Pyriform Space.—G. B. BRAND.

CASE XXVI.—A.S., male, aged 73. Swallowed a fish bone in *January*, 1933. First seen on *August 22nd*, 1933. Began to feel pain in *June*, in the left side of throat where the fish bone had lodged, followed by dysphagia with pain shooting to the left ear. General health has been poor for about a month. Two weeks ago, a large glandular swelling appeared on the left side of the neck. The patient is coughing up large quantities of blood-stained mucus and frothy saliva. *Examination* revealed a large ulcerating growth occupying the left pyriform region and extending up the left pharyngeal wall. The left cord was invisible. A piece of tissue was removed and showed the characteristics of a squamous epithelioma of cellular type. Wassermann reaction—Negative.

The patient is being treated with deep X-ray therapy, with marked improvement.

DISCUSSION.

CASES XXV AND XXVI.

Dr. GAVIN YOUNG: I have seen something of Case XXV, who has been attending the Western Infirmary for Deep X-ray Therapy.

The PRESIDENT: My case is a happy one. When I saw him first he had a large ulcerating growth filling up the left pyriform space and extending well up the left pharyngeal wall, with a large hard glandular swelling on the left side. He was put on deep X-ray therapy and to-day I do not think there is much to be seen at all.

Dr. MARTIN: Have you any idea of the dosage ? The curious thing about the case is that the skin seemed so moist and healthy. In deep X-ray therapy pushed to the extreme, of course, you get a browning of the skin which very often breaks down. I should like to know the dosage and also the protection. The result is very good indeed.

The PRESIDENT: I think you will all agree that that case was well worth while. The patient is perfectly comfortable. She wears her dental plate and has no trouble at all.

EXHIBITS

EXHIBIT NO. I.—**X-ray film of Scabbard Trachea due to an Intra-thoracic goitre.**—G. B. BRAND.

EXHIBIT NO. II.—**Photographs of a case of Monilia infection.**—G. B. BRAND.

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DISCUSSION.

EXHIBIT No. I.

The PRESIDENT: I think you saw the exhibit of the scabbard trachea. The patient is now perfectly fit. The second plate was taken a fortnight after thyroidectomy.

EXHIBIT No. II.

The PRESIDENT: There is a very close association between the Skin Department and the Ear and Throat Department in this hospital and we see a lot of interesting cases. That child was a very interesting case. She died of some gastro-intestinal condition, apparently a growth of some kind in the abdomen and smears were taken which showed Monilia infection. The growth has since been sectioned and a certain part of it was found to be loaded with tubercle bacilli.

EXHIBIT No. III.—**Specimens of two cases of Neurocytoma (Sympathetic-blastoma) with secondary involvement of the temporal bone. (Specimens of temporal bones and microscopic slides.)**—F. T. LAND.

A. Tumour arising from superior cervical sympathetic ganglion and invading mastoid from digastric fossa.

B. Specimens of similar case (kindly lent by Dr. J. W. S. Blacklock) with primary growth in the abdominal sympathetic system, and metastasis in the temporal bone.

Dr. LAND: These specimens are shown, not only on account of their rarity, but also in view of the fact that in both cases primary mastoid disease was closely simulated. About 150 cases of malignant tumours arising from the sympathetic system are described in the literature. The great majority originate in the adrenal medulla, having metastases either in the liver, or in the flat bones. Most frequent in infants under six months, being then most highly malignant, they occur in children up to 5 or 6 years of age. In nearly all cases with secondary deposits in the cranial bones, a tumour, often large, will be palpable in the abdomen. In one of the cases, of which the specimen is shown, the primary lesion was in the superior cervical ganglion, the temporal bone being invaded by direct extension. The overlying glands are enlarged and, facial paralysis being present, the clinical picture of tuberculous mastoiditis was closely resembled.

EXHIBIT No. V.—**Epithelial tumour of the baso-sphenoid encroaching on the nasopharynx and both ethmoids. X-ray plates and microscope slides.**—T. O. HOWIE.

History of Case.—Examined at Bellahouston Dispensary *January*, 1932. No evidence of tumour noted. Tonsils removed 18.7.32. Re-admitted 1.10.32.

Complaint—Obstruction of the nose and loss of smell of four years' duration. Some indefinite frontal headaches. Two years ago right external rectus paralysis, with diplopia, which gradually passed off.

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Examination.—Polypi in the right nares. The whole of the upper part of the naso-pharynx is occupied by a smooth firm tumour, the size of half a walnut, arising from the dome and extending towards the right ethmoid. The right Eustachian orifice is clear. There is some exophthalmos and broadening of the bridge of the nose. Dr. Conway (Victoria Inf.) found the visual fields to be normal. 24.10.32. Four 2·5 mg. radium needles introduced through the right nostril to the growth; left for seven days—1,680 mg. hours. Re-admitted 15.7.33. Patient failed to report till this date. The nose is becoming blocked again, but has had freedom through the right side for some months. *Examination* under cocaine and adrenalin showed marked improvement in the right side of the nose. A few small polypi in the right ethmoid. Post-nasal examination shows the right side of the naso-pharyngeal tumour to be considerably reduced, but an extension has taken place towards the left Eustachian orifice. Dr. Conway finds restriction of the right visual field and weakness of convergence of right side. No fundus changes. Radium inserted for 1,680 mg. hours as in X-ray. Patient died at home three weeks after radium, with right-sided hemiplegia and severe headaches. There was no *post mortem* examination. She showed no obvious endocrine deficiency and no signs of intra-cranial pressure while in hospital.

X-ray Plates.—(A) Lateral view: Enlargement of sella turcica with destruction of anterior and posterior clinoids. Shadow in naso-pharynx extending forwards on level with lower edge of orbit.

(B) Antero-posterior view; Polypi in right nares. Clouding of right ethmoid. Shadow in naso-pharynx.

(C) Radium needles in naso-pharynx, lateral view.

(D) Radium needles in naso-pharynx, antero-posterior view.

Microscopic Slides.—(A) Tissue from naso-pharyngeal tumour. Areas of vascular connective tissue in places slightly fibrous and with definite glandular structure. Attached to this are areas of cellular tissue—definite tumour growth. It is composed of spheroidal cells, epithelial in type, and attempting glandular formation, in parts. The tumour is hæmorrhagic in character.

(B) Tissue from right ethmoids. Similar to (A) but more vascular.

Dr. HOWIE: The interest in this case was the diagnosis of tumour of the base of the skull, entering into the nasal cavities. The question was from what was it arising? They are often reported as sarcoma or angiosarcoma. Ewing in *Neoplastic Diseases*, gives rather a good description:—

(1) *Tumours of Rathke's pouch:*

These arise from remnants of oral epithelium and form:

(*a*) Benign intracystic papillomata.

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