account for the smooth, skin-like contour presented by the protruding portion of the growth.

Dr. A. GRAY: I think this fibroma sprang from the meatus, and not from the tympanic membrane, as the epidermis covering the tympanic membrane does not run in the wavy outline that ordinary skin does: this runs with the corium sticking up.

Mr. WHALE: I suggest Dr. Pegler should look to see where are the scars left by removal, now that he has removed the growth.

Mr. TILLEY: I think Dr. Pegler should adopt the suggestion made by Mr. Whale—viz. get rid of some of the desquamation by means of peroxide of hydrogen or carbonate of soda solution, and then apply a large-sized Peter's speculum (Siegle's) to the meatus. That method will give more information about a drum adhesion or perforation than any other means, and it does not seem to me that the value of the instrument is as appreciated as it should be.

Dr. PEGLER (replying to Mr. Tilley): I shall always employ Peter's modification of Siegle's speculum in my aural work. I shall certainly show the patient again.

[*N.B.*—At the time of going to press the features of this case have cleared up considerably. The whitish *débris* has been got rid of by syringing, and the red, hardish, rather irregular surface has appeared again, but inferior to this, about two-thirds of the inferior quadrant, consisting of a thin, greyish, papery membrane, has come into view, and moves slightly when examined with Peter's pneumatic speculum. The patient may be shown again at a later meeting.]

ROYAL SOCIETY OF MEDICINE—LARYNGOLOGICAL SECTION.

November 2, 1917.

President: Dr. A. BROWN KELLY.

(*Continued from p.* 133.)

Epithelioma of the Ethmoidal Labyrinth; Lateral Rhinotomy; Removal.—Dan McKenzie.—The patient is a woman, aged forty-one, who was sent to the Central Throat and Ear Hospital by Dr. Cowie, of Denmark Hill, in July of this year. The only symptom was epistaxis. But as this had been continuing for about four years in ever-increasing severity she was pitiably anæmic. The growth was polypoid and occupied the left ethmoidal region, and diagnosis was made by Dr. Wyatt Wingrave microscopically before operation.

In view of the grave anæmia, efforts were made to complete the operation as rapidly and with as little hæmorrhage as possible. The inner aspect of the nose under the nasal bones was therefore liberally treated with adrenalin. And after the external incision and manipulations had cleared the bone, the lower edge of the nasal bone was defined and a septum elevator introduced below it to separate it from its underlying muco-periosteum. Thus isolated the bone was rapidly nibbled away with mastoid gouge-forceps, and this method proved to be much more rapid than the use of the chisel would have been.

https://doi.org/10.1017/S1755146300019521 Published online by Cambridge University Press

The rest of the operation proceeded along familiar lines, and the whole was completed in fifteen minutes with a trifling loss of blood.

The patient has made a good recovery both from the operation and from her anæmia, and at the time of writing there is no sign of recurrence either locally or in the cervical glands.

Lieut.-Col. PERRY GOLDSMITH: Up to what age would Dr. McKenzie accept a patient for this operation? Probably you have had cases of sarcoma of the nose, in which intranasal operation has led to disastrous results in elderly people: there may be severe hæmorrhage, and septicæmia following it, while recurrence has been rapid. I have noticed this in several cases aged fifty and over. A patient may have sarcoma of the nose and yet live in comfort for a considerable time.

Mr. HERBERT TILLEY: What is Mr. Shattock's opinion on this case? How curious it is that these malignant growths in the ethmoid and the nose in general are often so amenable to surgery, or even, in some cases, to radium emanation! Probably in this patient the epithelioma has the same macroscopic and histological appearances as an epithelioma elsewhere, yet in the last-named we would not be surprised at a rapid recurrence, in spite of radical surgical treatment, while in the nose we rather expect them to get well. At the hospital to-day I saw a woman from whom, last May, a large endothelioma was removed from the inside of the nose. There is no sign of recurrence, the pain has gone, and the hæmorrhage, which had been very profuse, has ceased. Yet it grew in a space which is practically honeycombed with cells, where one would imagine the most careful operator would be liable to overlook small extensions of primary growth. Furthermore, in the nose it is extraordinary how 100 mgrm. of radium emanation, buried in the growth for twelve hours, will cause them to melt away, and they will then remain passive or disappear entirely for years, and some seem to be cured. If there is anything which Mr. Shattock can tell us as to the explanation of the different degrees of such malignant growths in different regions we shall be much obliged to him.

Sir WILLIAM MILLIGAN: What forceps did Dr. McKenzie use? Possibly he used Citelli's mastoid forceps; if not, I would suggest that instrument. I agree with what Mr. Tilley said about the frequent non-malignancy of these growths in the nose, which have been diagnosed as malignant. I remember the case of a lady on whom I operated nineteen years ago for what was pronounced, by competent pathologists, to be a round-celled sarcoma of the ethmoidal labyrinth. It occupied practically the whole of her right ethmoidal region, and the operation was performed under considerable difficulty, as the patient nearly died of hæmorrhage. Many years ago she developed a similar growth in the left nasal passage. It was so extensive in the upper ethmoidal labyrinth that its exact point of origin could not be detected. It was successfully dealt with, and again pronounced—though not by the same pathologists—to be round-celled sarcoma. I did not expect recovery, but she has recovered, and is well, with the exception, naturally, of suffering from a marked nasal atrophic condition. I have also been struck with the fact that there appears to be a type of malignant disease of the nose which, clinically speaking, appears to be a non-malignant as well as a very malignant type, the growth in the latter being surprisingly rapid. I do not know that there is any difference in the actual objective external appearances.

Sir STCLAIR THOMSON: This point was brought out by the late Sir Henry Butlin, who said in 1901: "Our present knowledge and prognosis

https://doi.org/10.1017/S1755146300019521 Published online by Cambridge University Press

in regard to this type of growth is almost impossible, some cases recurring rapidly, while others give excellent results."[1] Mr. Shattock will remember a specimen I sent him from a case which I had seen in consultation with Sir Henry Butlin in 1909. Mr. Shattock's report on the microscopical section sent was: "A typical specimen of lymph-endothelioma." I operated upon it, and now, seven years afterwards, the patient is well, and without recurrence.

Dr. SYME (Glasgow): This case recalls to my mind one or two similar which I have seen, bearing out what Mr. Tilley said. One I showed before the Scottish Otological and Laryngological Society, in which there was extensive destruction of the interior of the nose by sarcoma. I turned down the cartilaginous part and split the nose in the middle line. The whole nasal cavity was invaded as well as the accessory cavities. This was cleared away to the base of the skull. Although eight years ago, there has been no recurrence. Another case was one of epithelioma of the ethmoid which had invaded the antrum. I operated through the antrum and cleared away the ethmoid by this route, and intranasally. That was at least eight years ago, and beyond a slight recurrence a few months afterwards there has been no further sign of the disease. I have had an interesting case of a malignant polypoidal growth, attached by a narrow pedicle, just in front of the middle turbinate. It was epithelioma. I removed it two years ago and there has been no recurrence.

Dr. IRWIN MOORE: A year ago I showed before the Section the case of a female, aged fifty,[2] on whom I had recently performed lateral rhinotomy (Moure's operation) for small-celled sarcoma of the antrum. Three months later I showed a second case, in a patient aged sixty-two,[3] the growth being epithelioma. In each case the growth affected the right ethmoid region and the anterior wall of the antrum, which was necrosed, the orbital floors being intact. In the sarcoma case the muscles of the cheek were also deeply infiltrated. In the epithelioma case, three months later, I found that the growth had extended under the malar bone into the zygomatic fossa and around the orbit, causing proptosis, necessitating a second operation. In April the eye was removed, since it had become disorganised. This patient died yesterday, just a year after the first operation, and the *post-mortem* examination showed that the growth had extended most rapidly, involved the whole side of the face, the antral and orbital walls, and backward into the sphenoid sinus. There was a large sloughing cavity in the side of the face, into which one could put one's fist. In the sarcoma case the patient is well, and shows no signs of recurrence. These two cases, under observation side by side, are interesting as tending to show the lesser degree of malignancy of small-celled sarcoma in this situation compared with epithelioma.

Dr. DAN MCKENZIE (in reply): I should not be disinclined to operate on a patient of any age. With regard to the question of the mild degree of malignancy of nasal cancers, I generally look upon sarcoma as less malignant, but when I get the name "epithelioma" given me by the pathologist I have more apprehension. The forceps used were Jansen's mastoid forceps.

Excision of the Upper Jaw for Carcinoma of Antrum and Palate, followed by Diathermy.—Norman Patterson.—Woman,

[1] *Lancet*, October 19, 1901.
[2] JOURN. OF LARYNGOL., RHINOL., AND OTOL., vol. xxxii, p. 102.
[3] *Ibid.*, p. 355.

https://doi.org/10.1017/S1755146300019521 Published online by Cambridge University Press

aged fifty-six. Admitted to London Hospital on April 3, 1917. Complained of pain in the mouth for three months. Examination showed two large patches of growth on the right side of the hard palate joined together by a narrow neck; alveolus not involved. The antrum was quite dark on transillumination. Microscopic report by Dr. Turnbull—epithelioma.

Operation, April 5: Preliminary laryngotomy, followed by complete excision of right superior maxilla, including the orbital plate, which was involved. The usual method was employed, omitting altogether the horizontal incision along the lower orbital margin. I consider this incision unnecessary, and by its omission subsequent œdema of the lower eyelid is avoided. By retracting the flap upwards and outwards the orbital periosteum can be separated, and the malar bone divided in the usual situation. The superior maxilla on the right side was found to be infiltrated with growth, and in many places the bone was very soft. The antrum was full of growth.

The patient's condition was rather bad and the operation had to be stopped, although it was quite certain that diseased tissues had been left behind, especially in the ethmoidal region.

A week after the operation the patient developed cellulitis.

April 25 (three weeks after the first operation): The whole surface of the wound was destroyed by diathermy, especial attention being paid to the ethmoidal region.

When seen on October 4 the patient showed no sign of recurrence. She has been fitted with a denture.

Mr. E. D. D. Davis: The facility with which intratracheal ether can be given for these cases is remarkable. I have had a number of cases of injury of jaws and face in addition to cases similar to Mr. Patterson's, in which this method of anæsthesia was employed, and the shock after the operation is much diminished; the patients make an uninterrupted recovery, and do well. If this patient had been given intratracheal ether Mr. Patterson would have been able to complete the operation. Laryngotomy can be simple enough, but intratracheal ether is a great comfort to the surgeon.

Excision of the Retro-pharyngeal Gland for Recurring Retro-pharyngeal Abscess of Tubercular Origin.—Norman Patterson.—Boy, aged seven and a half. Retro-pharyngeal abscess, evidently tubercular, opened through the right side of the neck in November, 1915. Seen on March 8, 1917, at London Hospital. There was a large swelling, causing the right posterior pharyngeal wall to bulge forwards and extending past the middle line. A swelling was also present in the upper part of the right side of the neck. Operation was carried out the same day. A long incision, passing through the old scar, was made behind the sterno-mastoid and the abscess evacuated. The dissection was then carried inwards behind the carotid sheath and pharynx, and the retro-pharyngeal gland, which was much enlarged, caseating in parts and in parts calcified, was removed. The abscess-wall was gently curetted and the cavity packed with gauze. Healing took place slowly. There has been no recurrence.

In September, 1917, the patient developed an abscess in the left axilla, and there is now an enlarged gland on the left side of the neck.

Sarcoma of the Antrum.—F. A. Rose.—H. F——, male, aged sixteen, noticed obstruction of the right nostril in July, 1917; later a

https://doi.org/10.1017/S1755146300019521 Published online by Cambridge University Press

swelling appeared in the alveolus of the upper jaw. When seen in September the antrum was dark to transillumination. Since then the growth has invaded the zygomatic fossa and is increasing rapidly.

Pathological report: Round-celled sarcoma.

Prof. SHATTOCK: We must, of course, beware of errors in pathological diagnosis. The other day I examined a section from a soft tumour of the ethmoid, which had clinically suggested sarcoma: in my opinion it was a papilloma; but others might have regarded it as a carcinoma. Clinical facts, however, are clinical facts.

Dr. WILLIAM HILL: I have treated growths like Mr. Rose's with radium. Although I have seen the antrum apparently clear up and the nose very much improved, every one of my cases has died eventually. In one case the face was bigger than that of Mr. Rose's patient. That swelling went down, but the ethmoid was invaded as well, and although I have inserted radium tubes I have never succeeded. In one case, an old and debilitated subject—on whom, perhaps, I ought not to have tried radium—who came from Australia and whose mind was set on radium, the growth was in the top of the nose and the cribriform was involved. I applied 200 mgrm. of radium bromide. On the second day he had a rise of temperature, with septicæmia, and it was evident general toxæmia had been set up by the action of the radium. He died four days later from what we regarded as perhaps thrombosis. There were enlarged veins inside his skull. Before death he had a high temperature and low, muttering delirium. The dose I gave was not excessive, for only 50 mgrm. was applied to the top of the nose, and it was duly screened. Perhaps one ought to have applied the radium consecutively to various areas. It has been recorded that sometimes radium causes profound toxæmia. I have seen these growths disappear from the nasopharynx without recurrence.

Mr. ROSE (in reply): My own experience does not include any case of round-celled sarcoma of the nose which has run a favourable course as did the two cases mentioned. I have only had to treat three: One was in a child aged four, who died within a year of my seeing him. Another was a child aged about twelve, and then there is this boy, aged sixteen. This boy is moribund, and the swelling in his face, which is so conspicuous, has appeared within the last ten days; in fact, when I first saw him, six weeks ago, there was no external swelling visible at all. Therefore, as my experience of round-celled sarcoma is so unfavourable, I cannot help thinking, when I read and hear of cases which run a favourable course, that two different diseases are called by the same name.

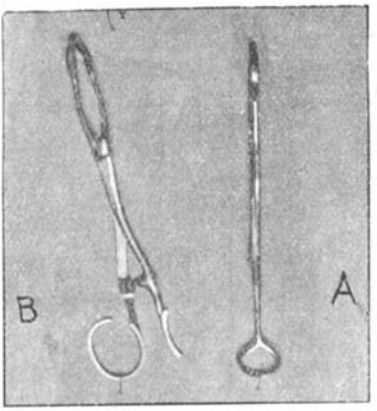
A Tonsil Forceps.—W. H. Kelson.—I have found that in difficult cases of tonsil enucleation, where there is a brittle tonsil to remove, tenaculum forceps, however well made, are unsatisfactory, as they are apt to tear. Therefore for some time past I have used ordinary gland forceps. When one completes the operation with the snare there is no difficulty in getting the wire over the handle, but if the operation is completed with the tonsillotome there is difficulty. I have therefore partly cut away the handle of the forceps on one side, and cut through the loop of the handle on the other, which allows a medium-sized tonsillotome to be easily slipped over the forceps whilst the tonsil is grasped (see p. 171).

Paralysis of the Left Vocal Cord in a Man, aged thirty-nine.—W. H. Kelson.—Patient, a clerk (passed C1), came to hospital com-

https://doi.org/10.1017/S1755146300019521 Published online by Cambridge University Press

plaining of hoarseness, which he states came on suddenly in September. He gives a history of having had syphilis fourteen years ago. On examination the left vocal cord is seen to be almost motionless, the right coming across to assist when phonation is attempted. The left pupil is rather larger than the right. Examination with X rays shows a distinct bulging in the region of the transverse and descending portions of the aortic arch.

Major WATSON WILLIAMS: Was this patient treated for syphilis? A case which I have illustrated I diagnosed as lupoid tuberculosis of the pharynx, curetted it and applied lactic acid. Then by some accident I gave antisyphilitic treatment, and it cleared up. I ask whether that has been done here, because tertiary syphilis of the posterior wall of the pharynx sometimes strongly resembles lupoid infiltration.



A shows blades of forceps well adapted for securely seizing the tonsil; B shows handles cut away so as to allow of the blade of a medium-sized tonsillotome being passed over.

Lupoid Tuberculosis of the Pharynx, affecting the Soft Palate and Uvula, in a Boy, aged eight, the subject of Congenital Syphilis.—Irwin Moore.—This case, first exhibited at the Sectional Meeting on March 2, 1917,[1] and described in the agenda as "(?) Lymphadenoma," was again shown at the meeting on June 1, 1917,[2] as "Lupoid Tuberculosis." Considerable discussion followed, various opinions being expressed, and objections raised to the term "lupoid."

When the case was last exhibited the following history had been obtained, and since then certain investigations have been carried out, as follows:

(1) *Enlargement of Glands.*—Patient was first seen on January 16, 1917, suffering from enlargement of the submental, posterior cervical and inguinal glands of eight months' duration. The submental glands, which were matted together, disappeared in six months under potassium iodide treatment. When last exhibited the enlarged discrete glands in the neck and inguinal regions were still present, and had undergone no change.

(2) *Infiltration of the Pharynx.*—When patient was first seen the

[1] JOURN. OF LARYNGOL., RHINOL., AND OTOL., vol. xxxiii, p. 152.
[2] *Ibid.*, January, 1919, p. 24.

https://doi.org/10.1017/S1755146300019521 Published online by Cambridge University Press

pharynx presented a semi-translucent swelling of the uvula, extending over the greater part of the soft palate; it was solid, rigid, and leathery in consistence. This did not vary in appearance until March 12, two months later, when the infiltration was observed to be gradually extending downwards along the posterior faucial pillars. (Compare condition seen in the water-colour drawing of February 15 with that of March 20.) There had been no signs of ulceration or miliary deposit.

(3) The *Tonsils*[1] were not enlarged. The microscopic sections of the *adenoid tissue* removed from the nasopharynx on February 14 "show a certain amount of fibrosis with chronic inflammatory reaction which is characterised by the formation here and there of cellular systems, which occasionally have a central multinucleated giant-cell. The lesion is undoubtedly tuberculous" (Dr. Eastes' Laboratory).

For a later opinion see Prof. Shattock's report, pp. 173 *et seq.*

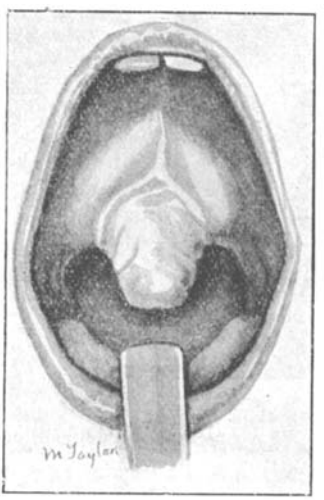


FIG. 1.

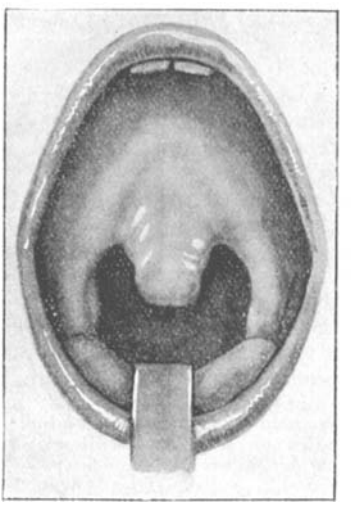


FIG. 2.

FIG. 1.—Lupoid tuberculosis of the pharynx affecting the soft palate and uvula in a boy, aged eight, the subject of congenital syphilis. Case shown March 2, 1917. Drawing made February 15, 1917.

FIG. 2.—Shows the infiltration extending downwards on to the faucial pillars and tonsils. Case shown June 1, 1917. Drawing made March 20, 1917.

(4) *Examination of the Larynx* on March 24 by Killian's suspension apparatus, with the co-operation of Mr. E. D. D. Davis, showed œdematous infiltration of the epiglottis and arytænoids, but no signs of ulceration. No difficulty in breathing has been observed.

(5) *Examination of the Lungs.*—No history of tuberculosis and no pulmonary signs were present until March 10. On this date (*a*) *clinical examination* (Halls Dally) revealed scattered fine moist crepitations over the whole of both lungs. At this time a slight cough, night-sweats and slight rise of temperature were present. The child was losing flesh in spite of his appetite being good. (Note: Patient's usual weight,

[1] Since this case was shown both tonsils have been enucleated. Sections have been cut and searched for tubercle bacilli, with negative result, but typical giant-celled systems were present.

https://doi.org/10.1017/S1755146300019521 Published online by Cambridge University Press

3st. 8 lb., does not vary much.) (*b*) *Radioscopic examination* (H. D.) showed no enlargement of hilar glands, no peribronchial striation, and no enlargement of the tracheo-bronchial glands. No tuberculous foci in lung-tissue. (For a later examination see further report below.)

(6) *Blood Report.*—"Showed on February 16 that it was not typical of any exact condition; it indicated a mild anæmia of secondary type with leucocytosis. Leukæmia may be excluded" (Dr. Fletcher, Dr. Eastes' Laboratory). *On March* 10: "A slight leucocytosis; the lymphocytes were within normal limits, but a little on the high side. The Arneth count is low" (Halls Dally).

The following additional investigations have been carried out since this case was exhibited on June 1 with the kind assistance of Prof. Shattock, Dr. Halls Dally and Dr. A. N. Leathem:

(1) Two independent authorities (Dr. Eastes' and Mount Vernon Hospital Bacteriological Laboratories) have found (June 8 and July 6, 1917) *strongly positive Wassermann reaction*, and the parents have admitted infection with and treatment for syphilis.

(2) Dr. Halls Dally has shown (July 16, 1917) by radiograms recent *enlargement of hilar glands* with associated *peri-bronchitis tuberculosa simplex*, and will demonstrate this at the meeting (radiogram of chest will be shown).

(3) A definite *tuberculin reaction* was obtained on June 26, after diagnostic injection of 0·001 c.c. O.T., the temperature rising from normal to 101·2° F. (H. D.), whilst a few days later it was observed that the soft palate looked pinker and more normal. On palpation marked softening of the infiltrated palate was observed, probably the result of the tuberculin injection (temperature chart will be shown).

(4) *Blood Examination.*—The first Arneth count on March 10, 1917, showed: Cells of group I, 8 per cent.; cells of group II, 44 per cent.; cells of group III, 39 per cent.; cells of group IV, 9 per cent.; cells of group V, 0 per cent. Total nuclear bodies, 249, as against normal, 275, this being distinctly on the low side and suggestive of tuberculosis. The second Arneth count on July 3, 1917, showed: Cells of group I, 9 per cent.; cells of group II, 50 per cent.; cells of group III, 0·34 per cent.; cells of group IV, 7 per cent.; cells of group V, 0 per cent. Total nuclear bodies, 239, being a still lower count, which is still more in favour of tuberculosis (Halls Dally).

(5) Histological report of the microscopic sections of uvula, etc., submitted to Prof. Shattock:

(*a*) *The Uvula* (removed June 29).—The basis or ground substance of the section consists of a felt-work of fine undulating fibrils, amongst which there lie flat connective-tissue corpuscles furnished with large oval nuclei. In places the mesh of fibrils is abnormally open from œdema. Many of the capillaries show pronounced endothelial proliferation, some of them being quite blocked with the cells (Fig. 3). The proliferated cells are large and flat, and notable numbers of lymphocytes occur amongst them, but no polymorphs. In the groups there occur a certain number of multinucleated cells: these have mostly but few nuclei (Fig. 4); in one occluded vessel, however, a multinucleated cell holds nine, and these are peripherally disposed (Fig. 5). Distributed through the connective tissue are groups of closely-placked plasma-cells and lymphocytes; none of the groups in the two sections examined include any giant-cells. The relationship of some of these groups with capillaries is clear, for they lie in their immediate vicinity. The capillaries

https://doi.org/10.1017/S1755146300019521 Published online by Cambridge University Press

in which endothelial proliferation is proceeding may be regarded as lymphatic, from their size (they are larger than the blood-capillaries) and varicosity, and because those of chief size which contain a fine mesh of fibrin in addition to endothelial cells and lymphocytes show no red cells nor polymorphs entangled in the mesh. The arterioles throughout the section are quite normal. The investing epithelium of the uvula is intact. The muscle-fibres are unaffected. In regard to the glands the epithelial tissue is normal, but there is an abnormal number of



FIG. 3.—Section of uvula, showing lymph-vessels occupied with varying numbers of proliferating endothelial cells, and lymphocytes, lying in a connective tissue infiltrated with lymphocytes and plasma-cells (⅔).

cells, lymphocytes and plasma-cells in the supporting connective tissue. Histologically, the lesion of the uvula is a capillary lymphangitis with an accompanying œdema and the presence of groups of plasma-cells and lymphocytes in the connective tissue (S. G. Shattock).

No tubercle bacilli nor other organisms were found in a number of sections of the uvula stained (A. N. Leathem).

(*b*) *The Adenoids* (removed from the nasopharynx on February 14).—The section contains typical tubercular giant-cells of full size, but by the side of such are others isolated in fibrosing tissue, which include only a few nuclei. No caseation is present. The endothelial cells around the giant-cells are mostly elongated and fibroblastic (S. G. Shattock).

https://doi.org/10.1017/S1755146300019521 Published online by Cambridge University Press

(*c*) *The Cervical Gland.*—This contains one or more caseous foci in which chromatolysis has occurred; these are surrounded with well-advanced fibroblastic tissue; the giant-cells lying in this fibrosing zone are few, but some are quite typical of a tubercular lesion (S. G. Shattock).

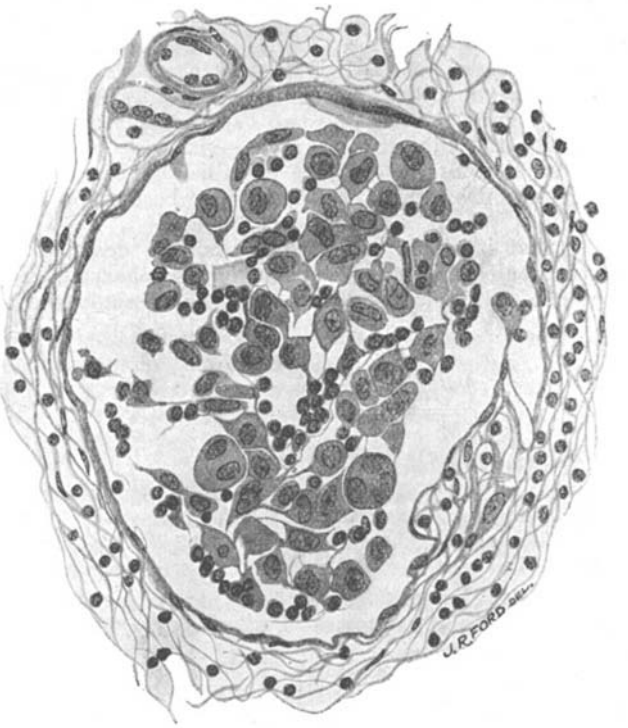


FIG. 4.—A transverse section of one of the lymph-capillaries shown in the preceding section ($\frac{1}{6}$). Some of the proliferating endothelial cells contain two or three nuclei. Amongst the cells are a certain number of lymphocytes.



FIG. 5.—A multinucleated giant-cell, selected from a group of proliferating endothelial cells in a lymph-capillary. It contains nine nuclei disposed peripherally ($\frac{1}{12}$ oil immersion).

(*d*) *The Inguinal Gland.*—The section shows areas of endothelial proliferation, but no giant-cells. There is no caseation (S. G. Shattock).

These lymphatic glands were kindly removed for me (during my absence) for microscopic examination on July 20 by Mr. Norman Patterson

https://doi.org/10.1017/S1755146300019521 Published online by Cambridge University Press