THE SURGICAL SIGNIFICANCE OF SOME SO-CALLED SIMPLE TUMOURS

Lecture delivered at the Royal College of Surgeons of England

on

27th May, 1948

by

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LET ME BEGIN by describing my first encounter with a simple tumour. It was a nice simple lipoma on the back of a healthy looking man. Alas, the differential diagnosis, in which the icebag test was not included, was not fully explored prior to operation, when to the dismay of the teacher there was revealed a cold abscess—a tumour yes, but not a neoplasm. Admittedly the bulk of the tuberculoma is composed mainly of swollen coagulated necrosed tissue and fluid, but some of the mass has been formed by the proliferation of cells of the part as well as by incoming cells. More obvious proliferation is seen in the granuloma pyogenicum ; this sometimes grows at a most alarming rate and on an infant's face, especially if the parents be medicals, the pre-operative diagnosis is inevitably sarcoma. Occurring about the finger nail, it produces a horrible looking growth with a differential diagnosis made particularly difficult because such conditions as subungual melanoma have to be remembered.

Fortunately the granuloma pyogenicum responds in a remarkable way to radiotherapy ; this is a practical help but we are still left wondering about the basis of the rapid growth. Histologically the picture is one of capillary angioma plus pyogenic infection but it is probable that the angiomatous proliferation is the secondary and not the primary change. The more serious form occurring in the nose, the so-called granuloma malignum, has been attributed to a particular staphylococcus possibly in combination with a streptococcus (Stewart, 1933) although other writers obviously consider this growth as a malignant neoplasm of uncertain origin (Dempsey, 1933). Meanwhile let us diverge for a moment.

It is known that a malignant neoplasm can arise in granulation tissue ; Pack and Anglem (1940) quote one arising in uninfected granulation tissue in relation to a hæmatoma and I have seen a similar lesion in the breast of a young man—a blow on the breast was followed by a large swelling, presumably hæmatoma, which diminished slowly. Some four months after the injury, when almost gone, it was replaced by a new and painful swelling, which was removed by wide excision. Histologically this showed remnants of hæmatoma with phagocytic reaction of gross

degree ; most of the pigment was intra-cellular. At the periphery there was a new tissue of soft fibromatous type which was obviously invading the surrounding fat ; despite the histological findings, he is now, three and a half years later, well and free from any sign of disease. This sequence recalls the changes described by Browning *et al* (1936) in the mouse, where a depôt of a trypanocidal styryl compound in the subcutaneous tissues elicits an active surrounding phagocytic reaction, followed in turn by the development from these phagocytes or their precursors, of a sarcoma. To return to the nasal granuloma it is possible that some observers have had cases in which a malignant growth, like these just discussed, has arisen secondarily and, by so doing, has cast suspicion on the exact nature of the pre-existing lesion. One is apt to forget that the onset of malignancy in a lesion is not proof that the earlier lesion was itself a neoplasm. Some such sequence may well be the explanation of the vagueness of the conception generally held about this condition.

Philosophically, of course, the really surprising thing is that the proliferative activity of granulation tissue in the healing of wounds is so consistently restricted at the right level. One thinks of the rare failure of the retarding mechanism, when the brakes don't work in time, namely, the formation of keloid ; although in fact we may well pause to wonder why the keloid, having overshot the mark, then usually stops. None the less the power of proliferation is still there and is presumably under slightly more tension than normal, in that sarcoma occasionally arises in a keloid. One example, observed personally, arose in a keloid which had been present for forty years at the site of burn in infancy. It need hardly be said that a keloid would scarcely fit the definition we hope to coin for a simple tumour.

But we are not yet escaped from the boundary zone between infection and simple tumour. The molluscum contagiosum is occasionally removed by the young surgeon lacking the dermatological knowledge which, judging by one's experience as a hospital pathologist, is too often disdained by surgeons, to the disadvantage both of themselves and their patients. With such knowledge, the diagnosis of molluscum is fairly straightforward. There is now little doubt about the infectious nature of this odd little growth and histologically it seems to have nothing to do with neoplasm as we understand the term.

More difficult to apprehend correctly are the ordinary warts of the juvenile skin ; doubtless many of you have had your own personal experience of these. One boy in whom I had a particular interest was, along with his brother, afflicted by a remarkable efflorescence of these on the hands. Over 200 warts were present, and on the forefinger of the right hand 91 individual tumours could be counted. Doubtless it was from this site that there was transmitted the cause of a daughter tumour which appeared on the point of the nose. Maternal concern led to the electrocoagulative destruction of the nasal protuberance and within a week or

two thereafter the digital growths thawed away, the skin was smooth again and the various ruptures and cracks all healed over. One can hardly claim that the success of the therapy was anything other than coincidental; after all it is known that these crops of vulgar warts do eventually disappear, presumably as the result of an immunity reaction. The many therapies that are advocated by the old wives are, in this disease, probably quite without effect.

Certainly the popular application of early morning spittle is likely to be of little value if the virus involved is the same one as causes the multiple papillomata occurring on the larynx of young people. This, in virtue of its situation, is of course a much more serious condition and although the growth may disappear spontaneously, generally doing so about puberty, recurrence after surgical removal is common and often extensive. Tracheotomy may be necessary and Tilley (1940) describes a case needing frequent re-opening of the wound; in all, this small boy endured 45 surgical interventions, and had to wear a canula for many weeks, the condition meanwhile spreading up the posterior pharyngeal wall into the nasopharynx. Then, within a fortnight, all disappeared and did not recur.

The only example I have seen was a boy of 12, almost choked by growth, from whom Dr. Fulton Christie removed the exuberant masses. Histologically this had the picture of simple squamous papilloma. Two months later recurrence was obvious, but radiotherapy by Dr. Scott Park for four days (1,000 r), led to disappearance and no further recurrence (over 14 months). Radiotherapy is apparently not always successful but certainly in this condition, seemingly rarer than it once was, it offers more success than early morning spittle.

Into the same puzzling group one would be justified in putting the venereal wart. The tuberculous wart, named, perhaps unfortunately, lupus verrucosa, is more obviously a reaction to a known lesion. This occurs on the hands of cattlemen and the like, and the two cases I have seen were both concerned with the killing of cattle. One showed a small zone of hyperkeratosis related to an underlying tuberculous granuloma; the other had a large zone of very warty reaction.

Another peculiar form of hyperkeratosis is the comparatively rare condition of Hairy Tongue in which long filiforms of keratin are seen with a coating on each of these " hairs " of fungal growth. The fungus may be coloured and the wretched patient have a tongue like a thick pile green or purple carpet.

In case you should imagine the boundaries are clear-cut somewhere in this subject, I would recall the extraordinary appearances of overgrowth of bone in the infra-orbital region in the condition of Goundou. This is believed (Botreau-Roussel, 1925) to be due to yaws, and yet, as Stannus (1947) observes, the extraordinary illustrations published by Botreau-Roussel can be matched in this country by cases of leontiasis ossea. Certainly the leontiasis case I have seen, a museum specimen, was quite

as florid as the West African lesions; unfortunately syphilis, although unlikely in this case, was not tested for. Paget himself thought the maxillary osteoma was probably not a neoplasm. None the less some of the simple " nasal osteomata " are probably, in fact, epiphyseal sequestrations of the frontal bone (Handousa, 1940), comparable with those seen in the long bones.

From these infective conditions which mimic simple neoplasm, it is but a short step to the traumatic condition as seen so characteristically in the dental fibroma which would usually be more accurately described as a denture fibroma, and to the " simple tumours " of metabolic origin, for example, the multiple xanthoma. This type of tumour may be accompanied by other obvious evidences of upset cholesterol metabolism (Brunschwig, 1939) and yet, particularly in relation to joints and tendons, the tumour may be single and apparently unaccompanied by evidence of metabolic upset. The histological pattern of the different types can be extraordinarily similar. The confusion here probably arises because the neoplasm of synovia may occasionally by chemical chance contain fatty material in its cells, and only rarely are the synoviomata frankly malignant, so seldom indeed, that some writers have postulated a granulomatous rather than a neoplastic nature.

Also, as it were, metabolic, and in this example surely related to the endocrines, is the fibromyoma of the uterus; this so-called tumour is readily induced in guinea pigs by œstrogens although not as a rule in rats or mice (Burrows, 1942). None the less one would hesitate to relate the fibroma in the intestine to an endocrine imbalance. To some such imbalance it seems fairly certain we should ascribe most examples of fibroadenoma of the breast and the common simple hypertrophy of the senile prostate. The fact that malignancy *can* arise in the uterine fibroid, in the fibroadenoma of breast or in the enlarged prostate does not mean that the commonly met state of affairs is a true simple neoplasm.

Another of the difficulties in defining the boundary between the simple and the malignant tumour lies in that factor so often neglected by the pathologist, the time factor. For example, at the Memorial Hospital in New York (Pack 1939), it has been found that epithelioma of the hand in the elderly takes about three years from first appearance before it produces metastases. The Marjolin ulcer, the supervention of an epithelioma in a burn scar, takes on average 43·3 years to arise. Not that this removes clinical worry, for the variation in time of onset ranges down to three months. Of subungual melanoma Hutchinson (1886) said " there is much greater hope of delaying the progress of the disease by operation than exists in most other forms of melanosis." There is no doubt that some acceptably malignant tumours have a peculiar way of going slow.

What then are we going to say of the tumours that not only go slow but even regress, the uterine fibromyoma after the menopause, the osteoma which in many cases ceased to grow after puberty, and, having

a small stalk, may cure itself by sloughing off, the multiple exostosis (with a family history in two-thirds of the cases) and even the so-called self-healing squamous carcinoma in which the keratinised remnants of the tumour are seen being dealt with by phagocytes ?

The slow-growing tumour has in the past made its claim to be called benign, for example, the rather uncommon carcinoma of the trachea. The two cases I have seen were found at necropsy, and like some of the others reported, one of these had produced no metastases and very little local invasion. It would have been a most suitable case for a bold surgeon, if diagnosed, and Chevalier Jackson's aphorism (1945) is worth recalling : " All is not asthma that wheezes." The histology of both these growths is strongly reminiscent of the salivary growths occurring in the palate, and quite a number of the reported cases (Culp, 1938) have been described under the various vague terms which used to be applied to parotid tumours. A curiously similar histological picture has been seen in a recurrent carcinoma of the orbit and in a tumour from the skin of the groin, both of which I mention because Paget (1876), referring to the type of tumour described by Billroth as a cylindroma, records examples in the parotid, in the orbit and in the loin.

The parotid tumour itself can be slow-growing, although its simplicity is, as it were, reduced by its inaccessibility. Paget (1876) quotes with commendation of Hunter's skill, one such tumour which John Hunter removed, measuring 9 in. × 7 in. and weighing 9 lb. While in this region one may mention the adenolymphoma, an apparently completely benign lesion of the parotid, which that invariably benign pathologist Professor M. J. Stewart of Leeds once implied should be recognised by any intelligent surgeon (Carmichael, Davie and Stewart, 1935). One of several intelligent surgeons known to me was studying these tumours and on the lookout for another, when he was misled by a cystic form of the more usual parotid tumour !

The term "mixed tumour" is going out of favour—and justifiably! In one salivary tumour of lip given to me by Professor D. F. Cappell, the tumour cells had burst into the tissues, and, so far as one is justified in believing what one sees through the microscope, the product of the cells seemed to be diffusing out further into the tissues. Close to the tumour cells this looked like oedema fluid which, with special staining, gave the colour reaction of mucin but distally the appearance changed gradually into what was, on morphological and tinctorial grounds, cartilage. The transition was so gradual that to the observer it seemed that the resemblance to cartilage must be fortuitous. None the less the tissues themselves must have been deceived, for there had been formed in this apparent cartilage, what was unmistakable bone.* Similar formation of bone in " cartilage " in a salivary lip tumour was noted in his time by Paget (1876).

*This histological section seems to say that saliva injected into connective tissue persuades (organises) it into becoming cartilage.

Nevertheless non-progression is not necessarily simplicity. One only has to recall Bowen's disease, in which, although restricted within the epithelium's narrow plot of ground, the condition is cytologically malignant and a squamous carcinoma lies confined, like a coiled spring, within the epidermis. One may well wonder why it does not more often spread laterally as the intra-epithelial malignancy does in Paget's disease. Admittedly the Bowen's case eventually breaks out, but some of the other long-duration growths can boast a prolonged story without any such sad end. The horn of the Widow Dimanche (Bland-Sutton, 1894) was not produced in a day and Paget (1876) quotes a massive fibroadenoma of the breast observed for 30 years. This alarming looking growth, known also as Brodie's serocystic sarcoma, or as Müller's pseudo-sarcoma phyllodes, is generally benign despite its tendency to fungate horrifically.

Apart from slowness of growth which permits the cogitation of the medical and the pre-operative handling of the patient (it is a significant point, realized last century, that the so-called simple tumour not infrequently comes to notice because of secondary infection), certain tumours have, as it were, become more benign in virtue of their greater accessibility. For this we owe a great deal of the credit to our anæsthetist colleagues, whose technical advances in the last twenty years we ought, as medicals, to acknowledge with gratitude. It is interesting how modern refinements and the setting up of special clinics, for the specialists thus distinguished, have brought to light conditions which are not so rare as they were once thought to be, for example, the bronchial adenoma or the intra-thoracic neural tumours.

Of course accessibility varies with the surgeon's own idea of his skill, and one example studied of a carotid tumour, a tumour said never to go malignant, (Willis) proved fatal for the patient, a young man, through its too intimate relationship with the artery of the same name. Recent work (Lahey and Warren, 1947) suggests the value of a diagnostic biopsy before deciding on removal if the artery is likely to be involved.

Despite the advances in surgical technique, surgical removal may prove, as we call it, incomplete. The most striking example of this is, of course, the recurrent fibroma, the recurrent fibroid of Paget; this has to be distinguished from the fibroma of the rectus sheath, the desmoid tumour, which is a tumour mainly of parous women, and may possibly have some relationship with hæmatoma of the rectus. Histologically the recurrent fibroid seems no more than a cellular fibroma and in one case studied over nineteen years the cytological appearances were still short of malignancy; none the less its clinical behaviour demands that we recognize it as a low-grade sarcoma of the dermis.

We are still not getting much nearer a definition of a simple tumour, and such obvious delimitations as " non-metastasizing " cannot very well be squared with the recurrent fibroid, nor, indeed, with rodent ulcer.

This latter tumour is itself problematical enough for a series of lectures, and although I am not prepared to push the thesis, one cannot entirely ignore the suggestion that most at least of the facial rodent ulcers are situated on the embryonic lines of fusion (McFarland *et al*, 1935).

Indeed, the whole question of sequestration and developmental displacement is, perhaps, the territory in which it is most difficult to find a dividing line. Take for example the hæmangioma ; of 996 angiomata at the Memorial Hospital, 66 per cent. (660) were present at birth (Ewing, 1940), and in a review of 318 cases (Geschickter and Keasbey, 1935), one-third were in children under 10. Most of these so-called tumours therefore appear to be congenital and it has been suggested that the termination should be altered, to express the widespread doubt as to the neoplastic nature of these abnormalities and I for one quite like Robertson's (1939) term, hæmangiecton.* Histologically some of these hæmangiectons, especially the cavernous type, look the most placid and innocent things, and yet the cerebral type can, as in one case personally studied, lead to death in convulsions in under eight hours.

The dermal type can also be much more obtrusive than its histological appearances would suggest; thus it may produce a clinical picture of intense paroxysmal and travelling pain which is more usually indicative of a glomangioma or, as we may now call it, a glomangiecton. This painful subcutaneous tubercle as you may remember is characterized histologically by the presence of glomus cells, believed to be modified muscle cells, which are a normal constituent of the arterio-venous shunt in the dermis. A fair number of the reported glomangiectons can be clearly related to an apparently causative trauma, and most observers have accepted the relationship (Lendrum and Mackey, 1939). No such relationship, however, occurs with any significant frequency in the case of the rather comparable tumour, the myoma cutis, the third small dermal tumour of adult life which can underlie the dramatic clinical picture so magnificently described by Wood of Edinburgh in 1812.

Along with the hæmangiectons of childhood we may surely group the lymphangiectons, including the hygroma. The lymphangiecton of adult life, such as that in the epididymis, may well be the result of a mechanical retention as indeed are numerous conditions we are pleased to call simple tumours, such as the sebaceous dermoids and many of the cysts. Of these I may mention for interest the gas cysts of the intestine. There was a specimen in the museum here ; it was from a hog and was sent by Jenner to Hunter, and to complete its fame I need only add that Cavendish himself reported on the contained gas : " a little fixed air, and the remainder not at all inflammable, and almost completely phlogisticated." Sir James Paget's comments are worth quoting :" Surely never were the elements of

*The *ectasia* or widening may not be obvious in the individual vascular channels of the lesion, as for example in the paucivascular form of the glomangiecton. None the less the duplication of channels constitutes an enlargement of the vessel which would normally occupy the site.

an inductive process combined in such perfection ! Jenner to observe ; Cavendish to analyse ; Hunter to compare and reflect," (Paget 1876). Of the three human cases I have seen, two had severe pyloric stenosis.

Another so-called tumour which is frequently an architectural mishap is the lipoma, especially the small ones, for example, in the renal cortex. On the other hand the diffuse variety as in lipomatosis of the neck is thought to be metabolic in origin and its rarity to-day may be a reflection of the higher proportion of water in the solvents we imbibe. A diffuse type of lipoma is occasionally seen in a limb but we would scarcely be tempted to think of it as metabolic. Lipoma is so often our mental prototype of a simple tumour that we are apt to forget how it can fox us clinically ; a sacral one may overlie a meningocele, in the groin lipoma may mimic a hernia, while, as in the specimen in this museum of such a tumour arising at the base of the tongue, the simple lipoma can cause sudden death (Choyce, 1932).

Possibly the papilloma of rectum in the child is also a displacement abnormality. I was led to this possibility by the finding of Paneth cells in two such cases. Normally, as you may remember, there are no Paneth cells in this part of the alimentary canal ; they are, in man, essentially cells of the small intestine. My interest in this cell arose during the study of a papilloma of the gall-bladder. This growth was formed of small-intestinal epithelium and behaved in a way that could well be expected of such epithelium (Kerr and Lendrum, 1935-36). From a cholecystostomy wound there poured out almost pure saline up to a rate of 7⅔ pints in one 24-hour period with a sodium chloride content of 0·8 per cent. Thus, this growth—not 3 in. in diameter—effectively dehydrated the patient by its extraction of water and chloride and this latter at a higher concentration than in the serum and at times when the kidneys, conserving chloride, were allowing none to pass out in the urine. My surgical colleague, A. B. Kerr and I decided this growth was a true heterotopia and I may add that the distinction between heterotopia and metaplasia is not always easy. This same problem arises over the so-called sweat gland adenoma of the breast. A study made of this type of change some years ago seems to show that it resembles not the ordinary sweat gland but the apocrine glands, which are specialised sweat glands with a peculiar granule-containing epithelium (Lendrum, 1945).

The apocrine glands, which have some peculiar connection with the sex mechanism, occasionally form an adenomatous mass in the axilla, or the vulvar or perianal region. Another interesting feature of these glands, shared with the breast, is the presence of the so-called myoepithelium. This is a layer of strap-like material with the colour reaction of smooth muscle, lying between the glandular epithelium and the basement membrane.

You will have noted that I have omitted the whole debatable group of non-malignant tumours of the endocrine glands, and by this time you

may well be feeling that even, despite their absence, the exact definition of a simple tumour is obviously going to be impossible and be tempted to ask if it really matters.

After all, one removes the so-called tumour, and if the pathologist says it is simple then so much the better. The removal is done partly to obtain a diagnosis which could not otherwise be certain, and in most cases there is no strong biological argument against removal. I would certainly agree with you thus far, although to continue on a practical note may I, on the grounds of experience, plead for the most scrupulous handling of pigmented tumours and the widest possible margin of excision ; the growth may be found on microscopical examination to be merely a simple melanonævus but too often, as a result of parsimonious surgery, I have found a frank melanoma with neoplastic invasion up to the edge of the tissue removed. Also, please consider papillomata of the bladder, papilloma of the adult tongue and of the pinna of the senile ear as at the very least locally malignant (Charteris, 1948), and in the case of a recurrent fibroid undertake the most drastic excision possible !

To return to your point, an enlarged cervical lymph node seems an obvious candidate for histological investigation although, I regret to say, operation is occasionally carried out before instead of after an examination of the white cells of the blood. The number of biopsy specimens removed before a Wassermann test has been reported is in part explained by the convenience of taking both specimens at the same out-patient session. None the less this is bad surgery, and to omit the serological investigation is even more culpable. I have seen two examples of subcutaneous gumma from the elbow region beautifully and completely removed by young surgeons whose error of omission was possibly due more to forgetfulness than to innocence of mind. It is a pity that the pathologist, with a section of the gland to look at, is not always able to give the prognosis ; for example in Brill's disease, multiple follicular lymphadenopathy, it is by no means clear yet whether deep therapy is really necessary.

There is little doubt that all of you would give a guarded prognosis on first meeting a swollen cervical gland and yet be tempted to give a good one for a tendon sheath tumour or for a giant cell tumour of bone—the osteoclastoma. Having seen the malignant form of both, revealed in the laboratory, one would be hesitant to give a prognosis on the clinical findings alone.

May I seize this moment to put before you some points about the guarded prognosis ? The pathologist is often reputed to be the surgeons' only critic, but true or not the young surgeon will learn a lot about the way of a surgeon if he works for a spell as a hospital pathologist. First let me quote the statement of Minnermos (600 B.C.) preserved for us by Stoboeus who quoted it as still apposite in A.D. 500 : " There are doctors who, to show their worth and to be sure of an excuse, made bad seem worse and of the worse make a disaster." This ancient maxim is one of many

interesting and intriguing things in " For and Against Doctors " by Drs. Hutchison and Wauchope. The guarded prognosis can only too easily become a habit, and like habits of the mind, it becomes widespread and incurable. The surgeon who over the years has been economical and accurate in his use of the guarded prognosis, acquires a reputation with at least one inestimably valuable result, the production among practitioners and patients of confidence in his judgment. One can hardly measure the aid this gives to his therapeutic efforts. For the surgeon to cry wolf is unwise ; on the other hand to be scared by a goose is pathetic, and one thinks sadly of the surgeon who refused to operate because he had wrongly assessed the tumour as less benign than it actually was. The simple myoma or fibroma of the stomach can cause steady slight bleeding, and radiologically, if the technique be short of the best, can look so like carcinoma of the stomach that it would have been left alone by some of the older generations of surgeons. The surgeon of to-day, supported by the modern skill of radiologists, gastroscopists, biochemists and anæsthetists, seems to take a more sanguine view of gastric surgery. One example of gastric myoma in my own series came to operation because of violent hæmorrhage : histologically it showed a small ulcer crater on top of an apparently simple myoma, but within two years this young woman had a peritoneum full of tumour. The alimentary leiomyomata are a family, as Professor Willis observes, with occasional black sheep.

Another tumour reckoned as unsuitable for operation until fairly recently is the extraordinary hyperostosis due to meningioma. Although not easy, total removal of the involved bone *and* the underlying meningioma has proved in skilled hands gratifyingly successful (Cushing and Eisenhardt, 1938).

Finally, before recalling our journey round the periphery of the so-called simple tumour, let me quote from Professor Willis' stimulating new book on the Pathology of Tumours : " The clinician's first demand of the pathologist who examines the tumour he has removed is : ' Is it innocent or malignant ? ' This habitual query has engendered the notion that every tumour must be either innocent *or* malignant. A more enlightened modification of the question and one which pathologists should encourage clinicians to ask is : ' *How* innocent or malignant is this tumour ?' ."

Thus, to recapitulate the wanderings we have undertaken, I think we may say that we have found it difficult to define the boundary between the lesions we know to be infective in origin and those we are tempted to accept as simple tumours. We can exclude fairly definitely from our tumour group some things which our forefathers accepted. We have also learnt that the onset of malignancy in a lesion does not necessarily mean that the original lesion was a simple neoplasm.

We have agreed to exclude changes which are traumatic in origin or metabolic—involving simple chemicals or endocrines. We have recognised

the difficulty of our boundary commission when faced by the very slowly growing tumour or by the incarcerated neoplasm (as in Bowen's disease).

We have had to accept the fact that some tumours were, in the past, virtually malignant because anæsthetic and surgical skill could not in those days provide a safe removal. We have looked at the displacement abnormalities and again found that we had to refuse admission to many of them—some of these being heterotopias, others partial failures in embryonic architecture, others again mechanical upsets of adult life, like many of the cysts.

We have avoided stirring the muddy waters of the so-called adenomata of endocrine glands, although I imagine you will agree that most of these are not true neoplasms. Yet somehow I feel we are scarcely ready to define the simple tumour.

Indeed, all I seem to have to offer is a series of exclusions, but these will, I trust, be of mental value to you in the future when you are tempted to harden your knowledge into definitions. The surgical significance of these various lesions I hope may come to life in your own practice of surgery if this blickling of homilies has succeeded in bringing these so-called simple tumours to your interest.

These ramblings owe much to the writings of Sir James Paget and his son Stephen Paget, and to my pleasant years of working with the surgical staff at the Western Infirmary of Glasgow.

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ELECTION TO THE COUNCIL—1st JULY, 1948

Sir Harry Platt was re-elected and Sir Archibald McIndoe and Mr. R. C. Brock were elected Members of the Council for the period of eight years.

1,588 Fellows voted: in addition 22 votes were found to be invalid.

The result of the Poll was as follows:—

Candidates	Votes	Plumpers
SIR HARRY PLATT	672	11
SIR ARCHIBALD HECTOR MCINDOE, C.B.E.	454	12
RUSSELL CLAUDE BROCK	418	16
Arthur Dickson Wright	416	20
Rodney Honor Maingot	353	2
Eric William Riches, M.C.	331	13
Angus Hedley Whyte, D.S.O., T.D.	266	11
Alan Cecil Perry	239	13
Harold William Rodgers	217	6
Hugh James McCurrich	206	29
Ronald Henry Ottywell Betham Robinson	205	8
Hubert Wallace Symons	178	12
Marriott Fawckner Nicholls, C.B.E.	149	10
Alexander Croydon Palmer, O.B.E.	132	5