'Give me the film and I can read it for myself,' which was stupid and arrogant, and never to the patient's advantage."

Apart from the fact that the radiologist has far more experience than the practising dental surgeon can possibly obtain, he, unlike the dental surgeon, is a medical man, familiar with the dangers of dental sepsis to the general health, and, perhaps most important, his opinion is unbiased and independent. This opinion of radiography by dental surgeons is most strongly supported by those dental surgeons who have devoted much time to its study.

L. M. Ennis, D.D.S., in his textbook, *Dental Radiography*, says:

"The trouble is that many dentists consider themselves radiologists merely because they possess the apparatus. Putting it straightforwardly, no dentist can qualify as a radiologist merely from sporadic experiments after a desultory course of reading and a superficial line of instruction at the hands of the equipment salesman, and yet there are many dentists who presume to do so. There lies a danger that needs no lengthy explanation. The making of radiographs demands more than the average unthinking dentist will comprehend unless he is thoroughly versed in the requirements of both the technique of making them and the ability to interpret them. Either one of these two realms of radiography can be mastered only after a deep study of the fundamentals that demands time and patience, and the casual operator in the field cannot break into his regular practice to allow sufficient time, or patience for that matter, to become a master."

The importance of the independent opinion is still further emphasized by the fact that dental sepsis or other foci of sepsis may be present, yet may be of little or no importance in causing the grave symptoms exhibited by the patient, and the eradication of these septic foci may subject the patient to unnecessary suffering. The following is an instance. On January 1st, 1932, I was asked to radiograph the teeth of a patient who had been confined to bed for seven weeks with acute sciatica. I took the opportunity also to radiograph the lower spine, pelvis, and hip-joints. The dental radiographs showed two large apical abscesses, to which, had these been the only radiographs taken, might have been attributed the cause of the pain, and the patient subjected to the pain and discomfort of extraction. Unfortunately the radiographs of the lumbar spine, pelvis, and hip-joints showed extensive carcinoma metastases (Fig. 2), though no primary had ever been suspected. This case also emphasizes the importance of radiographing the site of the pain as well as the possible source of toxin. In another patient suffering pains in the back due to erosion of the vertebral bodies by aneurysm, the teeth were extracted because it was thought that these, being septic, were the cause of the pain.

Many instances have occurred in which radiographically normal teeth have been extracted because of lumbar or sciatic pain when unquestionable genital or colonic sepsis had been given secondary consideration or entirely neglected. Only harm can be caused by the removal of any normal structure. This fact is continually brought to the notice of radiologists when investigating cases of gastric disturbance following dental extractions which have failed to relieve the symptoms for which they were extracted. The radiographic appearances of dental sepsis and their significance I have described and illustrated in the *British Medical Journal* (June 16th, 1928).

ACUTE AND CHRONIC INFLAMMATORY CONDITIONS AND TUMOURS

The radiographic appearances of acute and chronic inflammatory diseases and tumours of the bones of the lumbar and sacral spine, pelvis, and hip-joints and their significance will be dealt with in other papers. I have previously illustrated and described a series of cases in

which the radiographs showed definite evidence of such conditions as Paget's disease of the bone (osteitis deformans), secondary malignant deposits in bone, and evidence of syphilis and tubercle which had previously not been suspected as the cause for lumbar or sciatic pain.

SUMMARY

1. In the investigation of the cases of lumbar and sciatic pain, antero-posterior and lateral radiographs of the lumbar and sacral spine, pelvis, and hip-joints should always be made. These may give an immediate clue to the cause of the symptoms.

2. Congenital or developmental irregularities occur in a large percentage of cases, and should not be ascribed as the cause of the symptoms until all other possible lesions have been excluded.

3. In cases of injury to the back or pelvis, radiographs should be taken as soon as possible after the injury, and note made of any old as well as recent injury and the films kept for reference. Changes indicative of injury may be shown on radiographs taken subsequently which were not present on the first radiographs.

4. Acute lumbar and sciatic pain is most frequently associated with toxæmia from some focus of septic absorption such as teeth, colon, genito-urinary system, appendix, gall-bladder, sinuses. Radiographs will often help in the discovery of such a focus.

5. Radiographs of teeth will show evidence of chronic septic absorption though local symptoms and clinical signs may be absent. The essential feature of the radiologist's report on teeth is that it is independent and unbiased.

6. Paget's disease of bone and secondary deposits of malignant disease may be discovered in the preliminary radiographic examination before there is any clinical evidence that such conditions exist.

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THE INFECTIVE ECZEMAS OF THE SCALP*

BY

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The infective eczemas of the scalp are of greater importance than is generally supposed. They are seen in numbers in every large skin clinic, and in some cases present the physician with a task which under the present conditions he is quite unable to accomplish. But before attempting to discuss the rational therapy of these conditions it is essential to divide them into definite aetiological groups.

It is particularly desirable to avoid the common error of grouping them all loosely under the term "seborrhoeic eczema." Though this name is unsatisfactory, even for the disease to which it belongs, it is in fact frequently applied to a number of other conditions which are totally unrelated to seborrhoeic eczema, and especially to the eczemas of the scalp, whatever their cause may be.

It will be agreed that the term "eczema" may, however, be correctly applied to all of them; for eczema is

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a process, a cutaneous reaction of a special type revealing sensitivity or intolerance of the skin to one or several harmful agents; and whether these be bacteriological, mycotic, or chemical, or of external or internal origin, the process is always the same.

CLINICAL FEATURES

From the clinical point of view age may be taken as the most satisfactory basis of classification. In earliest infancy the affection of the scalp known usually as the milk crust is almost universal. According to Sabouraud this is due to perpetuation of the epidermic exfoliation which constitutes the vernix caseosa of the foetus, and which mixed with sebum forms the characteristic crust-like covering of the scalp. Whether or not Sabouraud's explanation of this process is correct, the importance of the milk crust lies in the fact that it is sometimes complicated by eczema. Some years ago A. M. H. Gray, in the opening paper of a discussion on infantile eczema, classified primary eczema of the scalp in infancy as an infective condition, though he did not specify the nature of the infection. Some identify it with seborrhoeic eczema, but there is at present no positive evidence that would justify such a conclusion. There are actually no established facts regarding the precise aetiology of primary eczema of the scalp in infancy at present, but the fact that it resembles other varieties of eczema of the scalp known to be of infective origin—for example, in attacking secondarily the post-auricular folds and giving rise sometimes to blepharitis—lends support to Dr. Gray's view.

Epidermic exfoliation may take place in the scalp in infancy in the absence of the characteristic milk crust, and may also be the starting-point of eczema. Kenneth Wills believes that this variety has its origin either in dandruff or in seborrhoeic eczema of the parents or nurse, the infection being conveyed to the child by contagion. Dr. Wills's view, though attractive and simple, lacks confirmation at present; for, apart from other considerations, it must be admitted that dandruff is almost universal in adults.

In childhood there are two principal clinical varieties of infective eczema of the scalp. The first may begin as a simple streptococcal impetigo of the scalp, though perhaps more often it complicates fissured streptococcal impetigo of the post-auricular folds. In the former case the impetigo becomes converted, often quite suddenly, into acute weeping eczema of the whole scalp; in the latter, eczematization begins in the post-auricular folds and encroaches upon the scalp by degrees usually, though sometimes quite suddenly. This variety often follows measles, and the actual starting-point of the infection may be an impetiginous rhinitis or blepharitis; more often than not, in fact, it is accompanied by fissures at the corners of the mouth and at the angles of the nares, and by chronic streptococcal infection of the nasopharyngeal mucous membranes. The condition is seen more often in hospital than in private practice, and unhealthy surroundings, malnutrition, and neglect are very important predisposing factors.

It is an extremely serious condition, which, when well established, may be extraordinarily difficult or even impossible to eradicate. It may be followed by chronic staphylococcal folliculitis of the scalp, eyebrows, and eyelashes, and it is sometimes complicated by widespread eczema in which the large intertriginous folds suffer most. It is known usually as impetiginous eczema or infective dermatitis, and it is really eczematized impetigo. Sabouraud calls it confluent impetigo.

The prognosis varies; it may clear up completely, often after spontaneous depilation, or it may persist with

remissions into puberty or adult life. Very rarely the chronic cases are followed by partial cicatricial atrophy of the scalp. More often the scalp recovers, while blepharitis persists indefinitely without much change, and appears often to form a focus from which the subject is sensitized to further attacks, of either eczema or pustular folliculitis. In adult males this variety of infective eczema frequently becomes complicated by sycosis of the beard, and occasionally of the hairy parts generally; when this happens the term "seborrhoeic sycosis" is often erroneously applied to it.

The second variety of infective eczema met with in children is less common and far less serious. Known generally as "*fausse teigne amiantacée*" of Alibert, it consists of rather densely superimposed lamellae of dead white scales disposed sometimes in circumscribed patches, at others diffusely over the whole or greater part of the scalp. If left undisturbed the mass of scales may be in the form of a dry white crust, which on section is seen to resemble the lamellae in a specimen of asbestos. But if the hair be lifted the superficial scales become detached from the main mass and are found adhering to the hairs. Sabouraud believes *fausse teigne* to be the result of an extremely mild exudative process not visible to the naked eye, and he states that streptococci can be cultivated from the deepest scales; *fausse teigne* may be associated with post-auricular eczema, and it is probably correct to regard it as a very mild eczematous reaction to streptococcal infection. Both impetiginous eczema and *fausse teigne* occur in adolescence and in adult life, but from puberty onwards the division of the infective eczemas into distinct groups is more difficult than in children owing to the advent of pityriasis simplex or dandruff. This condition, which may be regarded as almost universal, may in certain cases be complicated by seborrhoeic eczema. J. M. H. MacLeod and I have expressed the view, which has been supported by experimental evidence, that seborrhoeic eczema is a simple infection with the spore of *Malassez*. We regard this organism as a special type of monilia, and consider it the sole cause of seborrhoeic eczema in its typical forms.

It is necessary to exercise some care before making the diagnosis of seborrhoeic eczema. It is found most commonly on the frontal portion of the scalp, where it encroaches on the forehead, on the temples, and about the ears; but sometimes it extends diffusely or in patches of figured outline throughout the scalp. It is dry, covered by scales which feel greasy to touch, and is usually associated with, or preceded by, well-marked dandruff. It is often accompanied by figured seborrhoeic eczema of the chest and interscapular region or by one of the other typical varieties of seborrhoeic eczema. As long as the condition remains typical the diagnosis is simple, but as the result of scratching, of secondary pyogenic infection, or of external irritation of any kind, it may become a diffuse, dry, weeping, or crusted eczema, objectively identical with eczema of the scalp of any origin, and especially difficult to distinguish from microbic or impetiginous eczema.

What means have we, then, of differentiating in a difficult case between microbic eczema of the scalp and seborrhoeic eczema? It is usually a question principally of clinical judgement, and in this the past history of the patient may be valuable. The history of primary fissures in the post-auricular folds of impetigo of the scalp, of previous attacks in childhood of eczema of the ears and scalp, or the presence of chronic blepharitis dating from childhood points to the diagnosis of microbic eczema; while the presence of seborrhoeic eczema on parts other than the scalp may be taken as presumptive evidence of primary seborrhoeic eczema.

TREATMENT

Time will not permit of more than a very brief survey of the treatment of these conditions. The infective variety of infantile eczema of the scalp responds usually to the application of the crude tar paste devised by C. J. White. The original formula of this preparation was: prepared crude coal tar 2 parts, zinc oxide 2 parts, to be thoroughly rubbed together and incorporated with starch 16 parts, soft paraffin 16 parts. It is necessary, as in other varieties of infantile eczema, to splint the arms to prevent scratching. The prognosis is generally better than in the allergic type of infantile eczema, but it is necessary to bear in mind that the allergic predisposition may be present in this as well as in the facial type. The *fausse teigne* of childhood generally responds quite satisfactorily to the application of an ointment containing oil of cade, sulphur, and salicylic acid—for example, oil of cade 40 minims, sulphur 20 grains, salicylic acid 10 grains, soft paraffin 2 drachms, coco-nut oil to 1 ounce. Post-auricular streptococcal fissures are best treated by the application of silver nitrate, 1/2 to 2 per cent. in distilled water or spirits of nitrous ether, or of 1 to 2 per cent. protargol or argyrol. From the point of view of treatment impetiginous eczema is by far the most important of the conditions which have been reviewed. The early acute stage must be treated by simple applications, such as calamine liniment or lead lotion. The hair, of course, should be cut very short. The weeping and crusted stage is in due course followed by a dry, desquamative phase, and then ointments containing tar and sulphur may be applied; but the most satisfactory local treatment in very chronic cases is the application of very small fractional doses of x rays. But in impetiginous eczema general treatment is of far greater importance than local remedies. The patient is suffering from extreme intolerance to a pyogenic infection, and it is necessary to do everything possible to restore his resistance. The most valuable remedy that we have is natural sunlight.

A boy aged 7 developed fissured impetigo and eczema of the post-auricular folds, thought to be due to wearing a pair of ill-fitting glasses; later the eczema spread into the scalp, then to the axillae and inguino-crural folds, and eventually involved the greater part of the surface. For a year he received at different hands treatment of all kinds, including several ultra-violet light baths, but made no progress towards recovery. He was then admitted to hospital as an in-patient, and was given an epilating dose of thallium acetate; with the fall of the hair the scalp recovered and the remainder of the eczema almost cleared up, but when the hair re-grew the eczema reappeared. Eventually I came to the conclusion that in all probability the condition would never clear up in hospital.

On my advice the parents went to live at the seaside, and during the summer allowed the boy to sun-bathe for the greater part of each day. He was a pigmenter, recovered completely, survived the following winter, and when I heard of him a few days ago after three years there had been no relapse.

This is the ideal treatment, but unfortunately it cannot be followed by the majority of patients, who may be doomed to suffer from a very serious and disabling disease for the remainder of their lives. No doubt the same treatment might be applied with advantage to the adult cases of impetiginous eczema, so often miscalled seborrhoeic eczema. In both adults and children artificial light therapy, whether the carbon arc or mercury vapour lamp be used, is ineffective.

Finally, I would like to lay stress upon the importance of chronic impetiginous eczema from the public health aspect. Unless cured in childhood the condition may not only cause great suffering and misery, but may disable the subject of it from earning a living. In adult males, especially, the common sequel, *sycosis barbae*, is of particularly serious significance. Apart from the question of housing, which is of course of first importance as a prophylactic measure, the cases require in childhood as much care as is bestowed by the public health authorities on cases of lupus.

CHRONIC APPENDICITIS IN SHANGHAI

BY

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WITH A NOTE ON X-RAY EXAMINATION BY

J. E. BOWEN

(With Special Plate)

Does such a condition as chronic appendicitis exist, and is it possible that it may exist in one part of the world and not in another?

Certain English surgeons have stated that there is no such thing as chronic appendicitis. I presume that they are referring to cases confined to the British Isles. Speaking with the experience of twelve years of surgery and general practice in Shanghai, I would make the statement that such cases most emphatically do exist—in Shanghai.

Shanghai is a place where amoebic and bacillary dysentery are rife—*ascaris* is common and ova of *Trichuris trichiura* are very frequently found in stool examination. The climate is moderate in spring and autumn and cold in winter. In summer there is extreme humidity, and it is hot and very enervating. Vegetable gardens are for the most part manured with human excreta; dysentery, possibly on that account, is very common, whilst there are always cases of the enteric group, and cholera always appears in the summer. It is therefore extremely risky to eat vegetables that have not been boiled, and lettuce grown under foreign supervision, where only chemical manure is allowed, assuredly produces many cases of

dysentery or allied complaints, as, in spite of supervision, polluted water is undoubtedly used by the native gardeners. During the summer months one sees many cases of diarrhoea of obscure origin. Repeated examinations of the stools fail to demonstrate the presence of the dysenteries, and some of these cases continue throughout the summer to a varying degree of severity in spite of most thorough and varied treatments.

Are the dysenteries, summer diarrhoeas, infections with *ascaris*, *Trichuris trichiura*, etc., the cause or the precursors of the frequent cases of chronic appendicitis in Shanghai?

Many patients with chronic appendicitis seek advice in the first place simply because they do not feel well, and frequently remark, "I think I am run down and probably need a tonic." There can frequently be obtained a previous history of dysentery or diarrhoea, but in many cases the dysentery was very mild and the diarrhoea of short duration, and they are simply forgotten.

Tiredness, disinclination to go out after getting home, and a great desire to lie down and remain in an easy chair on finishing the day's work are very common complaints in these cases. Patients often complain of a feeling of nausea—rarely any vomiting—which has no relation to the taking of food. Physical examination of the patient may reveal nothing, but in many instances one can detect slightly increased resistance to deep palpation over the right lower abdomen, and frequently palpation over the right iliac fossa produces a slight feeling of epigastric discomfort and sometimes a feeling of nausea. This discomfort is sometimes referred to the umbilicus, but is more frequently epigastric.