1858

On
The
Parasitic Diseases
of the Scalp -
by
Robert Farquharson

~ 1858 ~

Of all the difficulties & impediments which beset the path of medical learning, few have been more universally dreaded by the student than the diseases of the skin. Their natural complexity, added to the confusion which has too often been impressed upon them by tedious descriptions & poorly executed plates, excites a sensation of fatigue in his jaded mind, worn as it is with the toils of classes & technical study. But when placed face to face with his tormentors, & taught to recognize the clinical points & peculiarities of the various pustules papules & other cutaneous affections to which our suffering flesh is heir, he is gradually led to confess that he had perhaps overrated ~~with~~ their difficulty & exaggerated the complexity of their forms. But after all, can we reproach him with having been wrong in so doing? Can we blame him for dreading the diagnosis of diseases of which, his knowledge is derived from books & not from the bed side of the sick - Books which in the vast majority of affections can give us so clear & concise a picture of their characteristic peculiarities, are here completely at fault, for without confined

Difficulty of the Study.

† Let it not be thought that I especially allude to Edin in the following remarks, for our school is more favoured in this respect than many others in this country.

R.F.

clinical study they do little better than confuse. Of all the maladies that come under our notice, those of the skin above all, demand a serious study upon the living subject, a careful education of the senses is of the last importance here. The various phases of various forms of disease, the difference between separate varieties of pustules, papules, or scales, so little apparent or important to the uneducated eye, & which no consumption of midnight oil alone would ever teach us to recognize, must be carefully observed & learnt, so that they may henceforth be familiar to us, as the faces of old friends. But what opportunities have we for this in our country, what chance have we of seeing these important affections upon the large scale necessary to impress our minds with the characters which they present, & the changes which they undergo. Cases I admit are usually to be met with in the wards of our hospitals, & to these is done every justice by our physicians in the way of clinical instruction, but nothing under special hospitals, or at least extended special wards, would be sufficient to meet the requirements of students in this respect. What then is the result of this? Medical men are sent out from

our schools, learned in botany & chemistry, percussion & auscultation, able to diagnose a Bronchitis from a Pneumonia, or a Typhus from a typhoid fever, but suprisingly inefficient in the detection of diseases of the skin. Their knowledge of these may be somewhat improved by the deligent perusal of works specially devoted to the subject, but ~~these~~ such, excellent as they often are, & absolutely necessary in connection with clinical observation, leave but little impression on the mind when studied alone. It is when placed actually in contact with disease, that we fully admire & appreciate, the able classifications of Willan & Bennett, & the excellent descriptions of Bazin, Cazenave & Devergie. In this state of affairs, therefore, if the student does not wish to remain either in ignorance, or at least with a very superficial idea of this subject, it is almost necessary for him to spend a few months in Paris or some German university town, to supply his deficiencies. This no doubt is one of the points which always rendered a period of foreign study, a species of almost necessary supplement to our own home curriculum.

In practice there can we exaggerate the evil consequences

of such an omission in our hospital education. Diseases are confounded one with another, confusion in diagnosis brings worse than confusion in treatment, the period for checking important affections is lost, hairs fall never to return, beauty is destroyed, health & comfort impaired, affections become chronic & as it were incorporated with the very constitutions of the unfortunate sufferer, & the public confidance in our medical art is shaken & falls. The quack then when called in, can do no worse & is in consequence considered to possess an equal if not superior knowlege of the subject under consideration. Questions of contagion are now overlooked, important affections are permitted to spread, & commit their ravages in schools & families ~~now~~ unchecked by judicious therapeutic means. This description may perhaps be somewhat highly coloured & perchance exaggerated, but from what has come under my own observation, limited as that necessarily has been, I cannot but think that it has many points of resemblance to the truth.

Evil effects of deficient knowlege.

Such then being the state of affairs, can we wonder that the principal advances in the pathology & treatment of these affections, should

usually have been made by continental observers. And how indeed could it well be otherwise!!

Reasons for continental superiority in skin disease

Devoting their whole lives & energies to this one pursuit, & physicians to special Hospitals, where the opportunities of observation might rouse even the most sluggish to enthusiasm, the dermatologists of France & Germany have ever been noted for the successful industry of their research.

But can we doubt that if the Physicians of this country were permitted the same glorious field of investigation, that their results would come up to their usual standard of intellectual superiority. But without the same opportunities they can never of course hope to compete with their foreign brethren

Whatever objections may be raised to the division of labour in medical as in other pursuits, there can be no doubt, that it has ever been by specialists that special topics, have been elucidated & advanced, for few like the immortal Hunter can hope to shine in every department of our science. By the particular investigation of individual subjects, we ensure that a certain amount of first rate intellect shall be devoted to their elucidation, & these topics, thought over

Specialism in general

at every point, viewed in every light, and discussed at every difficulty, must yield something new at last. When one isolated idea constantly occupies the mind, it is wonderful how soon it becomes encrusted as it were with the results of this continued reflection, & how it arranges itself in new forms of combination quite unforeseen by the more varied thinker. And although all the speculations & opinions given forth may not be of equal value, some must in all probability be correct, & the new discussion & recitation of the subject must in itself be productive of important consequences. But leaving the wider domain embraced by our introductory observations, let us approach the more special subject of our present remarks, & that is, the Parasitic diseases of the scalp.

Commencement of our subject

The almost despair of being able to render within a moderate compass, anything like justice to this important but difficult topic, which has been so much discussed & mystified since dermatology began. So many ideas have been put forth, regarding their nature, scientific classification & above all, treatment, that volumes would scarcely suffice for a complete

Difficulty & condensation

elucidation of the whole. But such an investigation, though doubtless of the highest interest to the medical historian, would hardly be so edifying to the practical man, & although certain points in their history will be referred to, as proving the advances of modern medicine, we shall endeavour not to fatigue, by the introduction of too many wearisome details. To this class of affections, our remarks concerning the difficulty but importance of diagnostic skill, more especially refer, as indicating in a great measure the proper treatment to be pursued. Writers on cutaneous affections are apt to fall into the extremely natural error of describing the differential diagnosis of favus, for example, as much easier than in reality it is. Of course to their well practised eye, the various symptoms stand out in broad relief from one another & cannot be mistaken, but to the comparatively uneducated observer, serious difficulties are liable to arise. If this were not the case, whence come the egregious & mortifying errors, which are committed every day in practice. Various classifications have been proposed for the parasitic diseases of the scalp, but all of which

Diagnostic skill important here.

Facility of diagnosis not to be exaggerated.

Former classification of these affections

~~pr~~ previous to the discovery of their parasitic origin, were not less vague than unsatisfactory. A sore puzzle must they indeed have been to the Willanists & difficult must have been their task of assigning them to any one section of their anatomical arrangement. That they were placed among the pustula, is a fact well known to all, & how little resemblance they bear to this class of diseases, must also generally have been observed. But it was necessary to place them somewhere, they were perhaps as like pustules as anything else, so pustules they were for many years, taking their place in the ranks with acné & impetigo. & frequently confounded no doubt with them. But the discovery by Schönlein of the peculiar fungus

Discovery of the Achorion 1839

constituting the disease known as favus, stirred up the stagnating waters, & after a little confirmation & research, dermatologists were forced to abandon their pustular theory & rank these affections in a class of their own. Some few of the olderfashioned men still adhere to the errors of their youth, but have fortunately not thus been enabled to arrest in any measure, the progress of their science.

varieties to be described

In the following remarks we will consider the 3 following varieties of parasitic diseases

I. Favus - Porrigo - Tinea favosa. Teigne faveuse.

II. Ring worm, Tinea capitis - Porrigo scutulata - Herpes Tonsurans - Teigne decalvante.

III. vitiligo - Teigne Pelade.

Favus.

We shall begin our remarks with Favus, as being the most common & consequently the most important of the 3 varieties. Its symptomatology, pathology & natural history have been fully illustrated both in this country & abroad & in its treatment merely has much scope been left for the labours of subsequent observers.

This affection known from a comparatively early period of medical history, has always been regarded with a well grounded aversion & disgust. Its insidious origin, obstinate course, & the permanent baldness which is the too frequent result, not less than the inefficacy of most known modes of cure, combined to render this, the most universally dreaded of all the maladies of the skin.

In this as in so many other affections, a

a period of incubation, varying in length, may occasionally be observed. But seldom if ever, is the opportunity afforded to the Physician of observing these introductory phenomena, so ~~and~~ advanced is the disease generally before it comes under medical care. An itching of variable amount has however been described by authors, as one of these initiatory signs, but this may be caused by so many other agencies, as seldom to alarm the patient into seeking professional advice. An erythematous redness of the scalp has been also mentioned, but is of course almost entirely masked by the hair, as well as by the hypersecretion of epidermis, which we are assured is now poured forth by the disturbed glands. A change is also stated to come over the hairs, & they assume in a minor degree that faded & detenerated aspect which is so characteristic of the disease in its later stages. But so many difficulties, so many sources of fallacy must arise to impede our correct appreciation of these phenomena, that we must admit their practical importance to be but small. Nor have we any reason to suppose that our means of cure would be much more successful, if employed at this early period.

Period of incubation.

Itching

Redness

Change of hairs.

Let us then proceed to the consideration of some of its more palpable phases. Hitherto the disease has been burrowing in the deeper recesses of the cuticle, but bursting its coverings, it now displays itself on the surface of the body. A minute yellow point is perceived & this, on careful examination, may be seen to have a central depression, & in many instances to surround the base of a hair. Gradually it increases ~~in size~~, insidiously they spread over the surface of the skin, till at last a considerable portion of the scalp may come to be coven with the little dry cup like masses. But increasing in number they likewise extend in size & from a minute pin head like point, they grow to grow 5 to 6 times their original magnitude. This they effect by additions to the outer layer of the crust, & as it is done in a regular & systematic manner the shape of the body is in no wise altered by its increase in dimensions. You can best appreciate this mode of increase by a careful inspection of the favic crusts, when we will find that the circumferential portions are of a much deeper shade of yellow, than the centre, which in consequence probably of greater age & longer exposure is blanched to a dirty white. But when their

Appearance on the surface

Commence by yellow point.

They increase in size

Mode of increase.

growth continues rapidly to increase, they approach one another, form large & coherent masses in which the original cup like formations are flattened & distorted by mutual pressure. On attempting to remove a favic crust, we will find it a matter of some difficulty, in consequence of its being sunk, or as it were let into the skin, so that merely the upper portion reaches the external surface. Pain will be experienced during the operation, & a small quantity of blood will probably be lost by the patient. Their colour usually described as a pale sulphur yellow, is seldom to be met with of this exact hue, but ranges from a dirty buff, to near approximations to its typical tint. But at this period or later in the disease the continued scratching engendered by the painful feeling of itching which still continues, causes the escape of blood staining the crusts of a reddish or deep brown hue & the pus contained in the pustules usually excited by the irritation of the disease or the treatment adopted for its relief, lends its ~~change~~ share towards the change of colour. Here then is a source of fallacy for which the Physician must be prepared, not excluding the idea of favus because the usually characteristic colour is

† See Leçons théoriques et cliniques sur les affections cutanées parasitaires - professées par - Le Docteur Bazin - 1858 - page - 122

awanting. But of all the signs of Tumes, that appreciated by the nasal organs is perhaps the most unequivocal. On approaching the nose towards the seat of disease, we perceive a strong peculiar disagreeable odour, resembling according to different observers, the urine of cats or ~~mice~~ the smell of mice, but rather the latter according to my experience, with occasionally a more pungent or somewhat peppery odour. In sufficient cases I should imagine this sign to be of the very highest diagnostic importence, though M. Bazin seems to think that olfactory impressions are not much to be depended upon in Medicine. I confess I cannot see upon principle his objections are founded. The stimuli conveyed to the nose are surely as vivid & dependable as those to the eye & ear, & I cannot see why it should be deemed of less importence than these, in this perhaps the only case, where its sole existence would be sufficient to establish the diagnosis. The alteration impressed upon the hairs by the disease is also a trustworthy character. By degrees they become dull & withered looking, they appear lighter than their normal colour, & frequently affect a twisted undulating, or even corkscrew aspect which is

smell of the disease

Alteration of hair.

description

very characteristic of the disease. They appear in fact, to be greatly deteriorated in health, & their usual firm hold of the scalp being weakened, a very slight force suffices for the avulsion. The appearance of the few short hairs growing from a large coherent mass of furfuraceous crust is curious, as if the superior portions had been destroyed by fire, & the stumps completely dried up, & almost charred by the heat. These effects on the hair are probably caused by the pressure of the parasite within the bulbs, interfering with their due nutrition, as well as, (as Dr Bazin suggests) the arrest of the sebaceous matter normally lubricating their shaft.

Cause of these changes of the hair.

One of the best signs of the departure of the disease is the improved aspect of the hair, & the great firmness of their hold to the skin. But the 3d & last period now rapidly approaches. The hairs frequently shed & as often reproduced, now fall never to return, & the portions of scalp once occupied by these epidermal appendages, assume now a red depressed, almost cicatricial aspect. The destruction spreads, & the whole head, except perhaps a sort of circle round its base & forehead, which is generally spared by the disease, may be denuded of its hair. Can we wonder then, that on the

3d period

Aspect of scalp.

strength of this distressing consequence, the disease now under consideration should be so universally dreaded. The general health is also frequently affected in long & obstinate cases, cachexia, anæmia, mental imbecility, & even death, having been referred to this cause by authors. On what these deleterious effects depend, it would perhaps be difficult to explain, though probably, the interruption to the functions of the scalp, as some have suggested, may be in part the cause. But I think the fact, so much insisted upon by some authors, that favus always exists in connection with a deteriorated constitution, has been greatly overdrawn, for it may often be observed upon the heads of children, apparently in the most robust health. Several varieties of the disease may be mentioned as described by authors, & though possessing but little practical interest, nevertheless may be made the subject of a few remarks. The first the most important & certainly the most characteristic form, is the favus urceolaire, the porrigo lupinosa & porrigo favosa of the older authors, the teigne urceolaire of the French. This variety is that which corresponds exactly to the description of the disease in general, as given

Condition of General health.

Varieties of the disease

+ - Bazin op. cit. p. 90.

above, has been again divided into the disseminated, when the crusts are separate & distinct & the coherent, when they unite to form one large mass. It is a strange fact noticed by Bazin, that this is the only species of favus, capable of existing on the body, so that we may always expect to find the cup shaped masses, when the disease affects other regions than the head. It is unable to live without the presence of hairs, but as nearly the whole body is thus clothed to a greater or less extent, its range is by no means circumscribed. Mr Lebert on detecting a favic scab, on the glans penis, imagined he had overthrown this theory, but the coincidence of a similar case, afforded to Bazin the opportunity of proving, that a minute almost microscopic hair did exist, growing from the centre of the cup.

Favus of glans -

2 Tinea Scutulata or scutiforme, forming one of the varieties of the vernacular ring worm. It is preceeded by itching & redness of the scalp, but more characteristically by an immense hypersecretion of epidermis, forming in many instances, a sort of gummy sheath around the base of the hairs. Before appearing on the surface of the skin, the cups have already come in contact, & lost their natural appearance, from mutual pressure, & this early pressure has a different effect

Itching & Redness -

aspect of crusts

on their shape, from that which they sustain in later life, forming the coherent form.
The former present themselves under the form of rounded masses coming in contact so as to form one large scab, covering perhaps a considerable portion of the head, darkened perhaps by dried blood & worn with the remnants of hairs. The French have described a third variety, which however appears an almost unnecessary refinement of diagnosis. In this form the crusts are not so regularly rounded as in the former kind, & from their anfractuous aspect & somewhat raised appearance Mr Bazin has compared them to the portion of a raised map representing mountains. In all other respects, it seems to resemble the last. This form they have christened Tegine Squameuse.

Third variety seems unnecessary

Seat of the disease. Seated first in the deeper layers of the epidermis, it makes its way gradually outwards & inwards, reaching the surface of the skin on the one hand, & insinuating itself into the hair follicles & bulbs on the other, thus explaining the alteration in the appearance of the hairs & not contact with this, it is to be met with, even in the interior of the hair shaft. Going further however in its destructive action, it soon weakens the vitality of the secreting papilla, which consequent

Seat of disease

† See Comptes Rendus Tom - XIII.

⊙ See on Parasitic vegetable structures found growing in living animals. Edin Philosophical Transactions - Vol XV p-277.

as it were, now secretes no more. The hair falls, for ever, the epidermal canal closes, & the cryptogame being of course, deprived of its means of nutriment, follows the example of its victim by dying. Nor is the disease uncommon in the nails, where of course it is conveyed by scratching, & where after producing, at first thickening, with tubercular looping enlargement of their substance, it assumes its invariable tendency to spread outwards by penetrating the ~~substance~~ tissue of the organ.

Nature of Disease - The crusts which were formerly supposed to owe their formation to dried pus, were shown by Schönlein to depend on a distinct vegetable parasite, easily discovered on microscopic examination. Here then was a great advance in our knowledge of this disease. Assuredly this is one of the greatest practical triumphs of the microscope, & one well qualified to shut the mouths of those affect to despise the results of this wonder working instrument. Since then the fact has been abundantly confirmed by Gruby, Bennett, Robin & other experienced micrographs, & the vegetable nature of this disease is now doubted by few. On section of the favic mass or even examination of a little of the dry looking dust

Nature of disease

Confirmed - Gruby 1841 & Bennett 1842

†See- his diseases of the skin p-464

† Edin Monthly Journal- p. 54-

Structure parasite

from its interior, we will find the structure to consist of numerous cylindroid tubes "giving off branches dichotomously, which in turn terminate in round or oval corpuscles." & of myriads of somewhat oval spores. We will also often find the hair affected & opened out & invaded in its structure by the presence of this foreign element.

Effects of parasite Theory

But despite this seemingly clear connection & favor to the vegetable kingdom, effects are not wanting, who consider that the disease depends upon a modification of some of the natural structures of the body, a sort of degeneration in that. Among the foremost of these is Dr Erasmus Wilson, who regards it to be a transformation of normal epithelial scales. Time is wanting to go over all his ideas & arguments, which after all is not much to be regretted as Fancy he stands pretty much alone, as regards his opinions, which are further disproved by the fact pointed out by Prof Bennett, that "cells once formed from a blastema, always advance according to laws originally impressed upon them. Consequently epidemic cells, though they may be ~~changed~~ transformed into hair, horn, & other epidermic structures, cannot be changed into pus cells on the one hand & into those resembling vegetable growths on the other."

Wilson

Bennett on cell development

+ - Bazin op- cit p - 117 -

Cazenaave, also rejecting the vegetable theory, considers the disease to depend upon some peculiar secretion from the sebaceous glands. But if any other proof were desired, that those derived from chemical tests are not awanting. Alcohol, ether & chloroform dissolve sebaceous matter, but not the crust of favus. Ammonia dissolves, blanches & renders gelatinous fus, but merely blanches favus a little, while reagents act upon all other fungi the same as upon that of favus.

Effects of reagents on favic crust

+ Its contagious nature forms another argument in favour of the usually accepted idea. But even this doctrine of contagion, has been of late doubted by many, & coincidence & a similarity of predisposing causes, have been regarded by them as sufficient explanation of the examples of the contagionists. But facts are stubborn things & the weight of evidence & observation, have been sufficient to convince most medical men of the contagious nature of the affection. Doubtless its infectious powers have been exaggerated from time to time, & thus a reaction produced in favour of scepticism, but the abuse of an idea, should not thus make us fly wildly, into the opposite extreme of total want of belief. - Rather should it

Contagion of the disease

† Monthly Journal - July 1850 - p 65

make us examine more carefully the grounds of our convictions, & endeavour to place our facts on a more firm & substantial footing.
Usually an interrogation of a pavic patient, we will discover some history of contagion, it is liable for example to run through different members of one family, & wearing of a pavic cap, a sleeping in the bed formerly occupied by one affected with the disease, are often adduced as causes. Doubtless a depraved state of health, with a deficiency of due hygienic influences, nourishment & exercise, must be powerful predisposing causes, by laying the system more open to morbific agencies & according to Prof. Bennett, a previous albuminous or rather tubercular exudation is necessary as a nidus for the subsequent deposition of the cryptogame. But unless we suppose the parasite to have inherent powers of causing this infiltration, cases of inoculation in a previously healthy subject, must be strong arguments against this idea.
As regards inoculation, though it has not been made the subject of much experiment, probably from the distaste that people have to acquire so disagreeable a disease, still enough facts have been

Bennett - loc. cit. p - 49
Bazin loc cit p - 114

+ Bennett loc cit p

adduced for scientific purposes. Remak succeeded in his attempt, as did Bennett on the arm of one of his class, & Mr Deffis as quoted by Bazin, has been most successful of all, having attained his object, on 3 consecutive occasions. The great difficulty of obtaining a characteristic crust by inoculation, appears to be, as pointed out by Bazin, that in order to produce the disease in its well marked form, it would be necessary to introduce its seeds into the capsule of the hair, which is of course a proceed practicable only by chance. Favus though most common to the human race, has also been met with on the lower animals. Prof. Bennett & Dr Curtis observed it on the body of a mouse, & a young American physician in a communication to the Lecture of Dr Bazin, assured him that he had met with several well marked samples of the disease on the same animals. One of these mice on being given to the cat, produced on its nose the cup like crusts of the disease, & not content to stop there, the disease was afterwards communicated to one by the children who was in the habit of playing with the affected cat. What will the anti-contagionists make out of this series of events.

successful attempts at inoculation

found on mouse

Treatment of Favus

Diseases of skin, p 47

* See his Practical treatise on diseases of skin p-356.

Barnett loc-cit - p-56

Treatment of Favus -

The treatment of Favus has long been very obscure, & unsatisfactory, but, as always happens, a more enlightened pathology, has paved the way to a more enlightened treatment of the disease. Time will not admit of our going into all the different methods which have been adopted for its relief, but a glance over some of the more important may not be out of place.

Treatment of Wilson

Erasmus Wilson after removing the crusts, by means of oil & soap water, applies an ointment of croton oil, & the citrine ointment with the internal administration of ferruginous tonics. He does not approve of shaving the head.

Veligan

Veligan, after poultices & ablation of hair, washes the head with a strong carbonate of Potash Lotion spread on lint & covered by an oil skin cap. When the crusts have entirely disappeared, he has recourse to an ointment containing the iodide of lead. Along with this he gives carefully watched doses of the Iodide of arsenic, & cod liver oil in the marked scrofulous cases.

Bennett

Prof Bennett begins by poulticing away the crusts & then shaving the head. He then applies cod liver oil to the scalp, which is enveloped in an oil skin cap, & the same

See Medical Times & Gazette for August 1853.

Dictionary of Practical Medicine p-1074

Bazin loc-cit - p-136

medicine is administered internally.

Dr Jenner Dr Jenner has employed with benefit lotions of a solution of sulphureous acid, with the subsequent

Copland use of oxide of Zinc ointment & Dr Copland has advised the frequent ablution of the scalp, with tar water, solutions of creasote, a terebinthinate lotions. But the treatment which appears to have been the most uniformly successful, is that recently devised by M ~~Bazin~~ Bazin, & pursued

Bazin - by him at the St Louis Hospital Paris. It goes upon the principle of first extracting the hairs & then applying parasiticide applications, on the very just principle, that as the cryptogame is usually ~~sta~~ situated in the hair follicles, as well as at the surface of the skin, we must remove the hairs before we can attack the enemy in his strong hold. Evulsion of the hairs has always been much practised in France, for the cure of this, & other allied affections, but has too frequently been employed with an unwholesome admixture of ignorance & barbarity. The calotte for example so much used by irregular & amateur practitioners in France, which consists in the application, to the head, of an adhesive plaster, which is afterwards torn off, in company with most, or all of the

Hairs, is most painful & useless contrivance, having been sometimes seen applied to the head of the unhappy victim 3 times without producing any effect on the disease. This practice is now very properly abandoned by all medical men of the slightest skill or renown. The treatment of the Brothers Mahon, so long famous, as the most successful known for the disease in question, consisted in loosening the hairs, with a depilatory powder, & afterwards removing them with the fingers. But all such means erred in trusting too much, to the mere mechanical abstraction of the hairs, & not employing a due combination of parasite killing remedies. Such a combination is well seen in the method of M. Bazin, which we will endeavour to furnish a short sketch, the particulars of which we have extracted from his recent work on the subject. On first seeing the case, he cuts the hairs short, & applies cataplasms & baths to soften the crusts, which are then removed by a comb. The head is then washed carefully with soap water, & afterwards painted over with the "Huile de Cade", which appears to possess the property of softening the hair bulbs, so as to render them more easily, & less painfully removed, the possibility

of the skin being ceased by the same application, Dr Bazin considers the "mile de cade" more efficacious than any of the so called depilatory agents, all of which he has carefully tried with but little effect. The preliminary operation being finished, the patient is put into the epilators hands, who laying the head between his knees, proceeds to extradate the affected hairs, by means of a pair of forceps. The operation is undoubtedly rather painful at first, but is soon very well borne by the patient. The epilators attain admirable dexterity in their art, & it is a most interesting sight to see them at work at the St Louis hospital, where Dr Bazin treats all his favus cases thus. Several times during the operation, the favourite parasiticide lotion of Dr Bazin, containing corrosive sublimate is freely rubbed over the affected parts. Several sittings are necessary to denude the part effectually of hair. so that the operation extends over several days. The hairs are then permitted to grow, & on their reappearance they present their normal aspect retain their naturally firm hold of the skin, they are permitted to remain, but frequently a second epilation is necessary for the due completion of the cure.

Extraction of hairs

Lotion to be applied

after each epilation & between the intervals of
operation, a pomade containing corrosive sublimate
is applied to the scalp - If demanded by the state
of health, syrup of iodide of Iron, Quinine & other
tonics may be administered. The mode of epilation
by forceps, is not claimed as a novelty by Bazin,
as it has been in use before, many under other
auspices been seen by Prof Bennett in use at
Vienna in 1841 - The instrument employed at St
Louis is similar to an ordinary pair of dissecting
forceps with grooves & much broader points.
Such is this excellent mode of treatment which has
never been known to fail even in the most
advanced case of the parasitic disease, at least
in the hands of Dr Bazin. The only objection to
be made to it, is the difficulty of procuring
epilators sufficiently skilful, to undertake the
successful extirpation of the hairs. But with a
very little care & attention, any one would
soon learn to perform this little manipulation
with ample success - I am sure that the more
this treatment is tried, the more will it gain
ground, & prove itself to be the only certain &
effectual remedy, for one of the most distressing
complaints with which we have to deal.

Let us now proceed to the consideration of the 2nd parasitic disease of the scalp, not with the intention of making any long or tedious remarks, but principally for the purpose of introducing the important & original ideas of M Bazin upon the subject.

2 genera of Tinea

The Tinea capitis, Porrigo furfurans, Tinea Tondens, Herpes tonsurans, or Tinea decalvans has been long known Practitioners in this country under the generic term ring worm. It has long been classed as an obstinate & infectious form of disease, but it was not till the labours of Gruby, that we were aware that depended like farus upon the presence of a parasitic growth. Such was a great progress in our knowledge of the disease, but in 1852 M Bazin followed & showed the connection of the herpes circinatus & mycosis, connected by an intermediate stage what he calls Ptyriasis & following each other in the above mentioned order. Previously to this M Gruby had detected a cryptogame in Mycosis, which he regarded as a different form, from that previously observed by him in the former stage of the disease. according to Bazin however, this is the same vegetable growth as exists in the 2 former stages.

discovery of Microsporon & Trichophyton

merely altered alittle by the hand of time.
To M Bazin is certainly due the credit of first
Discovery of Bazin discovering the tricophyton in the herpes circinatus
& in pointing out the intimate connection existing
between these 3 formerly considered distinct disorders.
We will endeavour as briefly as we can to state
the ideas of M Bazin on this subject as laid
down in his recent work. According to him then
the same parasite of tricophyton is found in the
3 stages, & these 3 stages are necessary for each
others mutual dependance proceeding & unchecked
from the first to the last in regular succession.
One of the very first symptoms of the affection is
a sensation of itching, which distresses the patient
much more than that experienced in the
Symptoms. commencement of pavus. It is generally worst during
the night, or after meals, & is described by authors
Itching as being often most agonizing in its intensity.
The external manifestations now begin & consist
of a circle more or less completely formed,
varying in size & accompanied by a slight
Circles elevation & redness of the skin. When situated
as it often is on the face neck or arm the herpes
is easily recognised, but when placed on the head
it is very apt to be overlooked, in consequence of the

of the masking influence of the hairs & the general tendancy of eruptions to appear less deeply coloured on the head. Frequently however the circles are covered with vesicles & even pustules have been observed among the initial phenomena. The hairs now begin to exhibit signs of alteration, they become reddish yellow, dry & exceeding friability, breaking with ease at a short distance from the skin. But the 2nd or pityriasic period is now at hand, let us see in what it consists. The parasite, hitherto concealed beneath the epidermal layer, now appears externally in the form of little white sheaths surrounding & frequently concealing the broken hairs, which are nearly severed as it were at the distance of a few lines from their roots & the skin assuming a peculiar grayish tint, resembles greatly the tonsures on the scalps of Popish priests. From this striking phenomenon, the recognition of the disease at this its second stage, becomes a matter of the greatest ease & certainty. There is usually a great hypersecretion of epidermis & the hair follicles, filled with the parasitic matter, assume a prominent & projecting aspect, which has been well compared to the condition commonly known as goose skin.

2 period of affection

3d - of Pustular stage. The Tonsures now become spread

sprinkled with pustules, pouring both pus & forming brownish & yellow crusts. & as the disease advances,
Sycosis it is accompanied by & ~~mat~~ disseminated tuberculous looking bodies, taking the place of the pustules. These phenomena are well seen in the common sycosis & mentagra. The obseme has the chin & upper lip of a reddish & almost purplish & bluish tint, cover with an occasional pustule, & containg several hard resistant nodules, as if some hard body had been let into the cellular substance. Where any hairs exist they can be extracted with the exercise of but little force & without occasioning any pain to our patient. This condition of
Easy extraction of hairs- the hairs forms an excellent diagnostic sign between this affection, & impetigo or syphilitic eruption affecting these parts & which simulate it pretty exactly. In such a differential investigation, the microscope will afford us little assistance, for as M. Bazin has pointed out, the pus secreted, seems to have the property of destroying the cryptogame, so that it can no longer be met with on the hairs. But notwithstanding this seemingly favorable occurrence the disease still remains & there is reason to believe, that the mere presence of the hairs, causes sufficient irritation to keep it from subsiding.
We have seen that the 3 stages of this affection, are all caused by the presence of one species of parasite,

See Hyslop's dictionary of Medicine.

viz the tricophyton. This form of vegetable growth is almost exclusively ~~caused by the presence of one~~ formed of spores, but according to Bazin, the tubes are more common at an early period of its existence. In the second stage, it forms the silvery looking sheaths surrounding hairs, & which are best separated from the epithelial scales by the action of Ammonia which dissolves the latter. (Robin) In the pustular degree, the cryptogamic is detected with more difficulty, but when subjected to microscopic examination, is shown to display the effects of age, in the small size of its spores & the greater number of its tubes. Thus we may explain the error of Gruby who considered it a growth distinct from the others, an error which Bazin has corrected by clinical & microscopic research. Mr Charles Robin, on the other hand, does not regard it as a parasite at all, but merely the epidermis rolled up in the form of tubes & I need hardly that Mr Erasmus Wilson also denies its vegetable nature.

Ideas of Robin –

The results of contagion & inoculation, all concur with those of microscopic examination, to show that the disease in the 3 stages, is the same. We can occasionally observe the 3 stages in progress at once, on the same subject, & frequently have inoculation of the herpes circinatus from the second form of the disease. Of this I saw one excellent example at the Hopital St Louis, Paris, & in conversation

with the epilators of M. Bazin, I learnt that they have frequently caught the herpes circinatus in the heads, from operations on the heads of children in the later stages of the disease.

Treatment. If the disease affects any part of the body scantily supplied with hairs, it rarely goes beyond the first degree, & may be efficiently treated with the simple sublimate lotion. But when seated on the head, chin, upper lip, & cheeks, epilation is demanded, before our lotions will produce their due effect. But in consequence of the remarkably brittle consistence of the hairs, the skill of the epilator is tried to the utmost, & many attempts are required, before the affected surfaces can be properly denuded. Thus the treatment of the disease is rendered tedious & indeed it is generally regarded, as much more difficult to cure than favus, which formerly had a superior reputation for obstinacy. In the 3d stage, however, as before mentioned, the hairs may be extracted with the greatest ease.

Treatment

A third Tinea is mentioned by M. Bazin & is founded on diseases of the scalp, long known in British practice under the term of alopecia.

Tinea – & is characterized by the presence of a third variety of fungoid growth, discovered by M. Gruby, & called by him, Microsporon Audouinii. This affection has been subdivided into 2

Discovery of Microsporon

varieties - 1 Tegine decalvante. 2 Tegine achromateuse.
In the first of these, we have usually itching & a dry & discoloured aspect of the hairs, which fall off spontaneously, leaving a surface somewhat whiter than ordinary, on which careful inspection may detect small soft hairs. In the second form (Tegine achromateuse) the hairs previously to falling, assume a white colour, while the affected scalp partakes of this blanched aspect. Symptoms
In this affection the cryptogame is met with, chiefly in the interior of the hair, where it forms little swellings or nodosities. Its appearance is much the similar to those of the allied affections, but its spores have been observed to be small & less numerous than in them, while the tubes are present in greater abundance.
Treatment. Is according to the usual principles, the infirm hairs being carefully extracted, & the denuded surface washed with the ordinary Liniment. If these Treatment precautions be neglected, an irremediable baldness will probably be the sad result.

Our task is now ended & we hasten to a close. We have endeavoured to the utmost of our capacity, to draw a sketch of the some of the most important affections of the skin, & feeble, disjoined & unsatisfactory as this sketch certainly has been, still we trust that we have given a correct idea of the Conclusion

of our subject, according to the present state of science. We cannot pretend to have advanced any new ideas of our own, but have at least introduced those of M. Bazin, which if known, have not hitherto been published in this country, but which from their great interest & intrinsic value, deserve the earnest attention of the medical world. They opened up new fields in the pathology of parasitic affections, & brought their treatment, once so tedious & unsatisfactory, within the range of safe & reliable means. Such has been the important step recently made, & for which M. Bazin deserves the grateful thanks both of patient & medical men. Let not his remedy be rashly accepted or blindly denied, but let due investigation, confirm the accuracy of his statement, or prove the error by which he has been led astray. Such is the true spirit in which to regard the discoveries of our modern science, & by thus proceeding, may we trust to place medicine, on that sound & established footing, towards which it is now advancing, day by day.