

ledge that he has obtained in the fields of human and animal pathology.

He has incorporated much that he has published before on dermoids and odontomata in his lectures before the Royal College of Surgeons of England and the Odontological Society, and there is here presented to the profession a work arranged on entirely new lines, the pages being full of useful clinical facts, and the all-important matter of treatment, though it is discussed shortly, embodies the most recent teaching of modern surgery.

The author has not attempted to define a tumour; in the opening chapter he is content with placing all new growths among the four groups:  $\alpha$  connective tissue tumours;  $\beta$  epithelial tumours;  $\gamma$  dermoids;  $\delta$  cysts; in fact a more accurate title would be tumours, dermoids and cysts. Great difficulties must exist in deciding what should be excluded from the term tumour, and in order that the clinical value of this work should not be sacrificed to a too rigid interpretation of the term, the author has inserted a chapter on teratomata as certain varieties of them are so very apt to be confounded with dermoids. An attempt is made to separate tumours into genera and species, and it fails at the outset. For instance, lipomata and sarcomata form separate genera; lipomata are divided into separate species according to their location as sub-serous and inter-muscular, &c., whereas sarcomata are divided into species on purely histological grounds according to the shape and disposition of their cells. We certainly think that, unless the terms genus and species can be employed consistently, they are best dispensed with.

In discussing carcinomata the old terms scirrhus, encephaloid and colloid have been abandoned. The relationship between an adenoma and a carcinoma is dwelt upon, the difference being that in the latter case the structural mimicry of the parent gland tissue is incomplete. Epitheliomata are separately considered from carcinomata, as it is shewn that only stratified epithelium can give rise to epithelioma. The term columnar epithelioma is not used, and such growths as arise from mucous membranes covered with columnar epithelium are included under adenomata and carcinomata.

The term tumour has been narrowed considerably in its application since the introduction of modern histological methods, and its use may yet be limited still further. Virchow separated the infective granulomata, as actinomycosis, tubercle, &c., from tumours on the ground of their causation by micro-organisms. Should carcinomata prove in the future to have a similar causation, then for the same reason the term tumour can hardly apply to them. It would perhaps be better to employ the word tumour in a clinical rather than in a strictly pathological sense, and apply it as meaning any addition to the body of organised or partly organised structures, however caused. With regard to actinomycosis, cases of this disease have before now been mistaken for sarcomata, and in a work like the one under review, where the clinical features of tumours are dwelt upon, it would be better to discuss actinomycosis for the same reason that has been urged for the discussion of teratomata in this book.

The subject of tumours and their zoological distribution has always been the most interesting in the whole science of pathology, and the interest is not likely to abate as long as the causation of neoplasms still remains uncertain.

The chapter on the causation of tumours is not very satisfactory; it might have been made much fuller, for the germ theory of cancer is hardly touched upon; in the second edition we would gladly welcome a *résumé* of the most recent investigations on this matter. Mr. Bland Sutton closes the book with this advice regarding the treatment of all tumours,—“thorough removal of the tumour, whenever this is possible, at the earliest possible moment.”

We may safely say that we have not for a long time read any book with such sincere pleasure as this master-piece of Mr. Bland Sutton. We are unable to point out a single imperfection of importance in the printing of the book, thus shewing how carefully the publishers have done their work, and the numerous illustrations, except some of the coloured plates which are decidedly inferior, will be very interesting and useful to the careful reader seeing that they have been taken from such varied sources and are in themselves a record of much patient toil in hospital museums.

## Correspondence.

### SOME REMARKS ON GUINEA-WORM.

TO THE EDITOR, “INDIAN MEDICAL GAZETTE.”

DEAR SIR,—In the March number of the *Indian Medical Gazette* for the year 1888 there appeared a letter of mine in which I ventured to place before the profession a few words regarding guinea-worm and its treatment, with a hope of obtaining any reliable remedy from able hands. Unfortunately I have had no occasion to read any satisfactory discussion on the subject in any of the chief leading medical journals current in India.

To-day I again venture to mention a few of the principal points in connection with the ætiology, symptoms and treatment of the disease with a view of procuring some able and satisfactory remarks on the subject in general.

*Ætiology.*—The use of water contaminated with the young filaria seems to be the chief cause of the disease. The drinking of such water does not appear to produce the affection as is supposed by some; because no such worm is ever found to enter into any of the internal organs indirectly through the medium of the blood. Bathing in the water and washing the body with it is the origin of the disease. It is a common practice amongst many of the natives who detest sanitary measures and sanitary laws, that after bathing, &c., in the water they allow their bodies to remain wet with the contaminated water for a considerable time, and thus the young filaria enter the bodies by direct penetration through the minute pores of the skin. Rinsing the mouth with the water sometimes gives origin to the worm in the parts contained in the cavity of the mouth, such as tongue, palate, and inside of cheeks, although such cases are comparatively few in number. The lower extremities and especially the feet, which remain more exposed than the other parts to the influence of the water, are often attacked by the young filaria. The scrotum and the surrounding parts for the same reasons not unfrequently fall victims to the disease. Guinea-worm is a foreign body and enters the human frame by direct penetration from without inwards in the way stated above.

*Symptoms.*—These are found different in different persons. The ordinary train, however, runs thus: There is often much itching of the part followed by irritation, resulting finally into a blister-like boil which afterwards bursts and gives exit to the head of the worm. There is not much pain of any consideration. In several cases there are some constitutional disturbances, such as restlessness, vomiting, thirst, and a sort of urticarial skin eruption all over the body. This eruption lasts for a few hours only. The patient not unfrequently says for some time that “*jee ghabrata hye*” (thinks as if he is going to die).

But these symptoms are not found equally in all cases. There are many patients in whom the worms are seen in superficial parts like a ridge and felt like a thin strong cord. In such cases there are very few constitutional symptoms and no eruption at all. There are certain cases in which the worm after undergoing putrefaction sets up inflammation in a localised place and thus forms a sacculated abscess. Such abscesses may be found more than once in the same individual; the site chosen for this purpose is generally some fleshy part. The cases in which the worm breaks—either while removing it from the body or when it dies in the tissues and comes out by small thin shreds—present most characteristic phenomena; great irritation, inflammation, swelling, tenderness, most excruciating pain, and restlessness succeed one after another and remain so in spite of all treatment for several days. In some severe cases the weight of the bed-clothing or a slight touch to the affected part gives unbearable pain. The affection becomes chronic. The patient feels himself dirty and gets quite exhausted by its long continuance. In some cases the severe symptoms remain for a few days only; but the patient is subject to the affection every year, probably in the first part of the rainy season or a few days previous to it.

*Treatment.*—The proverb “Prevention is better than Cure,” is the first thing to be remembered here. The only preventive treatment which I can lay great stress on is the strict avoidance of water contaminated with the young

filaria, for any use whatever. It is a common belief amongst many of the natives that with regard to water all that they have to do is to procure a sweet supply of water for drinking purposes alone. Regarding water for cooking, bathing, and other works, they are indifferent. Once they meet with a water sweet in taste and all is done for them. No consideration for its source, smell, dirt and the surrounding hygienic or unhygienic conditions, and thus here lies the whole mischief. Owing to this cause alone not only guinea-worms are not prevented, but several other contagious diseases are unavoidably produced. Therefore it should be a rule with everybody that he takes great care in selecting a pure healthy supply of water not only for drinking purposes alone, but also for cooking, bathing, and other household works.

When once the disease has made its appearance, the following is the mode of treatment generally adopted.

Where the worm is superficially like a ridge it is removed there and then. The part all along the ridge is to be kept covered with a piece of wet cloth dipped in simple cold water for about ten minutes, when, after removing the cloth, we shall see that the ridge becomes more marked than before. Now with a sharp scalpel about three-quarters of an inch long incision along the line of the ridge and a little to one side of it and not just over it, should be carefully made so as not to injure the worm. Afterwards the skin and the *facia* with the other superficial parts should be dissected out on each side of the worm which now becomes quite visible. Then a strong long needle should be introduced underneath the parasite and the pointing end of the needle taken out the other side. Now the needle with the parasite on must be drawn upwards, and finally the worm seized with the fingers, and by gradual but gentle pulling up and friction of the surrounding parts it is removed whole and entire. Sometimes it is found to enlarge the incision to more than two inches in length. The length of the parasite is generally more than 24 inches.

Where sacculated abscesses are formed these are opened. The cavities should be thoroughly cleaned out with some antiseptic lotion such as carbolic, boric or sublimate.

No special mode of treatment is necessary in such cases, and in due time the wounds are healed up.

It is in broken cases of guinea-worms with unbearable troubles that active treatment is called for. Here the skill of the surgeon or the intellect of the physician is of essential importance. In India innumerable drugs have been tried with no satisfactory results. Suffice it to say that the proverb "*eka naru bazar daru*" (thousand medicines for one guinea-worm) has been well-known to the natives of this country from time immemorial. Indeed, the sufferings of a patient attacked with broken guinea-worms are great, and it has been earnestly expected that a sovereign remedy should come to light one day or other for ameliorating the condition of such sick-poor.

In my last letter I advocated the use of the bruised leaves of "Omarpatee," the description of which was also stated. Here I have only to add that my further experience of the leaves has served to confirm my views already stated; others may give a fair trial to the leaves and record their experiences.

I place the above few words on record in order to obtain correct theories as regards the cause of the disease and the proper treatment for the cases of broken guinea-worms.

BARNAGAR, C. I.;  
May 1894.

M. B. VINZE,  
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#### "VESTIGIA NULLA RETRORSUM."

TO THE EDITOR, "INDIAN MEDICAL GAZETTE."

DEAR SIR,—It is not a little disheartening to workers in scientific medicine to read an article like that in the editorial columns of the *Pioneer* of June 1st on the subject of enteric fever and its causation.

The *Pioneer* is presumably the organ of lay opinion on topics such as these, and the public are perhaps only too ready to allow their ideas on this and kindred subjects to be shaped for them by the newspaper to which they resort for their stock of daily information. So that when this information is based on incomplete knowledge an unfortunate perversion of public opinion is apt to be the result.

This is doubly lamentable in the present instance, inasmuch as the *Pioneer* has the reputation of being officially inspired,

and it may be that the thinking section of the public will run away with the idea that the views put forward in the editorial to which I shall refer at some length, are representative of the state of scientific knowledge in India. This is the more to be feared as few of those outside the profession who take any thought for this and kindred subjects have any access to papers in which more accurate information is to be had, and the consequence is that a distorted and dangerous view of these questions is the only one available to the general public, and yet an accurate, not to say a somewhat intimate, acquaintance with the real facts is of the utmost importance to the European community in India, more especially with reference to the causation and prevention of typhoid fever, as it is to the public alone we can look for any such cogent expression of opinion as shall result in the adoption of efficient measures for the check of typhoid in India.

The conclusion at which the *Pioneer* arrives, from its very insufficient premises, is in its own words, as follows:—"One affirmation meanwhile admits of being made with certainty, that the disease chiefly falls on young men and new arrivals to the country. Taking this fact as a basis, does it not lead to the conclusion that the origin of the fever is to be found in climatic causes, rather than in a specific poison taken into the system from insanitary surroundings—a liability which no improvements in sanitation seem to have any tendency to reduce." If the *Pioneer* means by this that the fact that the incidence of typhoid fever is mainly on young men is any evidence of the "climatic" origin of typhoid, then we may apply this reasoning equally to the climates of England, Russia, Denmark, America, and arrive at the very satisfactory (?) conclusion that the "climate," whatever that climate may be, is the source of typhoid. A truly lame conclusion.

We do not, however, think for one moment that this is the real belief of the *Pioneer*, but we believe that the key to its position is to be found in the last sentence of the above-quoted paragraph, *viz.*, "a liability which no improvements in sanitation seem to have any tendency to reduce," a statement of which the whole article is an expansion. The argument then is this—(1) Sanitary improvements on an enormous scale have been carried out in the towns and cantonments of Upper India during the last decade. (2) We have an increase, or at any rate no decrease, in this "rightfully prevalent disease" in spite of these enormous sanitary improvements. (3) Therefore, sanitary improvements have no tendency to reduce the liability to typhoid fever.

This argument may, at first sight, seem sound, and it is this very appearance of soundness in the reasoning which makes the editorial in which it occurs an element of danger, inasmuch as the logical outcome of it would be to abandon all attempts at sanitary improvements directed to check the prevalence of typhoid fever. It will be my object to draw attention to the dangerous fallacy underlying this argument.

The conclusion arrived at is bolstered up by a reference to the multifarious channels by which the typhoid germ is asserted to gain access to the human body with a somewhat supercilious reference to "scientific ingenuity" which in one year impugns the dairy, or if not the dairy, the "foul well in which the native dairyman washed the utensils, and from which he probably watered the milk if he get a chance," or, finally, as in the present outbreak, the "cream or curds which the *khansama*s got in the bazar."

I am fully prepared to grant the general conclusion arrived at which is this: "If you have a dozen sources of approach and shut all of them but one, and that the smallest, nay, if the veriest chink be left open, the enemy will still enter as freely and be as destructive as when the ingress was unrestricted." It is not only in accord with the doctrine of probabilities, it is an incontrovertible fact, and so far from its being a *reductio ad absurdum* as the editorial asserts, it is a *deductio ratiōnis*.

Were we talking of organisms whose power for ill depended solely upon the number gaining admission originally there might be some excuse for this allegation of absurdity, but if we realise the fact that one solitary bacillus falling upon a favourable soil will eventually, and that in an incredibly short time, produce millions of its kind, it becomes evident that short of the absolute exclusion of the individual bacillus we cannot have safety, and if we cannot extend our defensive operations to the closure of this