History.—His previous health seems to have been fairly good. He had an attack of acute articular rheumatism three or four years ago. He never worked in lead. He denied syphilis. He had never had sore-throat. About a year ago, he had an eruption on the chest, for which he was ordered baths, but no medicine; and it disappeared after a fortnight's treatment. He was in good health until six weeks or two months before admission, when he began to suffer from very severe frontal headache, which was worse at night, and was sufficiently severe to keep him awake. At the beginning of May, he had an attack one evening, with loss of consciousness. On coming to himself next morning, he found that he was paralysed on the left side. He could not stand for four days, and it was still longer before he could hold anything in his hand. There was some difficulty in speaking; he did not forget his words, but could not pronounce them properly. He had gradually grown stronger; and, on admission, could walk about the ward, dragging the left leg a little. The grasp of the left hand was considerably less than that of the right, and he had difficulty in raising the arm over his head. When he was looking at an object in front of him, there was from time to time a little irregular movement in the eyes—a slight involuntary roll. If, however, either eye were shut, the other eye became the subject of very marked nystagmus—mainly horizontal, and coarse in quality. If he were looking with both eyes in such a way as to put the muscles on the strain, the nystagmus again came on, but to a less extent. The pupils were equal, and acted well to light. There was distinctly deficient action on the left side of the face; the left corner of the mouth was less retracted than the right when he showed his teeth; and he had been unable to whistle since his attack, which he could do easily before. There was almost absolute loss of general sensation over the whole of the left side of the body; he could only just feel the hardest pinch in the head, face, arm, trunk, or leg; he did not feel a touch on the left conjunctiva or left side of the tongue. The special senses, moreover, were affected; he was unable to smell with the left nostril; he was barely able to hear my watch placed in close apposition to the left ear, though he heard it at a considerable distance with the right. Taste was nearly or quite absent on the left side of the tongue. When his sight was examined, however, it was the right eye which was deficient, and he had great difficulty in reading with that eye, what he read with ease with his left. This partial blindness of that eye, he believed, had come on since his illness, as he had good sight before. The field of vision, tested roughly with the fingers, appeared normal.

I may mention that Professor Charcot has found that there is a frequent connection between posthemiplegic chorea and this particular form of hemianæsthesia, and his observations have been confirmed by other observers so far as the sense of sight is concerned. Thus, in the two cases reported by Bernhardt (*loc. cit.*), loss of sight in the eye of the hemiplegic side was associated with choreic movements in the limbs of that side. In one of Professor Charcot's cases at the Salpêtrière that I had the opportunity of seeing, an elderly woman, who had suffered from hemiplegia for several years following an apoplectic stroke, had general and special anæsthesia, associated with choreic movements. Metallic applications were tried, and were followed by very marked improvement in the sensibility. M. Charcot has mentioned another case of the same kind which occurred in his practice (*Progress Médical*, Jan. 20th and 27th, 1877).

To sum up, then, we find that an affection of sensation, general and special, of every order, may be met with in a considerable variety of conditions besides hysteria, and that which is due to hysteria differs in no way from that which results from other causes, gross organic lesions not excepted. We find as a rule the whole realm of sensation involved, but in the hysteria, as well as in the other conditions, we may find one special sense, or certain districts of skin unaffected; thus, in the case of lead-poisoning, the sensation of the foot was nearly normal, whilst everywhere else the patient was anæsthetic.

The affection of sight, again, is in all quite different from that seen in most cases of organic hemiplegia where the optic centres are involved, for in these we find hemiopia—*i. e.*, blindness of that half of the field of vision in each eye which corresponds with the paralysed side. In the cases of which I am treating, however, we find affection of the eye on the paralysed side only, the other eye being intact, and the affection consists of concentric diminution of the field of vision in all directions, which may, in some cases, amount to complete blindness. The exceptional case I have myself reported of organic hemianæsthesia, in which it was the opposite eye that was nearly blind, I leave, as this was an anomaly for which I am unable to account.

Another feature which the hysterical cases have in common with those due to other causes, is the transitory nature of the symptoms. In several of Dr. Magnan's alcoholic patients, the sensibility returned within a few days or weeks after they came under treatment;

and, in at least two cases in which the hemianæsthesia appeared to be due to an organic lesion, sensation returned after the metallic applications.

I shall not attempt in the present paper to enter upon the difficult question as to the mechanism of this singular condition, whether in hysteria or in other maladies; still less shall I enter into the much vexed question as to the explanation of the efficacy in certain cases of metallic applications. My object has been to show that hysteria is by no means the only condition in which special and general hemianæsthesia is met with; that it is found not only in certain diseases—such as lead or alcoholic poisoning—in which we may suppose it belongs to the so-called functional symptoms; but also that it may be due to a distinct and localised organic lesion which can be accurately defined by necropsy. Instead of allowing ourselves to be dominated by blind scepticism when our attention is called to hitherto unnoted phenomena, let us bear in mind how very imperfect is our knowledge of the functions of the brain, and endeavour to apply our new knowledge to the elucidation of its problems.

LIFE-ASSURANCE AND RESIDENCE IN HOT CLIMATES.

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WITH reference to the extent to which residence in hot climates reduces, if at all, the eligibility of European life for assurance, I venture to offer the following remarks. Having been Staff Assistant-Surgeon to the dépôt at Warley at a time when recruits for the army in India were examined and admitted in large numbers, and having served for many years with European as well as native troops in various parts of that country, besides holding appointments in which the examination of lives for assurance formed part of the ordinary duties, I may perhaps be allowed to claim a fair share of experience on the subject. My only object being to invite attention, for the benefit of both assurance companies and of medical officers attached to them, to a subject which, so far as I am aware, is not discussed in any special English treatise, I hope I may be pardoned for thus noticing it; which I do in the hope that, if necessary, some abler pen will pursue it.

An impression—in a great measure erroneous—prevails with many assurance companies and medical practitioners that tropical residence is opposed to longevity. For the investigation of tropical lives—so to designate them—no general rule can, of course, be laid down. Each life must be dealt with separately on its own merits. But, unless the medical officer who examines it has been specially educated for the purpose, or has had special experience, his position, always responsible, as “one of the chief guardians of social morality and civilisation,”* becomes, in such cases, exceptionally so, and in some very embarrassing. The primary object of a life-assurance company is, naturally, to do business. At the same time, its desire is to obtain as many young and healthy lives as possible. Given ancestral longevity and freedom from evil hereditary influences, individual youth, health, and regular habits, with an occupation free from danger—such a life is obviously very desirable. This amount of unmixed good in a single individual is, however, rare. One or more disturbing elements frequently exist, and are provided for; but I am inclined to think, from a perusal of the examination-papers in use with various assurance offices, that, in the case of tropical residence as one of these elements, the inquiries might be so framed as to enable the medical examiner to arrive at the true value of the examinee's life with greater exactness than the present system in those offices admits. Some offices look so seriously upon tropical or Indian residence, that they occasionally double the premium: in others, lives in India are assured at home-rates. *In medio tutissimus ibis* is an axiom that may well be applied here. That the risk of life in India is, *ceteris paribus*, greater than it is in Europe must be admitted, because cholera and insolation—diseases which, in their season, destroy or damage life to a vast extent—cannot be eliminated from the calculation. Since the days when an undertaker in Calcutta offered 20,000 rupees for the business and goodwill of a brother undertaker for a single month (September) up to the present time, the value of European life in India has steadily increased. Improved systems of drainage, a better water-supply, facilities for rapid escape from noxious influences and for recruiting injured health, added to more rational modes of treatment and recognition of hygienic laws, have combined to reduce the mortality in later years from 40 per 1,000 during the three years ending 1813 to

* *The Medical Adviser in Life Assurance.* By E. H. Sieveking.

less than half that number in the decade ending 1870.[†] Still, the mortality generally is higher than in the United Kingdom. We learn from the *Army Medical Report for 1875* that, during the ten years ending 1874, the death-rate from all diseases amongst non-commissioned officers and men was—in Bengal, Madras, and Bombay—double that in Great Britain and Ireland. It is true, that these latter classes suffer more than officers. Nevertheless, the broad fact of a general higher death-rate, and of a certain amount, therefore, of Indian risk, remains. What that amount may be, it is not very easy to determine. The Directors of the Standard Life-Assurance Company—a company that probably assures more tropical lives than any other in the United Kingdom—whilst admitting that their rates will bear a certain reduction at the younger ages, believe that, at those which are older, they must, in the new policies, be increased. From a statistical point of view, these calculations may be correct enough; but, notwithstanding, it by no means follows that individuals may not live as long in India, or after returning home, as if they had never left England.

This brings me to the object of the present communication—viz., that each tropical life must be dealt with on its own merits; and that the rates for such a life should, in each case, be special. Much must depend upon circumstances. The military and the civil life differ broadly from each other and in themselves. The officer with his regiment, for example, may (barring the element of danger from his vocation) lead a healthier life, if he please, than many civilians, or officers in civil employ. The station where his regiment is quartered is changed in the annual relief once in two or three years; and the march with it (a good deal abridged in the present day, owing to railways), extending often over several weeks, is usually most invigorating. Then he may annually take sixty days' privilege leave to the hills; and his occupation, generally, secures for him a fair amount of air and exercise. The civilian, on the other hand, and the merchant, pass several hours daily in a more or less unwholesome atmosphere—the former in *cutcherry* (judicial court), the latter in his office. The planter, again, with his early rising, long rides over his estates, and regular habits, often attains a good old age in India, enjoying far better health (and showing it in his face and *physique*) than very many in England.

The part of India, moreover, makes a vast difference. One man may pass the greater part of his service in the hills—in an English climate, in fact. Another may have sojourned under malarious influences in what are known as the penal settlements in the plains. The liver and spleen of the former may be as free from all trace of disease as when the proprietor left England, whilst those of the latter may be seriously injured. Then the aggregate length of residence is not the same as consecutive length. Facilities of communication, and less stringent leave-rules throughout the services, make it easy for all to come home more frequently, and thus renew their strength. In former days, when men identified themselves more with the country, and remained there thirty or forty years continuously, doubtless, for them, a return to England, at an advanced period of life moreover, might be hazardous. But this is now all changed. Men go to India to fill their coffers, and return as rapidly as possible. Obviously, in such cases, the climate *per se* would tell less than upon the long resident. Something must, of course, be said for acclimatisation. Many men become inured to the climate. Dr. F. Mouat reminds us, in the pamphlet above referred to, that Sir James Annesley, in his *Sketches of the most Prevalent Diseases of India*, divided the 115 European gentlemen who died in the Madras Presidency in the years 1813, 1814, and 1815, out of 1,366, into three classes: the first class who had resided twelve years and under in the Peninsula, with a death-rate of $4\frac{2}{3}$ per cent. *per annum*; the second, residents above twelve and not exceeding eighteen years, whose mortality was something less than $3\frac{1}{2}$ per cent.; and the third class, whose residence amounted to eighteen years and over, who lost only $2\frac{1}{2}$ per cent. of their number. For the thoroughly acclimatised in India, a return to Europe would naturally be somewhat hazardous. The power of adaptation to climate and other circumstances inherent in the human constitution is marvellous; but this power must naturally diminish with advancing years. In examining a tropical life, habits should be carefully inquired into. Those of a prejudicial tendency are too easily acquired in the East. Hence the advisability of referring a tropical life to two friends—one who knew the assuree before he went abroad, and who had renewed his acquaintance with him since his return; another who knew him well in India. The fact of a man having risen in his profession would be in his favour, although the opposite must not be accepted too readily as adverse. A singular apparent inconsistency is sometimes seen. A man comes home sick,

Soon, the *res angusta domi* of England brings on an attack of impetuosity; and he applies to an assurance office for a loan, ready to assure his life to cover it. The inconsistency is, however, more apparent than real. Men are very properly often sent home for ailments that would become aggravated by continued tropical residence, whereas they shake them off rapidly in England, and are frequently well before even leaving the vessel. Such lives may, in truth, be perfectly sound. Some lives are improved by residence in India—the strumous, for example. I am acquainted with a retired (Native) Infantry Colonel, now in his fifty-fifth year, whose mother died early in life, after giving birth to this, her only child. He was a sickly little fellow. Struma displayed itself in a marked and exaggerated degree. His neck was scarred from glandular abscesses, and one of his elbow-joints became ankylosed after chronic ulceration; whilst his voice, from a similar condition in the larynx, lost the masculine, and acquired a feminine, tone. How he passed for the Indian military service I am not prepared to say. He did pass into it, however; and he rapidly began to improve in health. The climate suited him, and his constitution soon underwent a wonderful change for the better. He came home from time to time on furlough; and now, having served the State well as a regimental officer in India for more than thirty years, has retired in the full enjoyment of life, and likely, humanly speaking, to live for many years. His male ancestors were healthy and long-lived. Had he remained in England, phthisis would probably have carried him off before he had completed his fifth lustrum. It must be remembered that in a hot climate the lungs are not, as in a cold one, actively employed. Their ordinary office of eliminating carbon from the system is undertaken, for the most part in India, by the liver, which is, therefore, more likely to become deranged, or even diseased. I believe that the greater tendency to fatty deposit in tropical climates arises from the decreased activity of the lungs and the not always corresponding activity of the liver. It is well for the individual if obesity be the only result. Too frequently, where habits of life are favourable, fatty degeneration of tissue follows. Some years ago, I pointed out, from actual experiment, that, where Europeans had resided for a few years in the plains of India, there was apparently a positive diminution of weight in the lungs. Dr. Parkes, when alluding to this in his *Practical Hygiene*, mentioned that he had held the same opinion, though he had not enjoyed sufficiently frequent opportunities for testing it. This fact (comparative quiescence of the lungs in India), whilst it points to the expediency of locating European troops as much as possible in the hills, shows also that, after long residence in India, the lungs are less likely than other organs to be the seat of disease, whatever the proclivity of ancestors, or nearer relatives, to phthisis. This leads me to speak of what kind of life is suited for India, or likely to do well there; in what way different lives are liable to be affected; and what derangements or diseases we may expect to find in tropical lives generally.

But, before going further, I should like to say a word or two on the examination of a "life". An intending assuree is very different from a recruit for the army. The latter not being always full grown, allowance must be made for that, and, in some cases (it may be), for previous starvation, and consequently for future filling in. The difference between the raw recruit of twenty and the smart soldier two or three years later on is often very striking. The assuree, on the other hand, is usually developed. Under a "short service" system, where, moreover, a proportion of the troops may be told off for garrison-work, a recruit may get through his allotted period of active servitude without difficulty, even though he may break down and die later in life. But the assuree must live as long as he can. Every allowance should be made for the circumstances of the moment. A nervous examinee may wish to fortify himself beforehand. Alcohol will at first diminish, but afterwards accelerate, the pulse. A cup of coffee, taken at a neighbouring luncheon-bar, will quicken it in a marked degree. A meal of animal food will raise the pulse from five to ten beats per minute. Prolonged fasting, on the other hand, will reduce it by from twelve to fourteen beats per minute. Constitutional nervousness and various other points must be considered. Has the examinee walked rapidly to the place of rendezvous? Or has he come quietly in a conveyance? With reference to possible abnormal distribution, etc., the pulse should be felt in both wrists, alternately and together, whilst the assuree stands and lies down. An interval, more or less long, according to circumstances, should be allowed to elapse between the assuree's arrival and his examination. Doubtless, the respiration in all cases requires special attention; but, for reasons just stated, disease need not be expected there, notwithstanding the existence of phthisis in the family. Stress is sometimes laid upon the extent to which the apices fill: but general breathing capacity is required; and the direction in which this exists is not always the same.

* *The Death-Tribute of England to India . . . from 1861 to 18 inclusive.* By F. J. Mouat, M.D., F.R.C.S. 1875.

The relation of height to size and weight will, of course, be carefully considered. With regard to the lives that should go to India, it is understood that those in the services are picked lives; though, even with these, some points are omitted in the medical examinations which are deserving of inquiry. At present, if an individual have been vaccinated or had the small-pox; if he show no tendency to insanity, or epilepsy, or hernia, etc., he is, *ceteris paribus*, considered eligible, and passed; and yet he may not be so fit as appearances indicate. The dyspeptic, for example, especially if he be liable to low spirits, should not make India the land of his adoption. The swarthy and the fair* complexioned should alike avoid it; the former being likely to suffer from "liver", the latter from "sun". Those who have "weak bowels" should not risk it. The practice of sending the consumptive (under all circumstances) to India is, happily, diminishing, as it is becoming generally understood that certain parts of that country—the low damp climate of Bengal, for instance—are quite inimical to such cases. In the higher and drier stations, improvement may be expected. The hill-station of Ootacamund, in the Madras Presidency, is particularly suitable. Notwithstanding the risks from climate that have been here referred to, the *res angusta domi* is too often all-powerful in determining the future career of a youth. Interest, too, may influence, and the prospect of prizes not attainable at home. Under any circumstances, the man who has decided upon India should, whenever possible, consult a physician experienced in tropical disorders as to his proclivities and the best mode of obviating them.

In examining a tropical "life", attention would naturally be drawn to the complexion. This may be natural, or it may be the result of permanent destruction of the secreting portions of the liver. Even in the latter case, there is no cause for special consideration, as, if the assuree have left India for good, there may yet be quite liver enough for health. The general bearing is very important. Indications of disordered nervous system should be carefully sought for. Shattered nerves are frequently the result of a prolonged residence in India. The liver and spleen will obviously require especially careful examination. However disagreeable the duty, if there be the least suspicion, be the intending assuree married or single, the medical officer should look for signs of blood-poisoning from syphilis. The dissemination of this poison, and its effects, in India are much greater than is commonly supposed. The kidneys will be seldom found to be the seat of disease.

With regard to the question—Has the assuree, one of a long-lived family, who has lived in India for thirty years (including half-a-dozen spent in furloughs of two years at a time), as fair a chance of living to a good old age as other members of the family who have never left England?—the answer must obviously depend upon circumstances. Here is an example. A. B., who was recently examined at an assurance office, did not go to India till he was twenty-three. He had led a careful life in England, and his habits were regular. He had not (when he presented himself for assurance, at fifty-seven) suffered at any time from serious illness. He had risen rapidly in his profession, and, at fifty-five, retired from the Indian service in good health. His ancestors, on the male side especially, were remarkable for longevity, their several ages at death varying from eighty to ninety-five. His father, naturally a hale active little man, died at sixty, in India, having imprudently played at cricket, of which he was particularly fond, in a damp misty month (February), at one of the dampest stations in Bengal. The induced catarrh became a fatal bronchitis. Beyond occasional attacks of dyspepsia, he had never, during a service of nearly forty years, been ill; and, humanly speaking, had he not, for the sake of promotion, returned to India at so advanced a period of life, he might have been living now. Considerable stress was, however, laid upon the fact of the death at a comparatively early age by the medical officer of the company, whilst no questions were asked as to the longevity of A. B.'s family. A. B.'s mother's family were also long-lived; but his mother had died of cancer of the breast at fifty-five, and a sister of phthisis at forty-four, years of age. These facts, taken separately and without inquiry, would obviously be very important. But investigation would have elicited that the former, of excellent *physique*, had never complained of even a headache till she was fifty. Then, with a change in the uterine functions, a scirrhus tumour appeared in the right breast. It was completely removed by an eminent London surgeon, and she continued for four years to enjoy her usual good health; when she became a widow, and then, the tumour having reappeared, and life no longer having any charms for her, she abandoned herself to her fate. The tumour became an open sore, and death soon followed. The sister, who died of phthisis, had gone with her

parents to India when eighteen years of age, and married and became a mother shortly afterwards. Frequent pregnancies and continued lactation undermined her strength (European mothers, as a rule, are less able to suckle their offspring in India than they would be in England); and, at twenty-eight, tubercles were detected in the left lung. For sixteen years she battled with the disease; and, from time to time, regained very much of her former good health. But her condition was not treated with the serious attention it deserved; and, at forty-four, the poor sufferer finally succumbed. Four of A. B.'s brothers and sisters had died in infancy. Much, too, was made of this point. But what were the facts about which no questions were asked? Three of the children had died half a century ago in India from the effects of teething (a period more trying to European children in a tropical country than in a cold one), when the diseases of childhood, moreover, were less understood, and when, owing to difficulties of transport, change of air—so important a factor in aiding recovery—could not readily be obtained. The fourth infant died in England from unchecked hæmorrhage after leech-bites—a melancholy instance of neglect. When A. B. left India, he was advised not to do so, as he had evidently, it was urged, twenty years more work in him even in that country! The result of A. B.'s medical examination was, that three years were added to his life in the policy. Too great importance was attached: *a.* To the idea of blood-poisoning (cancer) in the mother, and to its hereditary nature; but, as Dr. Sieveking observes, "the female organs of reproduction are specially liable to the disease, and...the female sex has an infinitely greater proclivity to cancer than the male sex; and the taint, if any, would scarcely affect the assuree"; *b.* To the death of the sister from phthisis; for, although, as the same author has observed, "where both (cancer and tubercle) occur in the same family, any member of it must be regarded as bearing a double risk", the circumstances of the case were such as would not affect A. B. himself, whose lungs had for so many years been under tropical influences; *c.* To the deaths of so many members of the family, as to the circumstances attending which, however, no inquiries were made; *d.* To the death of A. B.'s father from a chest-affection. And yet, whilst stress was laid upon these points, leading to an increased rate of premium, no inquiries were made about the longevity of A. B.'s ancestors, male or female, and no careful investigation was made of those organs and parts of the constitution which would be liable to derangement after so long a residence in India. The satisfactory result of inquiries in these directions should quite have neutralised any unfavourable opinion formed upon a consideration of the four adverse (?) facts above referred to. A. B., who has a sister five years younger than himself—also a tropical life, enjoying excellent health—might, with her, be considered a "selected life".

COMPLETE INVERSION OF THE UTERUS: REDUCTION ON THE FIFTEENTH DAY.

By ALEXANDER FORD, L.R.C.P.Ed., Harrogate.

INVERSION of the uterus is so rare an accident that the following case may not be without interest.

On February 20th, Mrs. B., aged 22, primipara, was delivered of a healthy child. During the later months of pregnancy, she suffered from a fixed pain on the left side; but her general health was good. Labour was normal as regards the first and second stages. After the expulsion of the child, I waited about ten minutes and made traction on the cord, maintaining pressure on the uterus with my left hand. The cord snapped off. I then introduced my hand into the uterus and grasped the placenta, which was partially adherent. I removed all but a small piece. Presently my patient lost a large quantity of blood. She said she "could not see", and felt as though she should "sink through the bed". Her countenance became deadly pale, and her pulse so weak and fluttering that I could not count it. I administered stimulants freely and she rallied. I left her at 11 A.M. I saw her again in the evening and found her very weak.

On the following day, the patient complained of having severe after-pains and cramps down the thighs. The bladder had not acted. I drew off her urine, introducing my finger into the vagina to serve as a guide to the orifice of the urethra. There was no change when I saw her in the evening. I passed the catheter, and administered an opiate.

On February 22nd, my patient's condition had altered in that the cramps had subsided; the bladder had not acted. On introducing my finger into the vagina, I came upon a globular body filling up that canal, and this body was the inverted uterus. I made an attempt—a poor one, I must admit—to reinvert the fundus, and failed.

On February 23rd, Dr. Myrtle saw the patient with me, and rightly

* The fair scrofulous, for whom the warm and dry parts of India are usually well adapted, are not, of course, included in this category.