BRIEF NOTES
OF A
VISIT TO THE LEPER HOSPITAL
AT
GRANADA.

BY
JOHN WEBSTER, M.D., F.R.S., &c.

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HAVING had an opportunity of inspecting, during a recent holiday excursion in Spain, the ancient Leper Hospital at Granada, originally founded by Queen Isabella about three centuries and a half ago, after that celebrated city was wrested from Moorish dominion, I am induced to bring before the Royal Medical and Chirurgical Society some facts regarding the malady for which the institution just designated was first established; more especially, as leprosy has now disappeared from most of those countries where formerly it was so common, both during the early Middle Ages, and even at the period of the Crusades. Believing, also, that few practitioners in England of the present day, have, like myself until last autumn, ever seen unequivocal cases of a disease so frequently described in various old medical authors, and particularly often alluded to in Scripture, I trust that my present rather brief communication will not be considered by the Fellows as altogether uninteresting, although it merely contains several cursory remarks, based upon data derived from personal observa-

tion, when visiting the Granada hospital for lepers last September.

At that period, the establishment contained 53 inmates; 39 being male, and 14 female patients; showing that the former sex greatly predominated in number over the latter. This excess of male lepers has always prevailed, and ample experience proves that men are more frequently affected than women, in the proportion of about five to two at the least, speaking generally. Again, as to age, among the fifty-three leprous sufferers then congregated under one roof, there might be recognised individuals varying from a girl fourteen years old, and a lad not much more advanced, to persons of both sexes verging towards their grand climacteric. The complaint itself, under which the inmates laboured, had likewise attained a variety of stages; some patients being only recent victims, whereas others had been several years attacked; while all seemed slowly, but surely, advancing to the same result, namely, a fatal termination.

Among the patients now enumerated, a few had merely darkish-looking eruptions on their skin, of small diameter; many presented tubercular elevations on the face, forehead, about the ears, or exhibited other true marks of leprosy on their necks, arms, and hands. These parts of the body being usually the points where the malady was most frequently manifested; in fact, wherever the person's cutis became most exposed to atmospheric action. In numbers, the countenance appeared much distorted by excrescences or nodules on the nose and lips; besides which, the cheeks were, in several, so swollen as to alter entirely the features, and thereby to impart to the individual so affected even an animal-like expression. Other cases more advanced, had the mouth and tongue ulcerated, sending forth a horrible stench; their voice often becoming weak, husky, or otherwise seriously impaired, as to tone and strength, so that they were only able to speak in a whisper; while some had lost an eye, or part of their face by extensive sores, which, in particular examples, really seemed cancerous. Indeed,

various instances actually noticed might be justly classed in that category. Several had lost fingers, toes, and even a hand, in consequence of ulceration of these parts; whereby the poor sufferer became a horrid spectacle of mutilation and helplessness. Two or three were all but bedridden from their physical sufferings or debility; and two formed such a mass of bodily corruption, that it would be difficult, and certainly painful, if not useless, to attempt giving any description.

It not being proposed to detail in the present communication the usual pathognomonic symptoms characterising leprosy, as observed among inmates of the Granada hospital, since the malady there seen was strictly analogous to that prevalent during former eras, I shall not occupy further time with even a short outline. Nevertheless, in reference to one peculiar phase of the mental faculties noticed in leprosy patients, I may state that, *almost universally they seemed happy, and even quite contented with their really sad condition.* Some were also reported to be often singing, or attempting to do so; others laughing, and making merry, both when idle and when occupied in their work-rooms. In the central enclosure, where many male patients had congregated together, while I visited that part of the institution, several were gaily dancing to their companions in misery, while one of them played on a musical instrument; at the same time, different groups of busy talkers and hilariously disposed persons seemed enjoying themselves in various ways. The sight then witnessed was remarkable; and to observe many of the inmates thus pleased and contented with their lot, although labouring under a malady which would certainly prove fatal, after a longer or shorter period of bodily suffering, was not the least curious peculiarity noticed among the residents in this hospital.

Moreover, I may add, the Director confirmed all that is now stated respecting this usual, but singular, contentment expressed by many leprosy patients; and on my questioning several respecting their condition, or the prevailing feelings they experienced, I nearly always got similar answers. One

said she was very comfortable; another replied he had everything that was required; and a third, who accompanied on the guitar a ditty he then tried to sing, answered my inquiries by saying, "Why should he not be pleased? having nothing to complain of, but much to make him thankful." Such a peculiar feature in this disease like that now mentioned, from being often present, is very interesting, and therefore deserves record; while having been likewise generally observed among inmates by the superintendent of the Granada establishment, no doubt can remain regarding its frequent existence.

Another important observation, made by the same gentleman to myself, during our lengthened conversation, equally deserves being specially stated, namely—that he had found many leprous patients very lascivious in conversation, and that they would often become so in their conduct, were great care not always taken to keep the sexes separate. This he had observed after much experience. Indeed, that authority further added, the "*libido inextinguibilis*" noticed by various ancient writers, still constitutes a prominent symptom among numerous victims under his superintendence.

With reference to the particular districts from whence most inmates received at the Granada hospital for lepers usually come, it may be stated that very rarely any are natives either of the city itself, or belong to the adjacent "Vega," which has for many ages continued so celebrated on account of its rich soil and abundant productions; being, in fact, one of the most fertile regions throughout Spain. Almost all the patients admitted are inhabitants of places adjoining the low, south-eastern Mediterranean seashore, especially in Almeria, Adra, Motril, Malaga, Velez-Malaga, or other towns on that coast, and adjacent villages—Cadiz and its vicinity being also affected. The malady would hence seem as if especially obnoxious to marine populations, not those persons who dwell habitually upon more elevated or inland localities. Recent observers likewise further assert, confidently, that leprosy is now an

increasing malady, as to number, in various situations of the Peninsula ; more victims of the disease being at present recognised, than during the early part of the current century. Such an assertion, however, requires additional proof ere being admitted implicitly.

Nevertheless, that the complaint still prevails to a considerable extent in some regions of Spain, may be conclusively illustrated by an instructive fact recently communicated to the Madrid Royal Academy of Medicine by Senor Mendez Alveiro, viz., that 284 leprous patients were ascertained to be alive during 1851 in nine Spanish provinces, without reckoning many more about whom no statistical return had been procured, at that date, from the districts where they resided. The above authentic statement of Dr. Alveiro fully demonstrates how frequently this loathsome disease still continues to prevail throughout the country.

Respecting the 284 leprous patients so reported, it seems interesting to mention that 188 were males, and only 96 females ; giving two of the former to one of the latter sex. Further, it also appears worth stating, that 221 of the total number ranged from fifteen to forty-five years of age ; consequently, about three fourths of the whole were persons of middle age, or during full manhood. Among the males, 96 were married, 86 bachelors, 4 widowers, and one an ecclesiastic ; while of the females, 52 were single, 32 married, and 12 had become widows ; thus showing that 139, or almost one half, were unmarried when affected with leprosy. These figures, therefore, conclusively bear out the statements enunciated in a previous paragraph of this paper, which alluded to the sex and age of the customary sufferers from the malady under discussion.

On the other hand, if the frequency of leprosy in Spain at present be compared with its actual occurrence in the United Kingdom, the contrast becomes both curious and instructive ; the malady of former epochs has now, it may be fairly asserted, all but disappeared from the British Islands, among persons who have never visited any tropical climate where it rages endemically. One of the latest

illustrations of this complaint affecting a native of the British Empire, and coming within that category, occurred in the Edinburgh Infirmary during 1809 ; while two cases were also, it is said, recognised several years ago in one of the western islands of Scotland.

Through the kindness of Dr. Addison, I have, however, been informed that he had met with an unequivocal example of true tubercular leprosy in a man under his own care at Guy's Hospital, who was never out of Great Britain, and therefore constituted a case really indigenous. Dr. Wilks has published, in 'Guy's Hospital Reports,' an account of this remarkable instance of "*lepra tuberculosa*," drawn up by Dr. Gull, from which he courteously permits me now to quote the following idiopathic and salient features. This patient, aged 28, worked as a tailor, and was born at Cork, which he had left twelve years before his admission into Guy's Hospital ; five of these years having been passed at Croydon, and the remaining seven usually in London. Until eight years prior to his being treated by Dr. Addison, at which period the first symptoms of true leprosy appeared, this patient had always enjoyed good health, with the exception of having twice contracted syphilis, although in a mild form. All treatment proved unavailing, while the disease continued slowly to make manifest progress, and to exhibit every characteristic of this hideous malady, until the 24th of May, 1853, when he died, after having actually walked out of doors as usual on the same morning.

In reference to the above case, whereof drawings were exhibited before the meeting, through the kindness of Dr. Wilks, and which is the most recent example of unequivocal leprosy I have heard recorded as actually affecting any native of Great Britain who never visited or resided in localities where that disorder prevailed ; it seems further worthy of mention, that he neither experienced any change in his sexual feelings, nor manifested the singular hilarity so frequently noticed among many leprous inmates under surveillance at the Granada hospital.

Indubitably, examples of this malady which exhibited an

unmistakeable character, have fallen under the observation of other medical practitioners in England, among persons coming from, and natives of the West Indies, or countries devastated by leprosy; while it sometimes also attacks Europeans who have resided during successive years in situations where the disease is endemic. However, according to my present knowledge, no one has recently met with a case in Great Britain really indigenous. That fact becomes much more worthy of remark, when it is remembered how very common this malady was reported to be in the British Islands during former ages, even among the highest classes of society; as, for example, King Robert the Bruce, who, history reports, died its victim after several years' sufferings. Besides, it should likewise be recollected, that not many centuries ago, there existed upwards of one hundred lazarettos in Scotland and England; one of these, at Sherborne, near Durham, containing usually sixty-five inmates. Nay, it is also stated, that St. James's Palace in London was originally built as a receptacle for lepers.

Hereditary tendency is another point to which I would now beg to draw attention; since it is believed by some medical observers to exert considerable influence in producing leprosy. Supported by the statements made to me at Granada, this opinion seems very doubtful, if not erroneous. Indeed, among a large number of the patients there resident, no proof of any transmitted affection could be actually traced. On the contrary, their relatives were often reported to be both healthy and free from leprous indications. It should, however, be remarked that many of these inmates had lived, and were actually born, in districts where leprosy prevails endemically, and in which they were exposed to the influence of similar insalubrious causes, whether of soil or atmosphere. Further, numbers had also suffered from the effects of defective diet, and lived in unhealthy habitations, besides being frequently victims of filth and abject poverty. In fact, this most loathsome of human physical infirmities, considered with reference to its production, according to my own observation, seems analogous to

cretinism, goitre, pellagra, or ague, and may be fairly classed in the category of endemic diseases.

As an illustration that hereditary predisposition does not often or usually prevail, I would here allude, among other examples, to the cases of three brothers seen in the Granada Leper Hospital, who were each simultaneously affected with leprosy, and respecting whose history I then made special inquiry. In these respective instances, although the malady was unequivocally marked, but still exhibiting different stages, no sister, other brother, neither parent, nor any relative, had ever manifested indications of leprosy. Nay, more, they all were reported healthy individuals, and perfectly free from that complaint. On this question a curious example may be quoted, which occurred in another district of Spain, viz., that of a healthy father married to an undoubtedly leprous female, by whom he had no children. Having espoused, after her death, another wife, who was free from any taint, but lived in the same locality, he had by her four sons: of these three ultimately became lepers, notwithstanding the disease had never manifested itself in either parent. Therefore, other causes must have come into operation, and produced the complaint. It may, however, be here specially mentioned, as perhaps the fact will partly explain the supervention of leprosy in certain families, that this scourge, which is frequently now called elephantiasis on the opposite African coasts, not only often there prevails among natives, but frequently attacks, it is said, the descendants of persons originally from other countries, and whose progenitors had resided in these regions consecutively during, at least, three generations.

Another feature should likewise be specified, which usually characterises the true leprosy observed in Spain—at least, such was the information I received when making inquiry—namely, that the malady seldom, if ever, affects persons belonging to the middle or upper classes of society, but almost invariably attacks the poorly fed and badly lodged labouring population. This result has been particularly noticed in dwellings that are damp, devoid of free

ventilation, and whose occupants sleep on the ground floors, or in the same hovels with mules and donkeys, frequently wallowing among ordures, besides suffering from all the evils of indigence. Therefore, its absence in recent times from localities which were formally afflicted may be held as decisive indications of advanced civilisation in any country where this loathsome, incurable disease proved at one time so rife and destructive among residents.

Respecting those causes which appeared often to exert the most influence in producing leprosy throughout populations situated under the local circumstances already briefly adverted to, it would appear not only that innutritious diet acts powerfully, but even the kind of food which is consumed under such circumstances exerts a baneful influence. Thus, putrid fish, whereof residents near the sea-coast oftener eat than persons dwelling inland, may, to a certain extent, explain the greater frequency of this malady in maritime districts, compared with central and more elevated regions. Besides such deficiency of proper nutriment, eating diseased hog's flesh, habitual intoxication produced by deleterious "aguardiente" (bad, fiery brandy), consumption of old, mouldy grain, a deficient supply of vegetables, the want of salt, and the scarcity of, or often total abstinence from, animal food as an article of diet among the poor, prove equally most injurious. Whereas, throughout such fertile inland plains as the productive Vega of Granada, where the labourers are better fed, besides otherwise enjoying greater physical advantages, both of situation and climate, than the seaward residents, leprosy is much less observed.

Before taking leave of the etiology of the specific disease affecting residents in Queen Isabella's hospital at Granada, I would add, in reference to these moot questions, according to the experience of a medical friend and Spanish physician, who courteously accompanied me when visiting this establishment, and from whom I obtained much information, true leprosy cannot be correctly designated infectious, although that gentleman admitted it was contagious. Or,

like syphilis, variola, and the vaccine disease, the malady may be communicated by inoculating another person with matter taken from an individual already affected. So far this authority considered leprosy might be propagated from party to party. Both here and elsewhere, it is often confidently stated by writers, that the ordinary attendants at leper-houses rarely, if ever, manifest any symptoms of the disease affecting inmates, notwithstanding they may have long resided in such establishments. Besides which, competent witnesses also acknowledge that leprosy victims may remain at home for years, without infecting any other member of their family, or individual with whom they reside. From such evidence it would therefore indubitably appear proved that leprosy is not an infectious disease, according to the ordinary meaning of the term, but may be, nevertheless, communicated by virus taken from persons attacked, and hence, strictly speaking, like smallpox, is really contagious.

Previous to closing these cursory statements regarding a malady now very seldom met with in any part of Europe, except Norway and Greece, where leprosy still devastates the maritime population of these districts, and occasionally also on the southern coast of France, near Marseilles, besides various places in the Spanish territory—about which, the present observations are mainly founded on data obtained during my late visit to Andalucia—it only remains to make a few succinct but general remarks respecting the medical treatment, as also the hygienic mode of managing leprosy patients I recently saw in the hospital at Granada. Upon this important question, although no expectation can be reasonably entertained of curing confirmed cases by remedies, or even of arresting their fatal progress, after a certain stage, still something may perhaps be occasionally accomplished towards alleviating the sufferings of those victims who have become martyrs to such an inveterate and incurable disease as the one in question.

At the institution here passed briefly under review, through attention to diet, cleanliness, frequent bathing, and

proper clothing; and the judicious employment of patients in manual occupations, according to their physical strength and individual capacity; by their remaining much in the shady court-yards or adjacent garden, where refreshing, pure air may be breathed, aided by varied recreations, good effects towards ameliorating the sad condition of inmates may be sometimes, at least, obtained. In short, the system pursued mainly resembled that now followed at most well-regulated lunatic asylums. Of course, various local remedies were applied to ulcerated surfaces, and usually soothing applications; while the physician also prescribed medicines internally, according to symptoms, chiefly of a tonic description. But in regard to anticipating any permanent beneficial result through medical treatment, such an expectation was almost invariably considered nugatory; I therefore need not here enter upon so useless a discussion. It should, however, be added, with respect to the effect of remedial measures, that after leprosy has become decidedly pronounced in any patient's constitution, the disease rarely continues longer than eight or ten years before it terminates fatally. In support of this assertion, I may again refer to the 284 leprous persons which were previously quoted; of these, 79 had been affected, at the time they were officially enumerated, from one to five years, and 122 from five to ten years. The remainder were of much longer duration; one having been thirty years a sufferer, while another is said to have actually laboured under this disgusting complaint during thirty-five years consecutively.

The hygienic management of inmates usually pursued at the Granada institution next requires some passing remarks. There many patients appeared zealously employed in making various kinds of matting with "esparto," a species of rush, which serves for numerous domestic purposes throughout Spain. Among other uses to which it is applied, that of sacking to carry farm produce may be named; but especially in manufacturing baskets and panniers for mules and donkeys. Hence, these varied kinds of occupations become an extensive source of profitable manual labour to the labouring

population of the Iberian Peninsula. Some leper residents were likewise occupied at different handicrafts, such as shoemaking, tailoring, and so forth; while in the female division, the laundry or kitchen required the services of several; besides others who acted as domestic servants in different departments of the institution. Attendance at chapel, and the brief customary religious ceremonies regularly performed therein, also constituted a frequently recurring source of employment and satisfaction to inmates, whose monotonous existence was thereby agreeably varied, and their feelings, as Catholic Spaniards, essentially gratified; to say nothing of various other important beneficial considerations.

While alluding to the prominent part which duties of the sacred description now specified always play in every benevolent receptacle of Spain, having been present at the Leper Hospital of Granada when nearly fifty patients were assembled in its chapel at the same time, with their faces all turned in one direction, during the devotional services then proceeding, whereby they could only be observed by spectators, never by each other—and further, the sexes being congregated in separate apartments—it may be here remarked that, at no public establishment of any kind ever previously inspected throughout Europe, have I witnessed such a disgusting sight as the spectacle these miserable and afflicted fellow-mortals there presented to the eyes of professional or curious visitors. The disfigured, ghastly countenances of some, covered with deep, extensive sores; the distorted features of others; the idiotic expression of many; and the feeble physical frames of most; at the same time that every person was then devoutly kneeling and engaged in prayer; altogether formed such a melancholy exhibition of frail humanity, that the scene baffles description, and I have no desire ever again to join in any similar ceremony, or one so lugubrious.

In concluding the present short memoir respecting the Leper Hospital at Granada, readers will, I hope, permit

me to observe, that from the several statements and facts contained in previous paragraphs, all obtained from reliable authorities,—the following general inferences, if not fully established “dicta,” may be legitimately deduced.

1st. Leprosy chiefly affects the male sex, as it always has done heretofore.

2d. Every age is liable to its attacks, but mostly that after puberty and during manhood.

3d. The malady is not infectious, in the strict sense of that definition.

4th. It seems to be an endemic disease.

5th. Occurs only among the lower and badly fed ranks of society, at present.

6th. Residents on the sea-coast constitute its ordinary victims in Spain, as elsewhere.

7th. The principal apparent causes seem to be putrid, indigestible, and innutritious aliment; also indigence, filth, and occupying insalubrious dwellings in marshy, miasmatic soils; or where a humid, variable, marine atmosphere prevails.

8th. Leprosy may be communicated by inoculation,—according to some authorities.

9th. It is incurable when fully developed; hence in the latter stages, all medical treatment proves unavailing.

10th, and lastly. Although the disease seems nearly extinct in districts where leprosy formerly prevailed extensively, and has almost disappeared from every other European country excepting Greece and Norway, it yet still exists to some extent throughout Spain; especially among poverty-stricken natives, who live either upon or near the southern Mediterranean sea-shores of that Peninsula.