

## NOTE ON LEPROSY IN THE OLD TESTAMENT

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In Lev. 13 and 14 the word צרעת<sup>1</sup> is used a number of times to denote a skin disease, the sufferers from which were *tabû*<sup>2</sup> according to the Hebrew Code. Common tradition has translated this term as "leprosy" (meaning *elephantiasis Gracorum*), and until comparatively recently this interpretation has not been questioned. The leprous character of צרעת is now doubted by very high authority. Thus, Prof. Morris Jastrow, Jr., in his able treatise on the "So-called Leprous Laws of the Old Testament"<sup>3</sup> makes the following statement: "that צרעת was never intended as a designation of leprosy (or *elephantiasis Gracorum*) is now so generally admitted as to require no further discussion. Indeed, there is no proof that the disease was known in Palestine in early days more than in Egypt, or in other parts of the near Orient." Professor Jastrow adds: "If it (צרעת) had been known, it would certainly have been enumerated among the diseases threatened as curses in Deut. 28:27, where it is not mentioned." It should be remarked in this connection, however, that there may really be an allusion to leprosy in this passage, as, if the *athuah* be omitted, the text reads: **בחרם אשר לא תוכל להרפא** which may be rendered "the scabies of which thou canst not be cured," an expression which

<sup>1</sup>The stem צרע probably means 'strike down, overcome' and is seen in Bab. *gir'u* snake, which biliteral root צר appears also in *cararu* 'be hostile' (*cirru* 'foe'). The cognate stem appears in Ethiopic as צלע and Arabic *sara'a* 'strike to the ground.' Its use in the O.T. to denote maculation or pustulation refers to the striking or attack of the disease.

<sup>2</sup>The victims of צרעת were driven outside the settlement; 2 K. 7, 3, 8, or, as in the case of the leper kings Uzziah and Jeroboam, had to live in separate dwellings; 2 Chr. 26, 20-2; 2 K. 15, 5. Such a regulation really proves the knowledge possessed by the Hebrew priests of the dangerous character of the malady.

<sup>3</sup>Cf. also G. N. Münch, *die Zaraath der Hebr. Bibel*, p. 145; Bennett's, *Diseases of the Bible*, pp. 40 ff; Jay F. Schamberg, "The Nature of the Leprosy of the Bible," *Phila. Polyclinic*, VII (1898), pp. 162-169, and Jastrow, *op. cit.*, notes 2 and 144 for remarks on these and other citations.

might be synonymous with the nucleon **צִרְעָה** of Lev. 13 and 14. On the other hand, **צִרְעָה** is actually included among the curses on the house of Joab in 2 S. 4: 29, and it appears 2 K. 5, *passim*, as the curse of Naaman the Syrian, while in 2 K. 15: 5 Jeroboam was smitten with **צִרְעָה** as a curse, and in 2 Chr. 26: 20-21, King Uzziah was similarly stricken. There is plenty of textual proof that **צִרְעָה** was regarded as one of the greatest of human ills, even if Dent. 28: 27 be omitted.

This entire subject, although of considerable interest, is beclouded by some uncertainty and in this brief discussion it is, therefore, only possible to follow the lines of greater probability. It is much too generally assumed that ancient peoples could not make a correct diagnosis and particularly of so complicated an ailment as leprosy, the characteristic bacillus of which has become definitely known only within recent years. It must be remembered that the ancients often made very correct clinical observations of disease, as may be seen from many conclusions arrived at by Hippocrates, Galen and Avicenna. Bearing this principle in mind, and reading Lev. 13: 2-16, which deals with **צִרְעָה** and its symptoms, one is tempted to think that this term, even if it did not denote exclusively what we now know as leprosy, at least *included* that dread disease. In other words, that while **צִרְעָה** could be and probably was used at a late date (Clastrow, p. 101) of other eruptive maladies, it was also used to denote leprosy itself. It would be unreasonable to expect an exact terminology, as even today psoriasis may be known medically as *lepra*.

Some years ago, being anxious to see leprosy at first hand under scientific auspices, the present writer visited the famous leper hospital at Bergen in Norway under the guidance of Dr. Krabbe, the local expert in the subject. After observing one hundred and eighty lepers, the writer under the supervision of Dr. Krabbe made notes of leprosy phenomena with a view to an examination of the disease among ancient peoples. The main purpose of this investigation was merely to discover the recognized symptoms of leprosy, in order, if possible, to identify the disease in the Old Testament and the Cuneiform Inscriptions.<sup>1</sup>

<sup>1</sup> It is impossible as yet to identify leprosy in the Cuneiform Inscriptions, as the symptoms of diseases are not so clearly described as in the O.T. The Sumerian ideogram  $\dot{a}$  1D *sa*PA, evidently to be read  $\dot{a}$  *sa*, or *a sa*

The symptoms of leprosy have long been known; in fact, long before the leprous bacillus was separated microscopically.

In the very first stages of the malady, the indications are often so obscure as to cause leprosy to be mistaken for at least seven other non-related diseases.<sup>5</sup> This confusion, however, is possible only in the very early stages of leprosy which quickly takes on its own well-defined form. Leprosy usually begins with a patch-like lumpy rash which does not fade under pressure. The important point in this connection is that this initial eruption may entirely disappear and reappear after a long interval, when the next and unmistakable form of the disease manifests itself, i. e., either tuberculation, or the appearance of the white skin (anaesthetic leprosy). It must be remembered in studying the Old Testament descriptions of צִרְעָה that there are two forms of leprosy: viz., the tuberculosis or pustulating phenomenon, peculiar mostly to men, and the anaesthetic or snow white skin-decay, to which chiefly women are subject. Of the cases observed by the writer at Bergen, only two exceptions to this rule were pointed out by the physician, which is about the average proportion at the present time, viz., 1.1%. Furthermore, a number of the Bergen cases were under medical surveillance, the

Semitized form *asakku*) which indicates a malady "destroying strength" may have included leprosy, but it is by no means certain. It has been suggested that *â-sig* was assimilated to the usual *azag* 'bright, shining' and meant 'shining sickness' and hence 'leprosy'(?). *Â-sig* has also been identified with consumption (Ball, *PSBA*, 13, p. 103). It is probable that *â-sig* simply meant 'strong (disease)'; cf. *esig* = DAN, Delitzsch, *Sum. Glossar*, p. 36. *Â-sig* is associated with the ailment *nam-kuû* (TAR) 'the cutting sickness,' HT. No. 12, Col. 1, 45-47, where both ailments are called the malady "which never leaves a man" (cf. IV R. 16, 2 21-22 a). *Â-sig* = *asakku* is usually used with *marû* 'sick,' i. e., the morbid disease. J. R. Proksch, *Monatshefte für Praktische Dermatologie*, 1891, p. 24, suggested that the incurable disease of the famous Gilgamesh was leprosy, but the allusion might equally well have been intended for some other malady, possibly syphilis.

These are: lupus, syphilis, erythema multiforme, multiple sarcoma (cancerous), Raynaud's disease, thrombo-phlebitis, to which Jews are said to be especially subject, and syringomyelia (*Monographic Medicines*, V (1916), M. Howard Fussell, pp. 84-85). Jastrow's contention that צִרְעָה was psoriasis is not supported by the symptoms indicated in Lev. 13. Psoriasis (washerwoman's itch) shows a red rash with pearly peeling scales and is not readily mistaken for leprosy.

physician being in doubt as to the leprous nature of the initial rash, a circumstance which strongly reminds one of the surveillance prescribed in Lev. 13:4-6, where a probation of fourteen days<sup>6</sup> was ordered in the case of a suspicious צרעת.

Applying our modern knowledge of leprous symptoms to those indicated in Lev. 13, the following facts seem clear. First, that in Lev. 13:12-13, the priest was authorized to pronounce "clean" a patient over whose entire body the rash had spread, seems to show clearly that the ancient Hebrews were quite aware that this phenomenon was not characteristic of an "unclean" צרעת i. e., of a real leprosy.<sup>7</sup> It must be supposed that the patients who were brought to the priest for inspection were all in the initial stage of some skin disease and the object of bringing them forward for observation was to ascertain whether the צרעת was of the *tabû* variety; viz., leprosy. Secondly, one is struck by the statement in Lev. 14:3 that if the נגע צרעת (AV, plague of leprosy) was healed in the צרוע, the patient, evidently after due observation, was to be pronounced "clean." This fading of the rash, while it might be peculiar to some other skin disease of a lighter variety, might equally well be a characteristic of genuine leprosy as indicated above under the symptoms of real leprosy.<sup>8</sup> Thirdly, the swelling (ישאת), the growth (ספחת) and especially the bright spot (בהרת) which, to be *tabû*, must be subcutaneous, indicated Lev. 13:2 as the symptoms of a genuine צרעת, readily agree with the leprous initial rash just mentioned, both as to color and consistency. Fourthly, the test indicated Lev. 13:4, as to the appearance of a white swelling (לִבְנֵי); also Lev. 13:38-39 coincides with genuine leprous appearance. Fifthly, raw living (חי) flesh, Lev. 13:11-17, and baldness (קרח), Lev. 13:10-11, eruption on the head or

<sup>6</sup>This probation of the O.T. may be negative evidence. The rule of segregation and observation may have been adopted to eliminate other skin maladies, whose eruptions might appear in the experience of the Hebrew priests during the indicated period. cf. below note 7.

<sup>7</sup>The eruption in the initial stages of leprosy does not appear all over the body. It is very significant that this fact was known to the Hebrews.

<sup>8</sup>All authorities are now agreed that the initial leprous rash may disappear; *Monographic Medicine*, V (1916), M. Howard Fassell, p. 97; Blakiston, *Diseases of the Skin*, 1893, p. 598, et al.

beard (נגע). Lev. 13:29-37, are all present in this disease. All the symptoms just noted seem to be those of the tuberculous or pustulating leprosy, but if we examine 2 K. 5:27, where Naaman becomes מצרע כשלג 'struck with צרעת like snow,' and Ex. 4:6, where the hand of Moses was stricken with a צרעת, also 'like snow' (מצרעת כשלג), these allusions appear to refer to the anaesthetic form of leprosy, rare in males. In this connection should be noted also, that in Nu. 12:10, a female (Miriam) becomes מצרעת כשלג 'leprous as snow.'

To sum up, it seems probable then, in spite of the necessary absence of proof by modern medical methods, that the צרעת described in Lev. 13, 14, and in the other passages just cited, was the curse<sup>9</sup> of real leprosy, as this צרעת was evidently an ailment which strikingly corresponded in its symptoms to modern leprosy.

Finally, the fact that the term צרעת was also used to indicate maculation, due no doubt to mould, in houses (*Salpeterfrass*), or in garments, does not militate against the use of the word to denote the genuine chronic leprous state in human beings, but rather confirms the theory that צרעת was the appropriate expression to indicate leprous conditions.

<sup>9</sup> Some authorities now claim that leprosy is curable by the use of chaulmugra oil, a vegetable oil expressed from the seeds of *Gynocardia odorata*, an East Indian herb used also in the treatment of psoriasis and sealy eczema.