Yerakon in the Bible and Talmud: jaundice or anemia?¹
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The modern Hebrew word for jaundice is tzakeveth derived from the word zahav meaning gold. The Biblical term yerakon (derived from the word yerek meaning green or green plant), is variously translated as jaundice, chlorosis, and mildew. Chlorosis is an iron-deficiency anemia found in adolescent girls just past puberty, and is characterized by a greenish color of the skin, weakness, and menstrual disturbances. It is also called green-sickness.

The term yerakon is found six times in the Bible (Deuteronomy 28:22; First Kings 8:37; Jeremiah 30:6; Amos 4:9; Haggai 2:17; and Second Chronicles 6:28). With one exception (Jeremiah 30:6), this word always appears in association with the word shidaphon, and most English translations render these two words “blasting and mildew.”

Rashi (Rabbi Shlomo ben Yitzchak 1040–1105) and others consider yerakon to represent diseases that afflict grain in the field, the symptoms of which are that the surface of the grain becomes pale and ultimately turns yellowish-green. Other Biblical commentators, including Samson Rafael Hirsch (1808–1888) interpret yerakon either as jaundice or disability, illnesses afflicting human beings. The reference in Jeremiah seems to refer to chlorosis or jaundice and not mildew. Whether the name yerakon in the six Biblical citations actually represents human or plant afflictions remains controversial, although most commentators espouse the latter interpretation.

Identification of yerakon

That the Biblical yerakon refers to some type of epidemic is clear from Talmudic discussions such as the “alarm is sounded.” (Taanith 19a) and prayers are recited (Kethuboth 8b) on account of shidaphon and yerakon. The dual explanation of the word yerakon is provided by the Mishnah commentator Rabbi Obadiah of Bertinoro (15th century) when he states (Taanith 3:5): “Yerakon is grain whose appearance became pale. And there are some who interpret yerakon to be an illness where the facial appearance of a person turns green like the grass of the field.”

As no symptoms of this disease are described anywhere in the Bible or Talmud, we are dependent upon the derivation of the word yerakon for its proper understanding. There is little doubt that yerakon is derived from the word yerek or yarok meaning green. The word yerek itself is found many times in the Bible (Genesis 1:30 and 9:3; Exodus 10:15; Numbers 22:4; Deuteronomy 11:10; First Kings 21:2; Second Kings 19:26; Isaiah 15:6 and 37:27; Psalms 37:2; Proverbs 15:17; Job 39:8) and always refers to a green herb or grass. Also in the Talmud (Sukkah 34b, Shabbath 20b, and others), the word yarok signifies the color green. One commentary on the Talmud (Tosafoth Niddah 19b) states that yarok is yellow, but ordinarily yarak or yerek means green. The Biblical term yerakrok (Leviticus 13:49 and 14:37; Psalms 68:14) is considered to signify dark green by some commentators (e.g., Rashi) and light green by others (Tosefta Nega’im I, 5). In the Midrash (Levit. Rabbah 15:3), dark green vegetables in a vegetable garden (ginath yerek) into which a spring flows are said to turn black.

A bluish-(venous)-tinge to the green is implied in the case of a suspected adulteress

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whose “face turns green, whose eyes protrude and whose veins stand out” (Mishnah, Sotah 3:4). In addition, one of the Talmudic commentaries (Tosafoth Chullin 47b) specifically states that yarak is indigo or sky-blue. A final interpretation of the word yerek or yerakon is pallor that may occur due to extreme fear (Jeremiah 30:6). In the Talmud yerakon also refers to pallor (as opposed to a healthy ruddy countenance), whether it is due to illness as in the case of a suspected adulteress (Numbers Rabbah 9:21), or whether it is caused by hunger (Ruth Rabbah 3:6). If a man is frightened to death, his face may also become greenish, i.e., pale (Kethuboth 103b and Abodah Zarah 20b). If a man is shamed in public, his face blanches (Mishnah Aboth 3:11) because the blood is drained from the victim’s face (Baba Metzia 58b).

The following story, which is related three times in the Talmud (Shabbath 134a; Chullin 47b; Tosefta Shabbath 16,5) concerning Rabbi Nathan, illustrates the difficulty in the interpretation of the work yarak.

“...if an infant is too red, so that the blood is not yet absorbed in him, we must wait until he is full-blooded and then circumcise him. For it was taught, Rabbi Nathan said, I once visited the coastal towns and a woman came before me who had her first son circumcised and he died and her second son and he died. The third (son) she brought before me. I saw that he was red, (Rashi, Rabbi Solomon ben Isaac, 1040-1105, explains that all the blood is below the skin and circumcision will lead to exsanguination) so I told her to wait until his blood was absorbed. She waited until his blood was absorbed and had him circumcised and he lived and he was called Nathan the Babylonian after my name. On another occasion, I went to the land of Kaputkaia and a woman came before me who had her first son circumcised and he died and her second son and he died. The third (son) she brought before me. I saw that he was green (yarok) (Rashi explains that he was anemic and weak from lack of blood production as yet) and I examined him and saw no convenient blood in him. I told her to wait until he becomes full-blooded. She waited and then had him circumcised and he lived and he was called by the name Nathan the Babylonian after my name.”

The “red” probably refers to erythema neonatorum but modern Bible scholars (1–3) offer differing explanations for “green” (yarok). They state that yarak may represent either severe pallor from anemia, or jaundice secondary to icterus neonatorum. Furthermore, the Talmudic discussion in Chullin indicates that yarak can also mean various shades of yellow (including egg-yolk color) or “green resembling the leek” (ibid). There is also a postmenstrual flow that is colored yarak (Mishnah Niddah 2:6) that may or may not represent blood or a blood breakdown product that would render the woman Niddah (ritually unclean). Finally, the milk of a clean (i.e., Kosher) animal is said to be white, whereas the milk of an unclean animal is said to be greenish in color (Abadah Zara 35b).

Preuss (1) offers the following thought to reconcile the two different interpretations of yarak, i.e., anemia (pallor) and jaundice. He cites Rabbi Ishmael who compares the skin color of Israelites (i.e., Semites) to boxwood (Mishnah Nega’im 2:1) and states that the skin color of Semites is in between the dark skin color of Ethiopians and the light skin color of Germanic people. Preuss proposes that pallor in Semitic people thus resembles jaundice.

The human malady of jaundice (yerakon) is said by the Sages of the Talmud (Shabbath 33a) to result as divine punishment for causeless hatred. It is said to be produced by the withholding of urination (Berachoth 62b; Tamid 27b; and Bekoroth 44b). Perhaps a disease of the gallbladder is the affliction that was erroneously thought to be caused by uric acid retention. Perhaps the uremic coloration in a patient with advanced kidney disease is meant.

Treatment for yerakon

Numerous therapeutic regimens are recommended in the Talmud for jaundice. Urine from an ass, if imbibed, is good for jaundice (Bekoroth 7b). According to Rabbi Mathia ben Heresh (Yoma 84a), the flesh of a don-
key should be eaten by someone suffering from jaundice. Water of palm trees and a potion of roots are said to be efficacious for jaundice (Shabbath 109b). Water of palm trees was thought to “pierce the gall” (ibid. 110a). A useful potion of roots is explained by Rabbi Yochanan as follows:

“The weight of a tuz of Alexandrian gum is brought, a tuz weight of liquid alum and a tuz weight of garden crocus, and they are powdered together . . . For jaundice two thirds thereof are mixed with beets and drunk, and the patient (although cured of his jaundice) becomes impotent.” . . .

Other remedies for jaundice are also mentioned in the Talmud (ibid 110b):

. . . “let him take the head of a salted shibuta (name of a fish, probably mullet), boil it in beer and drink it. If not, let him take brine of locusts. If brine of locusts is not available, let him take brine of small birds (alternate translation: clear fish brine), carry it into the baths and rub himself therewith. If there are no baths, he should be placed between the stove and the wall (to make him perspire).

Rabbi Yochanan said: if one wishes to make the patient with jaundice warm he should wrap him well (or rub him) in his sheet. Rabbi Aha ben Jacob suffered therewith, so Rabbi Kahana treated him thus and he recovered. But, if not, let him take 3 kapiza of Persian dates, 3 kapiza of dripping wax (dripping from an overflowing honeycomb), and 3 kapiza of purple aloe, boil them in beer and drink it. If not, let him take a young ass; then the patient shaves half his head, draws blood from its forehead and applies it to his own head, but he must take care of his eyes, lest the blood blind him. If not, let him take a buck’s head which has lain in preserves (vinegar), boil it in beer and drink it. If not let him take a speckled swine, tear it open and apply it to his heart. If not, let him take porret (leeks) from the wastes of the valley (Rashi: from the middle of the furrow, where the leeks are sharp) . . .”

The Biblical term yerakon probably refers to an affliction of grains in the field as divine retribution for sin. The single exception is the passage in Jeremiah (30:6) where yerakon represents a human affliction, either palor or anemia (chlorosis) or jaundice. The Talmudic reference to yerakon can, in the final analysis, refer either to jaundice or anemia (chlorosis). Preuss (1) and Krauss (4) lean toward anemia as the proper interpretation of yerakon; Katzenelsohn (2) considers it to represent jaundice, whereas Ebstein (3) cannot decide whether the reference is to jaundice or anemia.

As yerakon is said to be due to causeless hatred, and hatred and anger were thought to be related to yellow bile or gall, it would seem logical to conclude that yerakon is in fact jaundice. On the other hand, the care of the newborn baby who is green (either pale or yellow or both) and for whom circumcision must be postponed, does not provide convincing evidence for either interpretation. The question thus remains unresolved.

References