The Congenital Eunuch
A Medical-Halachic Study

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The *seris hamah,*[1] or congenital eunuch, has been studied in halachic literature from the Mishna through the responsa. However, as far as could be determined, no medico-halachic analysis of this phenomenon based on modern medical research has been published. This paper will attempt to fill the lacuna.

Sages of the Mishnaic period (*Tannaim*) state that a person of twenty years of age who has not produced two pubic hairs is a congenital eunuch. If he produces them after this age he is still considered a *saris*. The Talmud gives a specific list of characteristics: "He has no beard, his hair is straight and his skin is smooth. Rabbi Simeon ben Gamliel said in the name of Rabbi Judah ben Jair: Any person whose urine produces no froth; some say: He who urinates without producing an arch; some say: He whose semen is watery; others say: He whose urine does not ferment. Still others say: He whose body does not steam when bathing in the winter. Rabbi Simeon ben Eleazer said: One whose voice is abnormal so that you cannot distinguish whether it is that of a man or of a woman." An Amoraic[2] dispute ensues whether one or all of these characteristics must be present to establish his capability of procreation.[3]

Rashi in his commentary on this passage interprets the characteristics of this *saris*: "his hair is straight" means that it is

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1. Literally a "sun eunuch", one who was a eunuch from the first time he appeared in the sun, i.e., a congenital eunuch, *Yevamot* 79b-80a; j. *Yevamot* 8:6. There is a later interpretation where *hamah* is rendered *kadachat* (fever). A *seris hamah* is therefore considered to be a "fever eunuch" with a condition resulting from a post natal illness contracted any time after birth. See Rabbi Nathan Yehiel (Rome, 1035-1106), Aruch Complentum, ed. Alexander Kohut, New York, (undated) volume 3, p. 426. The mumps is the best recognized viral infection of the testes, which may, infrequently, be followed by permanent infertility.
2. Referring to the Talmudic sages, Amoraim, expounders of the Mishna in the third to the fifth centuries C.E.
3. *Yevamot* 80b. See also Tosefta 10:6 We shall note a medical explanation for the smooth, beardless skin and for urinating without an arch.

lank and smooth; his skin is as smooth as a woman's in contrast with a man's hairy skin; "he does not urinate in an arch," namely he does not form a long stream that reaches afar; "his semen is watery" rather than thick and is as clear as water; "his urine ferments" means that it smells when left in a container.[4]

We may note that the sages record only the secondary characteristics of the *saris* and the results of his infirmity. Nowhere do they present a specific definition of the congenital eunuch or an explicit description of the abnormality of his genitalia.

An interesting medical issue is mentioned in a Mishnaic controversy whether a eunuch may participate in *halizah* (the ceremony of releasing his sister-in-law from levirate marriage) and the eunuch's brothers may submit to *halizah* from his wife. Rabbi Akiba contended that this is the case with a *seris adam*, ("a man-made eunuch" emasculated by human action) because there was a time when he was potent, while the *seris hamah* was never potent. Rabbi Eliezer stated that this ruling does apply to the congenital eunuch since he may be healed, while a man-made eunuch may never be cured.[5]

The halacha is according to Rabbi Akiba's view on formal grounds, since the Talmud has determined that his view is normative in a controversy with any of his contemporaries and specifically with his teacher, Rabbi Eliezer ben Hyrcanus.[6] Interestingly enough, no commentary has been found to substantiate or contravene Rabbi Eliezer's opinion that a *seris hamah* may be healed. Furthermore, Rabbi Eliezer (known as Rabbi Eliezer the Great) brings evidence that this is possible, because cases of such nature are cured in Alexandria in Egypt.[7]

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4. Rashi *ad loc*.
5. *Yevamot* 8:4.
6. See *Hameiri, Beit Habeirah*, (ed. H. Albeck), New York, 1947, *Yevamot* 79b, p. 289. The *Tur* and the *Shulchan Aruch, Even HaEzer* 172:1 codify in this manner. See Ezra Zion *Melamed, Eshnav Hatalmud*, Kiryat Sefer, Jerusalem, 1960, p. 85. Others say that Rabbi Eliezer contradicted himself by claiming in *Niddah* 5:9, that the halacha regarding a saris is according to Beit Hillel, whose position is supported by Rabbi Akiba. See Shlomo Adani ben Bezalel Ashkenazi, *Melechet Shlomo*, in Mishna with 51 Commentaries, *Torah La-Am*, Jerusalem, 1960, p. 5b.
7. *Yevamot* 80a. In view of the fact that this *baraita* agrees with *Yevamot* 8:4 and also gives proof based on actual experience, it is assumed that Rabbi Eliezer maintained the view recorded in this mishna and withdrew from the other view attributed to him in *Niddah* 5:9. See Rashi *Yevamot* 80a, s.v. *ta shema*.

The rabbinic sages reveal the sexual and reproductive functioning of the *saris* as part of the discussion of *halizah.* We learn that a *saris* is able to engage in sexual intercourse, which has legal consequence.[8]

Even though the congenital eunuch can copulate, he is incapable of procreating. The rabbinic sages interpreted the Scriptural text relating to the *halizah* ceremony: "My brother-in-law refuses to perpetuate his brother's name in Israel" (Deuteronomy 25:7) as excluding the *saris*, because if he wanted to perpetuate, he is incapable of this accomplishment. Furthermore, the verse: "That his name not be blotted out of Israel" (*ibid*. 25:6) is interpreted as excepting the *saris*, whose name is in any event blotted out.[9]

In spite of his disabilities, the congenital eunuch is permitted by halacha to marry a Jewish woman and "enter the Congregation of the Lord." Both the Babylonian and Jerusalem Talmuds state that he is not under the Torah prohibition: "he whose testicles are crushed or whose male member is cut off shall not enter the assembly of the Lord" (*ibid*. 23:1). The Torah forbids marriage only with one whose testicles were emasculated or crushed or whose penis is cut off.[10]

Maimonidies codified this precept: "a physical disqualification for marriage applies only when it is not of natural causes (literally, "by the hand of Heaven") ...but if he were born in this way or became ill, he is fit to enter the Congregation, because it was by the hand of Heaven."[11] Therefore the congenital eunuch is not excluded from marriage.

There is a Talmudic attempt to discover the etiology of the congenital eunuch disorder: "What are the causes? (During her pregnancy) the child's mother baked at noon and drank strong (or diluted) beer." The reasoning here seems to be that the heat of

8. *Yevamot* 8:5; j. *Yevamot* 8:5 (*baraita*). If a eunuch cohabited with his deceased brother's wife, he disqualifies her for marriage with a priest, since such sexual intercourse is of the nature of fornication. It constitutes an incestuous relationship with his brother's wife, not for fulfillment of the mitzvah of levirate marriage.
9. Sifri, Deuteronomy par. #289; *Yevamot* 79b; *ibid*. 24a See also Maimonidies, *Hilchot Yibbum ve-Haliza* 6:2.
10. *Yevamot* 75a; j. *Yevamot* 8:2; *Korban Edah ad loc*.
11. Laws of Forbidden Marriages 16:9. See also *Shulchan Aruch, Even Haezer* 5:10, which quotes this opinion along with the differing views of Rabbi Asher and Rashi.

oven combined with the heat of high noon and drinking beer might affect the generative organs of the embryo.[12]

Various medical questions regarding the congenital eunuch are left unresolved in the Talmud. May he indeed be healed? What is the meaning of the above mentioned "capability of procreation"? Does it refer to his sterility, his impotence, or both? We shall explore these questions in relation to the following case discussed in the responsa literature of the nineteenth century which became a cause celebre.[13]

The Son of a Eunuch

A *seris hamah*, named Abraham Nahum, was born in 1838 in a village near Ismir, Turkey. When he grew up, his skin was smooth like that of a woman and he had no trace of a beard. No objection was raised when he married a young Jewish girl in his late adolescence, because he was not unlike his peers who had fathered children.[14] Since he was only a *bahur*, an adolescent, no one was suspicious.

Two years later, his wife admitted having had adulterous relations with other men. The local *beth-din* assumed that Abraham was a *saris* without verifying his condition and forced him to divorce his wife. They declared her son Jacob, a *mamzer* because he was presumed to be the issue of adultery and, perhaps, of incest as well. Abraham Nahum took a second wife and died a few years later. Jacob was warned by the Jewish community that he could not marry in their midst. He went to another place where he found a Jewish bride and fathered two sons, who in turn were declared *mamzerim*. When the community found that he had married, he was put under a severe ban and even imprisoned.

12. *Yevamot* 80a. See Julius Preuss, Biblical and Talmudic Medicine, (translated and edited by Fred Rosner), Sanhedrin Press, New York-London, 1978, p. 224. Preuss, who died in 1913, records this cause without comment. It would appear quite doubtful that there is any relevance of the exposure of a pregnant woman to heat and beer in the genesis of the destruction of gonads in utero.
13. See Moshe Zemer, "Purifying Mamzerim", in Jewish Law Annual, vol. X, 1992, pp. 99ff. Gratitude is hereby expressed to the Trustees of Boston University for permission to publish parts of the essay in this article.
14. As we have seen, *supra* notes 10 and 11, the *seris hamah* is permitted to marry. However, it may be conjectured that if the family of the bride had suspected his condition, the match might have been refused. Furthermore, as we shall see, Abraham Nahum married a second time.

Eventually, Rabbi Abraham ben Haim Palache, the Chief Rabbi of Ismir, was brought into the picture. He issued a verdict, which received the endorsement of the foremost rabbis of that day, including the future Chief Rabbi of Jerusalem, Yaakov Shaul Elyashar, and Rabbi Shalom Moshe Hai Gagin, also of the Holy City. The three rabbis wrote separate responsa, revealing each sage's perspective of the symptomatic and halachic aspects of the case.[15]

At first sight it appeared to Palache that in a case like this one could not say: *rov habe'ilot ahar ha'baal*—"Most acts of sexual intercourse are attributed to the husband."[16] He tried to resolve the following two questions: Was Abraham Nahum indeed a born eunuch *(seris hamah)*? If so, was he cured? The following halachic process was used to deal with these problems:

1. A village woman had seen him naked at the age of four and described his genital organs to the villagers, claiming that the child's penis was the size of a "*piñon*", a pine seed or *pinion* in Ladino (Judeo-Spanish).[17] Since that event he was held to be a born eunuch. He had never been checked by an expert, so it would be impossible to determine whether Abraham had actually been a eunuch. Therefore his status as a *seris hamah* was doubtful.

2. Rabbi Palache quoted Rabbi Eliezer's mishnaic minority ruling that a born eunuch may be healed in contrast with a castrated man for whom there is no cure.[18] Here is a second doubt — the man under study may have been healed. The investigating *beth-din* interviewed the late Abraham Nahum's second wife, Esterella, who testified that her husband had normal sexual relations, including ejaculation of semen. Moreover, she was a virgin when she married Nahum and, according to her testimony, she was deflowered by her husband.

Thus the rabbinical court revealed the double doubtfulness of his status as a congenital eunuch. As a result of these doubts, which were buttressed by other arguments supported by relevant halachic

15. Haim Palache, *Sefer Einei Kol Hai*, Ismir, 1962, pp. 135b-151a (which includes responsa of his son, Abraham); Yaakov Shaul Elyashar, Responsa Simha Laish, Jerusalem 1888, E.H. resp. 2; Shalom Moshe Hai Gagin, Responsa Yismah Lev, Jerusalem 1878, resp. 13.
16. *Sukkah* 27a.
17. Cf. New World Spanish-English and English-Spanish Dictionary, New York: New American Library, 1968, p. 392.
18. See *supra*, note 5.

precedents, Rabbi Palache and his *beth-din* declared that the presumed congenital eunuch, Abraham Nachum, was the father of Jacob! The rabbinic judges propounded an alternative solution that Jacob's mother might have become pregnant from a gentile when she was sleeping around during the first years of her marriage to Abraham.[19] In either event, Jacob and his sons were completely cleansed of the taint of *mamzerut*.

At first sight it would seem that the rabbinic court's attribution of fatherhood to a *seris hamah* is another instance of the use of a legal fiction in order to save children from being declared *mamzerim*. There are a number of such precedents of the use of this technique to help such unfortunate persons:

The Talmud relates that Rabba Tosfaah, a 7th generation Babylonian *Amora*, promulgated the legal fiction that a fetus may remain in its mother's womb for twelve months. Therefore, if a woman gave birth within a year of her husband's departure, we may attribute the paternity of the child to her spouse.[20]

Decisors of the 19th and 20th century used the legal fiction of reassigning paternity, in a manner similar to that of Rabbi Palache in the case of Abraham Nahum. The respondent, usually supported by a *beth-din,* decided that the husband of the mother (or a gentile) is the father of the child, whose legitimacy is thereby established. This halachic technique was employed retroactively in purifying four generations of *mamzerim* on the island of Corfu by Chief Rabbi Elyashar and, in a similar fashion, by other scholars such as Rabbi Jacob Moshe Toledano of Alexandria.[21]

As we have noted, the Talmud neither records a specific definition of the congenital eunuch nor presents an explicit description of the abnormality of his genitalia. It does however, ascribe to him certain secondary characteristics, some of which are explicable by modern medical science. A modern scientific definition of the *saris hamah*, requires reference to present day hormonal and fertility research. On the assumption that the definition of a born eunuch is a child with indeterminate sex, we shall examine four syndromes of such disorders due to abnormal genitalia, which may

19. Both biological parents must be Jewish for a child to be declared a *mamzer*.
20. The gemara in *Yevamot* 80b states that the halacha is in accordance with Rabba Tosfaah.
21. See Moshe Zemer, *supra* note 13, pp. 100-112, for an exposition of these legal fictions.

reflect the symptomology described by the sages.[22] We shall attempt to establish whether any of these categories of indeterminate sex may be attributed to the congenital eunuch.

A Medical Interpretation:
In-born Errors of Androgen Biosynthesis

There are a number of identified conditions in which there is a failure of male hormone production. Individuals born with these disorders either have ambiguous genitalia or a frankly female appearance. Although there may be subtle virilisation at puberty, these individuals also have critical production of other hormones essential for normal physiology (gluco- and mineralo-corticoids) and they are unhealthy and may not survive to puberty.

I. Androgen Receptor Deficiency

This syndrome exists in individuals who are genetically male but who are born with a disorder of male hormone action. In the complete form, these individuals appear as normal but infertile women who do not menstruate. They frequently have well developed breasts and fat deposits giving the characteristic female form. There are no internal female reproductive organs but normal male testes may be found in the abdomen. It is characteristic of these individuals that there is no development of the secondary sexual characteristics which require male hormone stimulation. There is minimal, if any, axillary or pubic hair and the skin is smooth since the sebaceous glands which produce skin grease do not develop.

This disorder is due to a failure of the tissues to respond to male hormones. These hormones are produced in normal quantities by functioning testes which are hidden within the abdomen. However, the androgen receptor, the agent responsible for transferring

22. Another form of genital malformation which might have been considered to fit our subject is that of undescended testes, as suggested by Preuss *ad loc, supra* note 12. However, men with this condition are essentially complete males, although they may be infertile, especially if the testes remain in the abdomen, rather than in the groin, just above the scrotum. It is only the sperm producing cells and not the hormone producing cells that are destroyed by body heat. Therefore men with undescended testes will undergo normal puberty, even if the testes remain in the abdominal cavity into adult life. It is unlikely that undescended testes that have not appeared by the age of two years will spontaneously appear and descend into the scrotal sac. An individual with this disorder usually has a normal penis and masculine secondary characteristics and would not have been considered by the sages as a *seris hamah*.

the hormonal stimulus to the chromosomes, is absent; and in the absence of a specific biological signal, the human body takes on the female form. However, the description above is of the complete form, whereas in cases of partial deficiency the appearance of the individual may resemble a normal but infertile man.

It is unlikely that an individual with the complete receptor deficiency condition would have been considered a *seris hamah* by the Rabbinic Sages since the individual would be considered to be a woman. However, a partial defect in a man who had a small penis must certainly be considered although he would have been infertile.

II. 17β-HSD and 5α-Reductase Deficiencies

Individuals with these conditions exhibit a curious metamorphosis at puberty. Boys born with either defect have abnormal genital development, so that at birth their genitalia are ambiguous and they are frequently considered to be female. However, at puberty, their body becomes virilised with the development of a muscular physique and enlargement of the phallus. In most individuals with this disorder there is only hair growth in the axillary and pubic regions but some do grow some hair on the face and body.[23]

The testes develop normally, although they may be hidden in the tissues considered to be the labia. There is normal male psychosexual orientation.

These disorders are caused by failure of the tissues of the body to convert the pre-hormones prepared by the testes into the active form. The curious change at puberty is due to the requirements for different hormonal stimuli by different tissues of the body. Pubic and axially hair, muscle development, and psycho-sexual orientation require testosterone, whereas the genitalia, scalp hair, and body hair require 5α-dihydro-testosterone, and it is these latter aspects of male secondary sexual development which fail to occur. The small phallic enlargement at puberty which may occur in these disorders is possibly due to a tiny amount of enzyme activity. There

23. J. Imperato-Mcginley, M. Miller, J.D. Wilson *et al*., "A cluster of male pseudohermaphrodites with a alpha-reductase deficiency in Papua New Guinea," Clinical Endocrinology, Oxford, 1991; 34: 293-298. See also J. Imperato-McGinley, R.E. Petersen, R. Stoller *et al.*, "Male pseudohermaphroditism secondary to 17-hydroxysteroid dehydrogenase deficiency: gender role change with puberty", Journal of Clinical Endocrinology and Metabolism, 1979, 49:391-395.

is normal testicular development and function and these individuals are fertile.

As we shall see, these conditions closely approximate the diagnosis that is favorable for the case of Abraham Nahum since there are ambiguous genitalia but normal postpubertal fertility.

III. Congenital Adrenal Hyperplasia

Female children born with this disorder often have ambiguous genitalia since there is intrauterine stimulation of female genitalia by small amounts of male hormones. At puberty there may be a minor degree of virilisation. However, they are female and are not capable of fathering a child.

The normal adrenal glands produce hormones essential for normal body functions and small amounts of sex hormones. Inherited defects in the complex processes of hormone synthesis often result in formation of excessive quantities of precursors. These may redirect the normal flow of hormone production leading to the overproduction of male sexual hormones. This may result in a clinical picture of virilisation. This condition is a possible cause of the *saris hamah*, since there are well recognized cases of women born with this disorder who have been brought up as males, and the diagnosis only made during investigations for infertility.

IV. Hypospadias

The passage for urine through the penis develops initially as a ridge along the foetal penis which then seals to form a tube. The closure begins at the proximal end of the penis and proceeds up the penis leaving a small orifice at the tip. Any failure of this closure process is termed a hypospadias. A complete failure of the penile canal to form in association with male-development of the phallus may well produce sufficiently ambiguous genitalia for mistaken gender assignment, particularly if there are undescended testes. At puberty, normal male sexual development and orientation will occur in isolated hypospadias, *i.e.,* not associated with any of the disorders outlined above.

These categories of genital malformations may be depicted in the following table:

Causes of Indeterminate Sex due to Abnormal Genitalia

	Androgen receptor deficiency	**17β-HSD or 5α-reductase deficiency**	**Congenital adrenal hyperplasia**	**Hypospadias**
Secondary sexual Character-istics	no axillary or pubic hair but normal breasts; appears to be a woman	axillary and pubic hair at puberty but no facial or body hair; skin does not become greasy (as is usual after puberty)	normal sexual, facial and body hair but since these individuals may be women, the character-istics may be more male in appearance	only deviation from normal male is in the abnormal development of the penis
testes able to produce male hor-mone	testes may be within abdominal cavity. May be normal hormone production but the body cannot respond.	yes	biological females with no testes. XS male hormone produced by adrenal glands	normal testes and hormone production
normal penis[24]	normal female phallus	tiny phallus prior to puberty but enlargement to child size after puberty (4-8cm)	variable phallic enlargement but probably no larger than male child size	variable deformity[25]

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24. This table and accompanying text do not differentiate between penis and pallus. Both structures are similarly constructed of erectile tissue. A normally formed penis has a central canal for urine flow whereas the female clitoris does not. The term phallus is used here to describe the organ in females and in males whether or not it has a central canal.
25. Hypospadias: The orifice of the penis may appear anywhere along the lower aspect of the shaft even at the base, so that the penis ceases to have any function in

potent, *i.e.* capable of inter-course	no	yes	maybe in severe case	yes
fertile, *i.e.* able to father children	no	yes	no	yes
genitalia in child-hood	normal for a girl	normal for a girl	variable enlargement of phallus and labia	normal scrotum with testes for boy but variable abnormality of penis[26]
genitalia in adult-hood	normal for an adult woman	enlargement of phallus and either split scrotum or "labia" with testes	variable enlargement of phallus and labia	normal scrotum and testicles for a man but variable abnormality of penis[27]

We may now determine that some of the characteristics of the *seris hamah* described in the above Talmudic passage (*Yevamot* 80b) may be the result of these forms of hormonal malfunctioning:

"No pubic hair until the age of 20": Androgen receptor deficiency.

"He has no beard": Androgen receptor deficiency of 17β-HSD or 5α-reductase deficiency.

"His skin is smooth": Androgen receptor deficiency or 17β-HSD or 5α-reductase deficiency.

"He urinates without producing an arch": (due to lack of developed male phallus or deformity): Androgen receptor deficiency, 17β-HSD or 5α-reductase deficiency, congenital adrenal hyperplasia or hypospadias.

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urinating. There may additionally be mal-development of the penis so it is shrunken and misshapen.

26. *Supra*.
27. *Supra*.

Potency, Fertility and Healing

Abraham Nahum, the *seris hamah* of Turkey may serve as a test case to determine whether any of the above mentioned infirmities may yield the scientific explanation of this phenomenon.

Can modern medical research shed new light on this case and answer the following four questions:

1. Does the fact that a village woman reported that Abraham Nahum's penis at the age of four was the size of a pine seed indicate that he was a congenital eunuch when he was married in his late adolescence?
2. Is it possible that such a person may have sufficient potency to have sexual intercourse as testified by Abraham's second wife?
3. Could he have been fertile and able to father a child?
4. Is it probable that a *seris hamah* could be healed in accordance with Rabbi Eliezer's teaching in the Mishna?

One of the categories of hormone malfunctioning explained above appears to fit this case as well as the Talmudic description of the *seris hamah*. We have seen above that a person suffering from 17β-HSD or 5α-reductase deficiency would appear to fit Nahum's case history:

1. In this disorder children are born with a micro-phallus and may or may not have visible testes. They are often thought to be female at birth. However, at puberty, they develop the characteristics of unaffected males: a deep voice, pubic and axillary hair and male sexual identity.[28] Their penis is enlarged to child size after puberty, while their skin remains relatively smooth and childlike without a beard.

Abraham Nahum was reported to have had a micro-phallus as a small child which is a symptom of this disorder, although it is not listed in the Talmud as a characteristic of a *seris hamah*. We have noted that Talmudic sages gave no description of his genitalia, but Nahum's condition was considered by the community to have been

28. Bernard Gondis and Daniel H. Riddik, The Pathology of Infertility, Theme Medical Publishers, New York, 1987, p. 228ff. claim "This disorder is characterized by ambiguous genitalia at birth, but subsequent normal male development and virilization at puberty." This claim of normal male development is not substantiated. In communities where 5α-reductase deficiency is common, these boys are well recognized. In other communities, the phallic enlargement is probably less marked or well recognized and the majority of boys undergo a gender reassignment at puberty. (See ref. footnote 23 *supra*, J. Imperato-McGinley, R.E. Petersen, R. Stoller *et al, op. cit*.)

that of a *saris*. The responsa mention that he had skin as smooth as a woman's and no trace of a beard. This might have indicated his being a *seris hamah*, but we have no report, one way or the other, of the above mentioned secondary sexual characteristics, such as pubic hair and a male voice, which might well have been contraindicative. Rabbi Palache and his *beth-din* noted that no examination was made by an expert. We, too, cannot determine without any reported evidence whether or not he may have developed the other characteristics of 17β-HSD or 5α-reductase deficiency.

We have noted that village authorities had no objection to Nahum marrying because he was still an adolescent and not dissimilar to others of his age who had married and fathered children. Since we do not have sufficient empirical evidence, we must agree with Rabbi Palache that it would be impossible to determine his status on the basis of the village woman's evidence or the fact that he was married as an adolescent.

2. A key issue in this case is whether Nahum, as a young married man, was able to engage in normal sexual intercourse. His second wife, Estrella, testified that he did indeed fulfill his conjugal obligations. As we have seen, a man suffering from 17β-HSD or 5α-reductase deficiency usually has a micro-phallus at birth which enlarges sufficiently at puberty to enable him to insert semen into his wife's vagina. The literature on penile enlargement suggests enlargement of a phallus to a length of four to eight centimeters. Males with this disorder are capable of inseminating their mates/wives.[29] Therefore the testimony of Nahum's widow may be accepted.

3. If, indeed, as the evidence seems to indicate, Abraham had 17β-HSD or 5α-reductase deficiency, then he may very well have been fertile. We must further note that Estrella bore witness that Abraham always ejaculated sperm during coitus. It would have been proper for the *beth-din* to apply the halachic principle, *Rov habe'ilot ahar ha-baal*: "Most acts of sexual intercourse are attributed to the husband."[30] Therefore, it is entirely within reason,

29. Impotency, *i.e.* an inability to have a penile erection, is not a cause for infertility. The cases of testosterone 5α-reductase deficiency have a penis of insignificant size. They are nevertheless able to lay their sperm at the entrance of the vagina, which can then "swim" up the female genital tract to fertilise the ovum. See M.M. Grumbach, F.A. Conte, "Disorders of sex differentiation", in J.D. Wilson, D.W. Foster (eds) Williams' Textbook of Endocrinology, 8th edition, 1992:853-951.

30. See *supra* note 16.

in light of modern medical research, that Abraham Nahum was indeed the biological father of Jacob, thereby purifying him and his descendants of the stain of *mamzerut*.

4. We may therefore conclude that the statement of Rabbi Eliezer, who lived about 1900 years ago, that a *seris hamah* may be healed has been verified by modern medical research. The symptoms of a man considered by his community to be a congenital eunuch in view of having been born with a miniscule membrum and bearing the typical secondary characteristics in his childhood may indeed be changed at puberty and afterwards. As we have seen, both in the research of the phenomenon of testosterone 5α-reductase deficiency and observing the case of Abraham Nahum, a micro-phallus at birth may be sufficiently enlarged at puberty to enable him to engage in sexual intercourse and to father children. He was not only able to engage in sexual intercourse, as noted in the Talmud, but appears to have been capable of procreation, which was considered halachically impossible.[31] If the pre-pubescent condition is considered sick and abnormal, then indeed after puberty one may declare that the *seris hamah* has been healed!

We have attempted to understand the ancient halachic phenomenon of *seris hamah* in light of modern medical research. Studies such as this have certain limitations. Among them is the difficulty in relating scientific significance to non-medical terminology in an ancient literature. Furthermore there may be insufficient empirical evidence to diagnose fully the illness and its progress.

Nevertheless, it would appear that we have isolated the medical syndrome that fits the Talmudic description of the congenital eunuch. Furthermore, the combined efforts of research in *halacha* and medicine have discovered a viable solution to the difficult problem of a congenital eunuch in the responsa literature of the last century.

Finally, we have shown that the astute observation of a rabbinic scholar, who lived in the late first and early second centuries C.E., about the curability of a congenital eunuch may indeed reflect modern medical conclusions. This paper has demonstrated that the prepubic medical condition of a *seris hamah* who had been considered seriously underdeveloped or deformed in his genitalia, impotent and infertile, may indeed become developed, potent and

31. See *supra* notes 8 and 9.

fertile. It would therefore appear that this study has rehabilitated the halachic teaching of the great Rabbi Eliezer which has been disregarded for nineteen centuries.

Source: The Schlesinger Institute for Jewish Medical Ethics