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THE USE OF ANESTHESIA IN CIRCUMCISION: A RE-EVALUATION OF THE HALAKHIC SOURCES

INTRODUCTION

The application of halakha to medical dilemmas is unique in that medical halakhic decisions require continual re-evaluation based on medical advances. A decision at one point in time may not necessarily apply to a later point in time, where medical realities may necessitate a fresh or updated approach. For example, some thirty years ago, in the early stages of organ transplantation, a number of rabbinic authorities prohibited live kidney donation based on the premise that the risk to the donor was excessive.[1] To blindly apply these earlier medical halakhic responsa to a contemporary case of live kidney donation, without taking medical advances into account, would be a misapplication of halakha. Indeed, as the risk of kidney donation is considerably less than in the past, and objectively small,[2] there is not one contemporary authority who forbids the procedure.[3] While the halakhic principles of these earlier responsa remain valid, the conclusions require revision in light of a new medical reality.

A similar re-evaluation is required for the halakhic sources dealing with the use of anesthesia for circumcision. Given our modern understanding of medicine, as well as the development of new and safer anesthetics, we must re-assess the existing halakhic literature on this topic for contemporary relevance and applicability. It may be that former analyses and conclusions are equally applicable to our modern context, but this conclusion can only be drawn after careful analysis of both medical and halakhic literature. Furthermore, the halakhic sources must

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be understood in their proper medical historical milieu, as scientific and medical knowledge have evolved over time.

The objective of this essay is to provide an historical overview of the halakhic discussions relating to the use of anesthesia for *mila* (ritual circumcision). Emphasis is placed on issues and trends manifest throughout the halakhic history of this chapter. The halakhic approaches to the use of both general and local anesthesia are presented, prefaced by a section on the history of anesthesia and a review of the current medical literature on the use of anesthesia for circumcision. After analysis of the halakhic sources, their contemporary applicability is discussed.

HISTORY OF ANESTHESIA

Throughout history efforts have been made to alleviate human suffering that accompanies both naturally occurring illness, as well as surgical interventions.[4] Opium, hashish, mandragora (mandrake) root and coca leaves have been used as analgesic, soporific and narcotic agents for thousands of years. The coca leaf was known to numb the tongue and gums when chewed and was used as a crude form of local anesthetic.[5] Alcoholic beverages were used to dull the sensorium of patients to a degree that would allow the tolerance of minor surgical interventions. It was only in the nineteenth century, however, that both general and local anesthesia were perfected and applied routinely in surgical procedures.[6]

By the mid nineteenth century, general anesthesia was being used to perform major surgical procedures. When general anesthesia was first used for childbirth, in 1846, there was opposition from a minority of religious Christians, who maintained that the Bible in *Genesis* 3:16 mandates that childbirth be painful for all womankind. Alleviation or elimination of the pain of childbirth, it was argued, ran counter to the divine will. In fact, James Young Simpson, the first to apply anesthesia in obstetrics, published a pamphlet entitled "Answer to Religious Objections Advanced Against the Employment of Anaesthetic Agents in Midwifery and Surgery."[7] While there does not appear to have been any halakhic objections at that time to the use of anesthesia in childbirth (see below), ironically, it was a Jew who was solicited by a medical journal in 1849 to interpret the biblical curse in *Genesis*. Rabbi Abraham de Sola, newly appointed chief rabbi of Canada and lecturer in Hebrew language at McGill University, wrote an essay, drawing on rabbinic and early Hebrew grammatical literature, asserting that the biblical curse does not preclude the use of anesthesia for childbirth.[8]

Rudimentary forms of local anesthesia have also been known since antiquity,[9] but chemically synthesized forms, systematically applied in the practice of medicine, were only introduced in the 1880's, after Karl Koller isolated the active ingredient from the coca leaf and called it cocaine.[10] To this day, cocaine and its derivatives are used for local and topical anesthesia.

USE OF ANESTHESIA FOR CIRCUMCISION—THE MEDICAL LITERATURE

Over the past several decades, the American Academy of Pediatrics has published several policy statements on neonatal circumcision of the male infant. Beginning with its manual on the hospital care of newborns in 1971,[11] and in revisions published in 1975[12] and 1983,[13] the Academy clearly stated that there was no absolute medical indication for routine circumcision.

The Academy's 1989 statement cited new research that suggested that circumcised males had fewer urinary tract infections and were also at lower risk for developing sexually transmitted diseases.[14] At that time, the Academy concluded that newborn male circumcision has potential medical benefits and advantages as well as disadvantages and risks, and recommended that parents should be told of both to enable them to reach an informed decision about circumcision in their newborn boys. Early in 1999, the Academy published a new circumcision policy statement which concludes that:

> existing scientific evidence demonstrates potential medical benefits of newborn male circumcision; however, these data are not sufficient to recommend routine neonatal circumcision. In circumstances in which there are potential benefits and risks, yet the procedure is not essential to the child's current well-being, parents should determine what is in the best interest of the child. To make an informed choice, parents of all male infants should be given accurate and unbiased information and be provided the opportunity to discuss this decision. If a decision for circumcision is made, procedural analgesia should be provided.[15]

The benefits of circumcision include the virtual absence of penile cancer in circumcised males, the lower frequency of urinary tract infections in circumcised infants and children, and the lower risk of contracting sexually transmitted diseases including HIV infection in circumcised

men compared to uncircumcised males. The risks of the procedure such as infection and/or bleeding are very rare when circumcision is performed by experienced physicians or *mohelim.*

The recent statement of the American Academy of Pediatrics recommends, for the first time, that pain relief be provided for neonatal circumcision. This recommendation may or may not be acceptable to Jews, Moslems, and others to whom circumcision is a religious commandment and who do not require any medical or social justification for its performance. The Academy recognizes this fact when it incorporates into its statement the phrase "it is legitimate for parents to take into account cultural, religious, and ethnic traditions, in addition to medical factors, when making this decision".

Pain and Pain Relief for Neonatal Circumcision

There is considerable evidence that newborns experience pain and physiologic stress during circumcision as manifested by crying and changes in heart rate, blood pressure, oxygen saturation and cortisol levels.[16]

There is wide acceptance in the medical community for the use of analgesia for neonatal circumcision. The three most widely used methods are the topical application of EMLA (acronym for eutectic mixture of local anesthetics) cream,[17] dorsal penile nerve block (DPNB),[18] and subcutaneous ring block.[19] Comparisons of these three methods suggest that ring block is the most effective anesthetic.[20] None of these methods are without rare side effects. Two cases of methemoglobinemia have been reported in infants after EMLA cream application.[21] Furthermore, another report found that "there are no studies that adequately address safety or efficacy" of the use of EMLA cream for newborn circumcision.[22] The risks of DPNB and ring block include infection; mechanical neural, or other tissue damage from the needle; and toxic reactions to anesthetic drug. These complications are rare and usually not serious.[23]

Newborn babies routinely receive intramuscular vitamin K. Newborn screening for a variety of treatable conditions requires heel stick or venipuncture, all painful experiences. Yet, very few physicians recommend topical analgesia for venipuncture.[24]

Other methods to attenuate pain during newborn circumcision include acetaminophen[25] and sucrose (sugar water) pacifiers.[26] The latter are routinely used by Jews during newborn ritual circumcision. Since ritual circumcision takes approximately half the time it takes to administer a dorsal penile nerve block, the argument is made that ritual circumcision is so brief that the risk of local anesthesia exceeds the ben-

efit.[27] The traditional Jewish ritual circumcision is also less traumatic than traditional surgical circumcision. Furthermore, a few drops of wine given to the Jewish newborn baby immediately following ritual circumcision serves as an analgesic and soporific potion.

ANESTHESIA IN EARLY RABBINIC LITERATURE

A number of talmudic passages discuss the use of pain relieving medications.[28] In one passage Rabbi Eleazar was given a *samma de-shinta* (soporific potion) prior to undergoing an abdominal operation,[29] and in another, it is mentioned that a convicted criminal should be sedated with wine and frankincense prior to his execution.[30] Anesthesia was also utilized by Jews in the Middle Ages, as evidenced by extant Hebrew medical manuscripts from that time.[31] There are, however, no halakhic discussions about the use of either general or local anesthesia until the nineteenth century, when anesthesia gained widespread use in the medical community.

ANESTHESIA IN HALAKHIC LITERATURE

GENERAL ANESTHESIA

The first halakhic discussions about the use of anesthesia for *mila* appeared in the journal *Tel Talpiyot* in 1896.[32] The topic was introduced by R. Tsvi Trammer,[33] who queried whether chloroform, a general anesthetic, could be used for the circumcision of a *ger* (convert) or an adult Jewish male.[34] His response stimulated further discussion and exchange in later pages of the journal amongst a number of prominent rabbinic authorities.[35] What ensues is a brief discussion of the major halakhic points raised in this first rabbinic interchange on the use of anesthesia for *mila*.[36]

Insensibility During *Mila*—A Potential Impediment to the Fulfillment of the *Mitsva*

R. Trammer's major halakhic concern is whether someone under general anesthesia, rendered insensible by the medication, is halakhically equivalent to a *shoteh* (an incompetent or insane person), who cannot fulfill the *mitsva* (commandment) of *mila*. He circumvents this concern by claiming that the *mitsva* does not devolve upon the *nimol* (the one circumcised)—neither a *ger*, since he is not yet obligated in *mitsvot*, nor an adult, whose obligation, like that of an infant, devolves upon others (his father or the rabbinic court).[37] Since neither the *ger* nor the adult

Jew are themselves obligated to perform the *mitsva* of *mila*, their possible status as a *shoteh* is halakhically irrelevant. There is therefore no reason to forbid the use of chloroform.

R. Amram Fisher counters that the *mitsva* of *mila* indeed devolves upon both the *ger* and the adult Jew.[38] As a result, their insensibility during the performance of *mila* presents a potential halakhic problem. Nonetheless, after an analysis of the laws of *shelihut* (messengers), R. Fisher opines that since they each appoint a *shaliah* (messenger) while they are competent, and the *mohel* (ritual circumciser) is a valid *shaliah*, the *mila* is valid for both a *ger* and an adult Jew, despite their insensibility or unconsciousness during the procedure.[39]

A Violation of the Spirit of the Law (*hithakemut negged hok me-hukei haTorah*)

In a different vein, not focusing on the halakhic details or particulars of general anesthesia and *mila*, R. Pinhas Levi Horowitz rules stringently and prohibits the use of chloroform, as he considers this a case of *hithakemut negged hok me-hukei haTorah,* actions which although not technically legally prohibited, nevertheless run counter to the intent or spirit of the Torah.[40] He borrows this concept from a responsum of Radbaz,[41] who addresses the legality of using certain chemicals to hasten the decomposition of a corpse. It was thought that earlier entrance into the world to come would be facilitated thereby. While Radbaz does not consider the use of the chemicals to be contrary to halakha, he nevertheless counsels against the practice, considering it to be tampering with nature and running counter to the Torah's intent. Radbaz concludes, "Therefore I proclaim regarding this and similar matters, 'thou shalt be perfect with the Lord thy God' (*tamim tihyeh im Hashem Elokekha*)."[42] R. Horowitz adds that since the *mitsva* of *mila* is itself identified with the notion of being "*tamim*" (perfect),[43] one should refrain from tampering with it as well. The use of chloroform, a general anesthetic, is one example of such tampering.

R. Gershon Stern rejects the application of Radbaz's principle to the case of *mila*.[44] According to our tradition, he argues, the deceased experiences the pain of decomposition and being consumed by worms. This pain, a form of penitence (*kappara*) for the deceased, is a miraculous or supernatural phenomenon. We should therefore not tamper with this process and effect the supernatural pain and penitence of the individual. The pain of *mila*, on the other hand, is a natural phenomenon and does not achieve penitence for the *nimol.* The alleviation of

this pain is subsumed under the license of physicians to heal and furthermore would not minimize or impact on the child's penitence.[45] Consequently, the use of anesthesia for *mila* is not a case of *hithakemut negged hok me-hukei haTorah.*

The Benefit of Pain for *Mila* of a *Ger*

Another issue, advanced independently by two authorities, is the benefit of pain for *mila* of a *ger* specifically.[46] R. Horowitz asserts that many non-Jews convert for the purpose of marriage, having found attractive or wealthy Jewish women. Such converts, he adds, are not desirable, and perhaps the *mila*, and its attendant pain, serve as a deterrent for their conversion. If we remove this deterrent by allowing the use of anesthesia, perhaps even more will convert.

R. Mordechai Leib Winkler offers a novel interpretation of a *midrash* which yields a similar conclusion.[47] According to the *midrash*, Abraham said to God, "Even before I was circumcised people would come to me [to convert]".[48] R. Winkler interprets God's response in the *midrash* to mean that the pain of *mila* deters people from conversion. This insures that people convert for genuine and pure reasons. Based on this *midrash*, R. Winkler contemplates refraining from any pain relief for the *mila* of a *ger*.[49]

Subsequent halakhic discussions on the use of general anesthesia address the issues raised in this first interchange in *Tel Talpiyot*, with some variations.[50] These issues include 1) concern that insensibility during *mila* might preclude fulfillment of the *mitsva*,[51] 2) the nature of *shelihut* and 3) the nature of the essence of the *mitsva* of *mila*.[52]

RESPONSUM OF IMREI YOSHER

The halakhic discussions on anesthesia and *mila* changed course with the appearance, in 1925, of a responsum by R. Meir Arik, known by his pseudonym, *Imrei Yosher*. Of all the halakhic literature on this topic, R. Arik's responsum seems to have had the most profound impact, and many subsequent halakhic authorities respond to the ideas expressed therein.[53] There follows a detailed analysis of the responsum and the responses that it evoked.

The question posed to R. Arik was whether it is permissible for a 30 year-old man undergoing conversion to apply a topical anesthetic prior to the *mila* so as to eliminate the pain of the procedure. The following is a summary of his response:

The existence of local anesthetic was known in the times of *Hazal* (the talmudic sages), yet, *Hazal* never introduced anesthesia into the *mila* ceremony.[54] It therefore must be, R. Arik maintains, that *Hazal* consider pain to be an integral part of the *mila*. This is further evidenced by the *midrash*, which states that according to R. Abba bar Kahana, Abraham endured the pain of *mila* to increase his reward.[55] Since the first, or prototypical, *mila* of Abraham was specifically associated with pain, without any interventions, we should not introduce any innovations that negate this aspect of *mila*.

RESPONSES TO IMREI YOSHER

Three arguments can be distilled from the responsum of R. Arik, with the central theme revolving around the requirement for pain as an integral part of the *mila*. While earlier authorities discuss the benefit of pain for the *mila* of a *ger* (see above), R. Arik is the first to introduce the notion that pain is a requirement for all routine circumcisions. This responsum evoked a litany of responses by subsequent authorities, who variously address their remarks to the arguments of R. Arik. Whether concurring or dissenting, subsequent authorities felt compelled to address the role of pain in the *mitsva* of *mila*. The responses to R. Arik are detailed below, arranged according to R. Arik's original points.

Point 1: The omission of Hazal's reference to any anesthetic for mila is proof that its use is forbidden.

According to R. Feffer, the fact that (local) anesthesia was not used in earlier generations is no proof of its prohibition.[56] Perhaps it was not used for medical reasons, physicians not having perfected its effectiveness without risk to the infant. If such a local anesthetic would have been safe and effective, it might very well have been permitted.

R. Fromer suggests that in the performance of the child's first *mitsva*, we strive to do it in an ideal fashion, without pain relief, similar to Abraham.[57] Anesthesia was therefore not mentioned by *Hazal* because it was only rarely used.

In another attempt to justify the practice of withholding local anesthesia from newborns in the time of *Hazal*, R. Fromer claims that even a newborn should not be distracted or preoccupied (*mitasek*) at the time of the performance of a *mitsva* (in this case, *mila*), and the endurance of pain precludes distraction. Therefore, local anesthesia, which eliminates the pain and introduces the possibility that the infant

will be distracted (*mitasek*), might preclude fulfillment of the *mitsva* and was therefore not routinely applied.[58]

Others maintain that since no *mitsva* in the Torah entails an obligation to endure pain,[59] there is no reason for *Hazal* to state the obvious, i.e., that anesthesia is permitted.[60]

Some draw analogy to the use of anesthesia in childbirth.[61] Despite the biblical pronouncement of the curse of Eve, "*be-etsev teledi banim*" ("in sorrow thou shalt bring forth children"),[62] implying that women will from then on suffer the pangs of childbirth, women have always been permitted to use all available means to alleviate the pain of labor. If anesthetics were available for *mila*, as R. Arik contends, they surely would have been available for women in labor. Yet, the omission by *Hazal* of discussions on the use of pain relief in labor was not construed as tacit disapproval.[63]

Point 2: The *Midrash* of Abraham implies that pain is a requirement for *mila*.

The most oft repeated refutation of this proof is based on a careful interpretation of the language of the *midrash* itself. The *midrash* says that Abraham endured pain so that God would increase or double his reward (*hirgish ve-nitsta'er kedei she-yikhpol haKadosh Baruch Hu sekharo*). The implication is that the pain, in fact, is not an integral part of the *mitsva*, but rather, an additional, non-integral aspect. While it was laudatory or meritorious for Abraham to endure pain, an act which enhanced his reward, it was not incumbent upon him in order to fulfill the basic *mitsva*.[64]

R. Baron proposes two other reasons why the *midrash* about Abraham's pain is not applicable to the halakhic discussion about the use of anesthesia for *mila*. First, while it is admirable to attempt to emulate Abraham's actions, including his performance of *mila*, technically, we are obligated to perform *mila* not because Abraham did so, but rather because Moses commanded us at Mount Sinai to perform *mila*.[65] Therefore, since Abraham is not the halakhic paradigm for *mila*, the pain that he endured, which was not a feature of the *mila* taught by Moses, is of no halakhic consequence.

Furthermore, R. Baron suggests that Abraham was rewarded for the pain associated with *mila* since he performed the procedure on himself. It is illogical, however, to say that a father is rewarded for inflicting pain on his son, as the infant surely does not receive additional reward for the pain he suffers.[66]

Some cite other *midrashim* about the *mila* of Abraham that make

no reference to pain.[67] As there is no compelling reason to adopt one *midrash* over another, it is claimed, there is no reason to accept pain as a requirement of *mila*.

Point 3: Innovations in the procedure of *mila*, such as anesthesia, are prohibited.

Throughout the centuries, a number of innovations into the *mila* process have been proposed, including altering the method of wound sucking or *metsitsa* (from oral suction to suction through an instrument) and the use of various devices (clamps) to better facilitate the *mila*. All invariably met with initial resistance, with compromise being reached on some of the innovations.[68] The resistance to innovation in *mila* pervades the halakhic discussions of the use of anesthesia as well. Some authorities, however, feel this concern about innovation is not applicable to this case.

R. Israel[69] concurs with R. Arik that new innovations in the *mitsva* of *mila* should not be adopted.[70] However, he adds, this applies only to innovations in the very performance of the *mitsva* itself. As anesthesia has no impact on the performance of the *mila*, it is not considered an objectionable innovation. The use of antiseptics for *mila* has never been questioned, R. Israel argues, as they likewise have no relationship to the *mila* procedure itself.

PAIN AS A REQUIREMENT OF MILA

The majority of *posekim* (rabbinic decisors) disagree with the assertion of R. Arik and offer independent support that pain is not a requirement for *mila*. Some infer from the halakhic discussions regarding one who is born circumcised (*nolad mahul*) that pain is not a feature of *mila*.[71]

R. Zirelson applies the *argumentum ex silentio*, similar to R. Arik, only with completely contradictory results.[72] While R. Arik claims that *Hazal*'s omission of the use of anesthesia is proof that pain is a requirement for *mila*, R. Zirelson claims that since previous *posekim* , including the greatest rabbinic scholars who usually elaborate upon the logic of their decisions, make absolutely no mention of pain as a factor in *mila*, it is impossible that it should be a requirement.[73]

Another proof that pain is not required is inferred from the literature of the *Aharonim*, which is replete with responsa prohibiting the use of assorted new instruments for the performance of *mila*, since they increase the suffering of the child.[74]

While the majority of *posekim* disagree with R. Arik,[75] a number of contemporary authorities follow his position in maintaining that pain is, in fact, an integral part of *mila*.[76]

R. E. Y. Waldenberg also accepts the importance of pain in the *mitsva* of *mila*, forbidding local anesthesia for routine neonatal *mila*.[77] As an additional support, he quotes the author known as *Olelot Efraim* that one should pray for one's troubles simultaneous with the cries of the infant who cries from the pain of *mila*. Since the cries of the child undergoing *mila* ascend to heaven unencumbered and unrestrained, prayers will hopefully accompany the child's cries.[78]

Many of the rabbis who do not consider pain to be an integral part of *mila*, nonetheless, believe it to be preferable, either because of the similarity to the *mila* of Abraham, or because pain relief constitutes a break from tradition. By the same token, many of the rabbis who consider pain to be an integral part of *mila* still allow anesthesia in extenuating circumstances, as for an adult Jew or convert, or where a person's brother died as a result of *mila*.[79]

MEDICAL REASONS TO REFRAIN FROM ANESTHESIA

In addition to the aforementioned issues relating to the use of anesthesia, some authors cite medical reasons to refrain from the use of anesthesia for *mila*. Ravaz[80] cites *Milhamot Ari*[81] that *mohelim* are cautious not to perform *mila* on a sleeping infant as it might induce epilepsy (*nikhfeh*).[82] R. M. Feinstein,[83] R. S. Z. Auerbach, R. Y. S. Eliashiv[84] and R. S. Wosner[85] all include medical concerns as one of the reasons to discourage the use of anesthesia for *mila*.

LOCAL ANESTHESIA FOR MILA

The earliest halakhic sources concerning anesthesia for *mila* confine their discourse to general anesthesia. In addressing the issue of local anesthesia, many authorities assimilate the permissive or prohibitive approaches of general anesthesia.[86] Given recent medical advances, however, local anesthetics merit their own analysis. While some of the halakhic issues of local anesthesia are analogous to those of general anesthesia, such as whether pain is a requirement of *mila*, other issues, such as whether one can fulfill a *mitsva* while insensible, are not relevant to local anesthesia, as the individual is awake during the procedure. A number of *posekim* of earlier generations voice concerns unique to local anesthesia.

R. Y. M. Horowitz[87] cites *Benei Asher* as being concerned that applying a local anesthetic might be equivalent to deadening the limb, and *mila* on a dead limb (*ever met*) is invalid, since no blood is shed thereby.[88] While *Benei Asher* concludes that the *metsitsa* would result in the emission of blood, thus validating the *mila*, R. Horowitz offers his own analysis from the case of a *metsora* (one stricken with the biblical disease *tsara'at*) who is required to undergo *mila*.[89]

R. Feffer addresses the same concern that local anesthesia might render the limb dead and preclude a valid *mila*.[90] Citing proof from the laws of *Shabbat*, he asserts that a dead piece of flesh attached to a living being is not considered halakhically attached (*mehubar*). Therefore, one is not liable for cutting off such a piece of flesh on *Shabbat*. Similarly, an anesthetized limb no longer receives sustenance from the rest of the body and is, therefore, analogous to a dead limb attached to a living organism. For *mila*, the foreskin (*arla*) must be cut from the living body, as it says, "On the eighth day the flesh of his foreskin (*besar arlato*) shall be circumcised."[91] As one does not fulfill the *mitsva* by cutting a foreskin that is already detached (*talush*), R. Feffer wonders whether local anesthesia might preclude fulfillment of the *mitsva* of *mila*.[92]

MODERN APPLICATION

Today, the halakhic analysis regarding general anesthesia largely remains unchanged, with modern authorities voicing much the same concerns and invoking the same rabbinic sources as in 1896, when the issue was first addressed in halakhic literature.[93] General anesthesia, despite the great strides in medicine, is still accompanied by a small, but not negligible, risk. With regard to general anesthesia, the rabbinic concerns about the insensibility of the individual during *mila*, the dangers of the procedure, and complete absence of pain all remain equally applicable today. While the notion that circumcising a sleeping infant may precipitate seizures is without modern medical support,[94] and would not be a reason to refrain from anesthesia today, this notion is only peripheral in the halakhic discussions.

With regard to local anesthesia, recent medical advances may impact on the application of carlier halakhic sources. In light of our modern understanding of the mechanism of anesthesia, as well as cardiac physiology and hematology, the premise that an anesthetized limb is considered halakhically dead would be challenged. Despite the injection or application of anesthesia, the foreskin continues to receive sustenance from the

body as before, and there is no interruption of blood flow. Only the local nerve supply to the foreskin is affected, not the circulation. Therefore, any incision, for *mila* or otherwise, produces bleeding as per usual.

The choice of local anesthetic, whether nerve block via injection, or topical application of an ointment, may also have halakhic ramifications. Since the concern about the insensibility of the individual during *mila* does not apply to local anesthesia, as the person is conscious during the procedure, there are two potential remaining halakhic concerns that might preclude the use of a local anesthetic for *mila*—the requirement for pain,[95] and the concern for danger. Given these two concerns, nerve blocks remain an halakhic problem, as they entirely eliminate the pain and are accompanied by medical risk, albeit minimal. Topical anesthetics, on the other hand, such as EMLA, may significantly diminish the pain, but do not entirely extinguish it. Even with the use of EMLA, an infant will feel at least some pain.[96] Furthermore, the risk with the use of topical anesthetics is negligible.[97] Therefore, a re-evaluation of the halakhic literature, coupled with the knowledge of new medical advances, reveals no clear remaining halakhic objection to the use of certain topical local anesthetics for routine neonatal *mila*. Indeed, according to R. Auerbach and R. Eliashiv, if there is no danger with the use of a topical anesthetic, it is permitted, and perhaps even desirable, to use it.[98] R. Tendler implies that it is in fact obligatory to use a topical anesthetic for *mila*.[99]

CONCLUSION

The halakhic discussions on the use of anesthesia for *mila* span more than a century. In addressing this topic today, it is imperative not only to know the issues raised by our predecessors, but also to understand contemporary medicine as it relates to the use of anesthetics for *mila*. The halakhic analysis regarding general anesthesia largely remains unchanged, with modern authorities voicing much the same concerns and invoking the same rabbinic sources as in 1896, when the issue was first addressed in halakhic literature. With respect to local anesthesia, however, a new medical reality requires a reassessment of the pre-existing halakhic literature. The advent of new forms of topical local anesthetic, which are of minimal risk to the infant, and still allow the feeling of some pain, necessitates a re-evaluation of the role of topical anesthesia for routine neonatal *mila*.

NOTES

Dr. Rosner contributed the section, "Use of Anesthesia for Circumcision—The Medical Literature."

1. See, for example, *Tsits Eliezer* 9:45 and *Minhat Yitshak* 6:103.
2. See D. Shaffer, et al. "Two Hundred One Consecutive Living-Donor Nephrectomies," *Archives of Surgery* 133:4 (April, 1998), 426-31.
3. Indeed, R. Ovadiah Yosef, mindful of the negligible risk, falls just short of obligating a kidney donation, but concludes that it is a great *mitsva*. See his *Yehaveh Da'at* 3:84.
4. For a general history of anesthesia from antiquity to modern times see V. Robinson, *Victory over Pain* (New York: Harry Schuman, 1946) and M. H. Armstrong Davison, *The Evolution of Anesthesia* (Altricham: John Sherratt, 1965). See also, H. Glaser, *The Road to Modern Surgery* (New York: E. P. Dutton and Co., 1962), 11-32; G. Williams, *The Age of Miracles: Medicine and Surgery in the Nineteenth Century* (Chicago: Academy Chicago Publishers, 1987), 39-56; K. Haeger, *The Illustrated History of Surgery* (New York: Bell Publishing Co., 1988), 184-93; I. M. Rutkow, *Surgery: An Illustrated History* (St. Louis: Mosby, 1993), 331-39.
5. H. Glaser, *The Road to Modern Surgery* (New York: E. P. Dutton and Co., 1962), 25-30.
6. Although ether, nitrous oxide and chloroform had been discovered by the early nineteenth century, it was not until 1846 that general anesthesia was successfully used for surgical procedures. The new discovery was announced to the world by Dr. Henry Bigelow in an article in the November 18 edition of the Boston Medical and Surgical Journal entitled, "Insensibility During Surgical Operations Produced by Inhalation."
7. Edinburgh: Sutherland and Knox, 1847. See also P. Smith, *Scriptural Authority for the Mitigation of the Pains of Labour by Chloroform and Other Anaesthetic Agents* (London: S. Highly, 1848). For comments on both the Christian and Jewish approaches to the pain of childbirth, see I. Jakobovits, *Jewish Medical Ethics* (New York: Bloch Publishing Co., 1959), 103-4 and notes. On the general opposition to early obstetric anesthesia, including religious, see A. D. Farr, "Early Opposition to Obstetric Anaesthesia," *Anaesthesia* 35(1980), 896-90.
8. Abraham De Sola, "Critical Examination of Genesis III, 16, Having Reference to the Employment of Anaesthetics in Cases of Labour," *British American Journal of Medical Science* 5 (1849-50), 227-29, 259-62, and 290-93. See also J. Cohen, "Doctor James Simpson Young, Rabbi Abraham De Sola, and Genesis Chapter 3, Verse 16," *Obstetrics and Gynecology* 88:5(1996), 895-98.
9. Robinson, op. cit., 15-22.
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