# Survey of Recent Halakhic Periodical Literature

# HAZARDOUS MEDICAL PROCEDURES

#### I. CONVENTIONAL RISKS: SHOMER PETA'IM

As a general rule, Jewish law forbids self-endangerment. The talmudic dictum "Never should a person stand in a place of danger" (Shabbat 32a) is predicated on the biblical admonition "and be exceedingly watchful with regard to your lives" (Deuteronomy 4:15). An entire section of the Shulhan Arukh, Yoreh De'ah 116, is devoted to an enumeration of actions and situations that must be avoided because they present an element of risk. Some activities, for example, standing beside an unstable wall or drinking water that has been left uncovered into which a serpent might have deposited venom, are uniformly banned even though the danger is remote. Other matters are subject to ad hoc determination.

However, the definition of "danger" in this area of Halakhah is far from simple. Life is fraught with danger; there are few, if any, activities that are totally risk-free. The rule determining acceptable assumption of risk is formulated by the Sages of the Talmud, Shabbat 129b, Yevamot, 12b, Ketubot 39a and Niddah 31a, as "Since many have trodden thereon, 'shomer peta'im Ha-Shem—God preserves the simple' (Psalms 116:6)." The concept encapsulated in that dictum is that any activity routinely undertaken by members of society and not perceived by them as hazardous is permitted despite the inherent danger. To the extent that a person is found worthy, divine providence is extended to the "simple" who comport themselves in blissful oblivion of the danger inherent in commonplace activities. However, providential guardianship is not made available to the foolhardy who assume risks shunned by prudent members of society. Risks ignored by people in general fall below the threshold of "danger" of which Jewish law takes cognizance.<sup>1</sup>

The concept embodied in the dictum *shomer peta'im Ha-Shem* is not difficult to fathom. Willfully to commit a daredevil act while relying upon God's mercy in order to be preserved from misfortune is an act of

hubris. It is sheer audacity for a person to call upon God to preserve him from calamity which he can himself avoid. Therefore, one may not place oneself in a position of recognized danger even if one deems oneself to be a worthy and deserving beneficiary of divine guardianship. That principle is clearly reflected in the statement of the Gemara, *Shabbat* 32a, indicating that a person dare not endanger himself in anticipation "that a miracle will be performed on his behalf."

Yet, at the same time, it is universally recognized that life is fraught with danger. Crossing the street, riding in an automobile, or even in a horse drawn-carriage, for that matter, all involve a statistically significant danger. It is, of course, inconceivable that such ordinary activities be denied to man. Such actions are indeed permissible since "the multitude has trodden thereon," i.e., since the attendant dangers are accepted with equanimity by society at large. Since society is quite willing to accept the element of risk involved, any individual is granted dispensation to rely upon God who "preserves the simple." Under such circumstances the person who ignores the risk is not deemed to be presumptuous in demanding an inordinate degree of divine protection; on the contrary, he acts in the manner of the "simple" who perceive no problems. An act which is not ostentatious, which does not flaunt societally accepted norms of behavior and does not draw attention to itself, is not regarded by Halakhah as an unseemly demand for divine protection. The risk involved may be assumed with impunity by an individual who desires to do so.

Accordingly, although hazardous medical procedures, when permitted, are discretionary rather than mandatory,<sup>2</sup> nevertheless, a person requiring medical attention for a serious condition cannot plead that he is not required to seek treatment because of the danger inherent in the taxi ride to the doctor's office or to the emergency room of a hospital. The risk of fatality as a result of a motor vehicle accident is certainly real and omnipresent; however, in our society, awareness of that risk is generally suppressed.

Risks of the nature encompassed by the principle "God preserves the simple" may not only be assumed by oneself but may be imposed upon others as well. For example, circumcision performed on a cloudy day was thought by the Sages of the Talmud to entail a risk beyond that associated with circumcision when performed at other times. Nevertheless, as recorded by the Gemara, *Shabbat* 129b and *Yevamot* 72a, the practice was permitted "since many have trodden thereon." The prac-

tice was permitted not only as a discretionary assumption of risk for oneself but represents a risk that may also be imposed by a father or a *mohel* upon a newborn infant. Since circumcision on the eighth day is a *mizvah* and may be delayed only in the presence of genuine danger, assumption of that risk is mandatory. Halakhah simply does not regard a hazard that is commonly accepted with equanimity as a halakhically cognized "danger." It follows that, in a medical context, a physician may expose a patient to commonly accepted risks even without specific authorization.<sup>3</sup>

As is evident from the discussion of R. Jacob Ettlinger, *Teshuvot* Binyan Zion, no. 137, there is, however, one factor that serves significantly to limit the type of risk that may legitimately be assumed on the basis of shomer peta'im Ha-Shem. Jewish law provides that those who return safely from a sea journey or from a trip across the desert must offer a korban todah, a thanksgiving sacrifice. That offering is brought in gratitude for having been delivered from danger. In our day, in the absence of the sacrificial order, this deliverance is acknowledged in the public recitation of birkat ha-gomel which is a birkat hoda'ah, i.e., a blessing of thanksgiving. In light of the recognized danger inherent in travel of such nature, Binyan Zion questions the permissibility of taking such journeys in the first place. He responds by drawing a distinction between an immediate danger and a potential or future danger. Immediate danger must be eschewed under all circumstances; future danger may be assumed if, in the majority of cases, no harm will ensue. One who embarks upon a sea voyage or caravan excursion is in no immediate danger, although at some point in the course of travel danger may arise. Since, in the majority of cases, no harm will befall the traveler, the risk of future danger may be hazarded. It is for this reason, asserts Binyan Zion, that the Sages, invoking the verse "God preserves the simple," rule that a woman belonging to one of the classes of women enumerated by the Gemara whose lives may be endangered by pregnancy is permitted to engage in normal coital relations without any restrictions whatsoever. Justification for assuming the risks involved in pregnancy follows an identical line of reasoning: Intercourse itself poses no hazard. The jeopardies of pregnancy lie in the future and may be assumed since, in the majority of instances in which such risks are present, no harm will result. However, were the danger to arise in the majority of instances, the activity could not be countenanced.

Accordingly, use of a medication or of any substance that has been

statistically determined to foreshorten life in the majority of users cannot be automatically sanctioned simply on the basis of " the multitude has trodden thereon." That is the case even if the danger lies far in the future and even if longevity anticipation is compromised only marginally.<sup>4</sup>

### II. HAZARDOUS RISKS

The narrative recounted in II Kings 7:3-4 describes the quandary of four leprous men. Samaria was besieged by the Syrian army and there was hunger in the city. The lepers outside the gates of the city realized that they faced death from starvation. Crossing into the camp of the enemy, where provisions were available, would entail the risk of immediate death by violence. However, the possibility existed that, because of their piteous affliction, the Syrians might not treat them as potentially dangerous enemies but would spare their lives as an act of mercy and, in addition, provide them with nourishment. The four lepers assumed this calculated risk. Despite the danger, they reasoned, "And now go and let us fall into the camp of the Syrians; if they save us alive we shall live; and if they kill us we shall die" (II Kings 7:4). To their surprise, they found that the Syrian hordes had fled leaving behind not only food and drink but treasure as well.

The Gemara, Avodah Zarah 27b, cites this narrative in support of a rule formulated with regard to seeking medical ministration at the hands of pagan practitioners. The idolaters of antiquity were regarded by the Gemara as potential murderers and, for that reason, various restrictions were placed upon social intercourse with them, including a prohibition against availing oneself of the medical services of pagan physicians. The Gemara qualifies that restriction by limiting it to situations in which the patient's condition, if allowed to remain untreated, is not necessarily terminal. However, in situations in which the affliction would otherwise inevitably lead to the death of the patient, the Gemara permits the patient to assume the risk of death at the hands of the pagan physician. The reasoning is that, since, if the malady is allowed to take its natural course, death would be inevitable, the patient has little to risk in exposing himself to the danger of being killed. As authority for sanctioning the assumption of such risk the Gemara cites the biblical narrative of the four lepers. Facing death as a result of near-term starvation, they assumed the risk of imminent death at the hands of the

enemy in the hope of avoiding starvation. To the objection that such a course of action involves the possible loss of the brief period of time the individual would certainly survive until overcome by the ravages of hunger, the Gemara responds, "*Le-hayyei sha'ah lo haishinan*—We are not concerned with ephemeral life."

Tosafot, in their commentary ad locum, hasten to point out that it is by no means the case that Jewish law regards ephemeral life as devoid of moral significance. <sup>5</sup> Quite to the contrary, euthanasia or the foreshortening of the life of a terminally ill person by even the briefest period of time is a capital crime. Sabbath strictures and the like are set aside, when necessary, in order to prolong life even ephemerally. The Gemara, *Yoma* 85a, clearly prescribes that a victim trapped under the debris of a fallen wall is to be rescued even on *Shabbat* despite the fact that as a result of such efforts his life will be prolonged only by a matter of moments. Accordingly, *Tosafot* comment that the Gemara's declaration regarding *hayyei sha'ah* must not be understood as an absolute assessment but rather as a comparative balancing of *hayyei sha'ah* versus normal longevity anticipation. Thus, the Gemara declares that, as a matter of prudence, the gamble of *hayyei sha'ah* in the hope of a complete recovery is halakhically warranted.

The most obvious application of this principle is in the case of a patient confronted by a life-threatening malady for which the only available medication may prove to be toxic. R. Jacob Reischer, *Teshuvot* Shevut Ya'akov, III, no. 75, describes a patient diagnosed as suffering from a terminal illness that, without intervention, would cause him to die "within the same day or [within] two days." The physician advised that a medication was available but that the medication would either cure the patient or cause his imminent demise. Shevut Ya'akov ruled that the medication might be administered but only upon consultation with multiple physicians and in accordance with the judgment of at least a two-thirds majority of the physicians consulted and even then only upon the acquiescence of "the wise man [i.e., the halakhic authority] of the city." The basic consideration underlying Shevut Ya'akov's ruling is a straightforward application of the principle enunciated by the Gemara, Avodah Zarah 27b, i.e., a brief period of longevity anticipation may be jeopardized in the hope of achieving a complete cure. Similar rulings permitting endangerment of hayyei sha'ah are recorded by R. Shlomoh Eger, Gilyon Maharsha, Yoreh De'ah 155:1 and 336:1; R. Jacob Ettlinger, Teshuvot Binyan Zion, no. 111; R. Me'ir Posner, Beit Me'ir, Yoreh De'ah 332:1; and R. Abraham Danziger, Hokhmat Adam, Binat Adam, no. 73 (93).

The stipulation of *Shevut Ya'akov* that the potential efficacy of the drug be determined on the basis of the opinion of a significant majority of medical experts reflects the application of an amplified principle of majority rule not only to questions of law but also to questions of fact. But why the need for confirmation of the decision by the local halakhic authority? The rabbinic scholar certainly possesses neither scientific expertise nor insightful medical judgment beyond the ken of expert physicians. The rabbinic role in such decision-making requires careful elucidation.<sup>6</sup> But, regardless of its basis, the requirement for rabbinic endorsement of what is essentially a medical determination certainly implies that *hayyei sha'ah* may not always be placed in jeopardy in the hope of achieving a cure.

An apparent contradiction to the principle that one may endanger hayyei sha'ah in the hope of achieving a cure is found in R. Judah the Pious, Sefer Hasidim, no. 467. This source describes a folk remedy consisting of "grasses" or herbs administered by "women" in treatment of certain maladies which either cured or killed the person so treated within a period of days. Sefer Hasidim admonishes that the women who administer such remedies "will certainly be punished for they have killed a person before his time." R. Shalom Mordecai Schwadron, Orhot Hayyim, Orah Hayyim 328:10, resolves the contradiction by stating that the instances discussed by Sefer Hasidim involved situations in which there was clearly a possibility for cure without hazardous intervention. According to that analysis, Sefer Hasidim sets forth the common-sense approach that hazardous procedures dare not be instituted unless conventional, non-hazardous approaches have been exhausted.

### III. DEGREE OF ACCEPTABLE RISK

In none of the earlier-cited sources does one find discussion or even consideration of the statistical probability of prolonging life versus the mortality rate or the odds of shortening life. Yet, certainly, in weighing the advisability of instituting hazardous therapy, the relative chance of success in achieving a cure as opposed to that of a fatal outcome is a factor to be considered. Nevertheless, in early rabbinic discussions of the issue there is no explicit reference to the role of statistical probability of prolonging life versus the odds of shortening life or of the mortality rate of the contemplated procedure. Later discussions are hardly univocal with regard to this question.

R. Ze'ev Wolf Leiter, Bet David, II, no. 340, permits intervention even if there exists but one chance in a thousand that the proposed drug will be efficacious whereas there are nine hundred and ninety-nine chances that it will hasten the demise of the patient. A diametrically opposed view is presented by R. Joseph Hochgelehrnter, Mishnat Hakhamim, as cited by R. Chaim Ozer Grodzinski, Teshuvot Ahi'ezer, II, Yoreh De'ah, no. 16, sec. 6. Mishnat Hakhamim refuses to sanction hazardous therapy unless there is at least a fifty percent chance of survival. In effect, according to Mishnat Hakhamim, the issue of whether the act is to be considered an act of homicide or an act of rescue is to be determined on the basis of the presumed result in at least fifty percent of similar cases. That view is also espoused by R. Eliezer Waldenberg, Ziz Eli'ezer, X, no. 25, chap. 5, sec. 5.7 Much earlier, R. Moshe Sofer, Teshuvot Hatam Sofer, Yoreh De'ah, no. 76, refused to sanction hazardous medical procedures in which the prospect of effecting a cure was "remote" but offered no statistical criteria with regard to the upper limit of mortality risk that may be legitimately be assumed.

The position of *Mishnat Hakhamim* is contested by *Teshuvot Ahi'ezer* who rules that a fifty percent chance of success is not a requirement but nevertheless requires, as did *Shevut Ya'akov* before him, that prior rabbinic approval be obtained on each occasion that such therapy is initiated. R. Moshe Feinstein, *Iggerot Mosheh*, *Yoreh De'ah*, III, no. 36, asserts that the view of *Mishnat Hakhamim* is more compelling but nevertheless defers to the ruling of *Teshuvot Ahi'ezer*. Earlier, in *Iggerot Mosheh*, *Yoreh De'ah*, II, no. 58, he ruled that, when death is imminent, a hazardous procedure may be instituted so long as there is a "slim" chance (*safek rahok*) of success, even though the chances of survival are "much less than even" and it is in fact almost certain that the patient will die. A former Chief Rabbi of Israel, R. Isser Yehudah Unterman, *No'am*, XII (5730), 5, maintains that medical risks are warranted "when there is hope for a cure even if, in most cases, [the procedure] is not successful and will shorten life."

Tiferet Yisra'el, Bo'az, Yoma 8:3, raises a quite different question in discussing the permissibility of prophylactic inoculations which are themselves hazardous. In the situation described, the patient, at the time of treatment, is at no risk whatsoever. The fear is that he will contract a potentially fatal disease, apparently smallpox. The inoculation, however, does carry with it a certain degree of immediate risk. Tiferet Yisra'el justifies acceptance of that risk, which he estimates as being "one in a thousand," because the statistical danger of future contagious infection is greater.

It is difficult to determine whether there exist nuances of disagreement between these authorities. Is the merely "remote" chance of success that *Hatam Sofer* refuses to sanction greater or lesser that the "one chance in a thousand" that *Tiferet Yisra'el* and *Bet David* find acceptable? Is the acceptable "slim chance" described by *Iggerot Mosheh* a greater or lesser risk than the "remote" chance that *Hatam Sofer* finds unacceptable? More fundamentally, what is the underlying principle employed by these authorities in determining the degree of risk that may be sanctioned?

At least one contemporary author differentiates between various cases on the basis of the nature of the risk involved rather than on the basis of anticipated rates of survival. Rabbi Moshe Dov Welner, Ha-Torah ve-ha-Medinah, VII-VIII (5716-5717), 314, argues that hazardous procedures may be undertaken despite inherent risks only if the therapeutic nature of the procedure has been demonstrated. For example, a situation might present itself which calls for administration of a drug with known curative potential but which is also toxic in nature. The efficacy of the drug is known but its toxicity may, under certain conditions, kill the patient. The drug may be administered in anticipation of a cure despite the known statistical risk. The same statistical risk, argues Rabbi Welner, could not be sanctioned in administering an experimental drug whose curative powers are unknown or have heretofore not been demonstrated. This, he maintains, is why Sefer Hasidim censures the practice of administering dangerous herbs as was the custom of women in his day. According to Rabbi Welner, it was not the risk per se which was found to be objectionable. Use of the herbs in question was simply not accepted medical practice. Since the efficacy of such potions had not been demonstrated, risk to the life of the patient precluded their use. The same distinction is applied by Rabbi Welner in determining the propriety of novel surgical procedures. Surgical hazards are acceptable only when the technique is known to be effective. Experimental surgery employing untried techniques does not justify exposure to risk.

Insofar as disagreement between the authorities cited does exist, such disagreement is limited to the permissibility of instituting potentially hazardous therapy.<sup>8</sup> It must be emphasized that procedures which involve any significant risk factors are always discretionary rather than mandatory.<sup>9</sup>

The position of those authorities, and indeed the general parameters within which hazardous medical procedures may be legitimately undertaken, must be understood in the context of the halakhic attitude toward risk-taking in general.

As is manifestly evident from the discussion of the Gemara, Avodah Zarah 27b, acceptance of a clearly perceived risk in conjunction with medical treatment is halakhically acceptable. R. Jacob Emden, Mor u-Kezi'ah 328, describes the surgical procedure for the removal of gallstones or kidney stones which he viewed as designed, not to eliminate a threat to life but to alleviate excruciating pain and, in that context, Mor u-Kezi'ah grapples with the issue of acceptance of risk for purposes other than preservation of life. A modern-day example would be performance of a sympathectomy, a major surgical procedure designed, not to cure any disease, but to sever a nerve in order to control pain. *Mor* u-Kezi'ah seeks to discourage risk-taking for palliation of pain with the comment that those who submit to such surgery "do not act correctly" because "in my eyes it is close to being forbidden (karov le-issur)." "Close to being forbidden," but not actually forbidden. Presumably, Mor u-Kezi'ah recognizes that palliation of pain is a therapeutic endeavor. Mor u-Kezi'ah, presumably, also maintains that at least some measure of risk may be assumed with regard to the treatment of even nonlife-threatening medical conditions.10

Risks for the purpose of palliation of pain were certainly sanctioned by earlier rabbinic scholars. R. Moses Isserles, known as Rema, the sixteenth- century author of authoritative glosses to the Shulhan Arukh, appears to sanction hazardous procedures designed solely to alleviate pain. In light of the scriptural prohibition against smiting or assaulting a parent (Exodus 21:15), Shulhan Arukh, Yoreh De'ah 241:13 rules that a son should not "wound" his father even for medical reasons. Thus, in treating a parent, a son is cautioned not to remove a splinter, perform bloodletting or amputate a limb. Rema comments that, if no other physician is available and the father is "in pain," the son may perform bloodletting or an amputation on behalf of his father. A similar statement is contained in the earlier thirteenthcentury commentary of Me'iri, Sanhedrin 84b. The phraseology employed by these sources clearly indicates that the contemplated procedures were designed to mitigate pain rather than to preserve life. There can be little question that, at the time those works were authored, the amputation of a limb was accompanied by a significant risk to the life of the patient. It is evident that such procedures were sanctioned despite the hazards involved.

The permissibility of placing a life in danger when the patient is not afflicted by a life-threatening malady does, however, require justification. The great value placed upon preservation of life augurs against

placing oneself in a situation of risk. Nevertheless, it is certainly the case that medical intervention is permitted in order to restore a patient to good health even in the absence of danger to life.

Authority for the practice of medicine is derived by the Gemara, Bava Kamma 85a, from the verse "and he shall cause him to be thoroughly healed" (Exodus 21:19). In context, the scriptural reference is to the treatment of the victim of a battery whose wounds may or may not be life-threatening. It is beyond dispute that an aggressor is liable for medical expenses even if the wound inflicted is not potentially lethal. It follows that the physician is permitted, and indeed obligated, to treat patients who suffer from afflictions which are not life-threatening. This is certainly the case when the treatment itself poses no danger. However, Ramban, in his Torat ha-Adam, observes that all medications are hazardous for, as he puts the matter, "With regard to cures, there is naught but danger; what heals one kills another." Even a patient whose life is not in jeopardy may be treated; every medical treatment carries with it an element of risk; ergo, risks may be assumed in the treatment of even non-life-threatening conditions.

The underlying rationale that serves both to justify medical risk-taking as well as to establish the limits placed upon the degree of risk that may be assumed may be found in the nature of a person's relationship to his life and body. Judaism teaches that a person does not have a proprietary interest in his life or in his body. Life belongs to the Creator of the universe who bestows life upon man in causing the soul to enter the body. In the words of the morning prayer: "You created [the soul]; you fashioned it; You preserve it within me; and You will take it from me. . . ." In the interim, during the course of his lifetime, man is a bailee charged with nurturing and preserving both soul and body.

Bailment is one area in which Jewish law adopts a reasonable man standard. A bailee has a duty of care requiring him to safeguard the bailment entrusted to him. The standard of care to which he is held *ke-de-natri inshi* (as people safeguard),<sup>12</sup> i.e., the quality of care a prudent person would exercise with regard to his own property.<sup>13</sup> In order to preserve his property and maintain it in serviceable condition even a prudent person would be prepared to accept a certain measure of risk. A bailee may act in a comparable manner with regard to property entrusted to him by others. The same is true with regard to preservation of life and health. Prudent risks are warranted in order to ensure normal longevity anticipation and restoration of health, i.e., the proper functioning of the body for its divinely ordained purposes.

The notion that man has the status of a bailee with regard to his life and his body and that as a bailee he is held to a standard of care *ke-de-natri inshi*, literally, "as people safeguard," rather than to either a higher or lower standard of care serves, in this writer's opinion, to justify not only assumption of prudent risks but also to explain why acceptance of such risks is discretionary rather than obligatory.

With regard to their own financial resources, some people are conservative by nature; others are more open to assuming calculated risks for potential gain. Innate fiscal conservatism allows some individuals to invest funds only when they perceive virtually no chance of loss of capital; others, following their natural instincts, eagerly venture capital in pursuing investments which, although prudent on balance, involve an element of risk. Neither policy is "right" and neither is "wrong." A bailee is permitted the same order of leeway, so long as he acts within the bound of prudence in managing funds entrusted to him for purposes of investment. He is required simply to safeguard the bailment *ke-de-natri inshi*—in the manner in which people safeguard their own fortunes.

Man, as a bailee, is granted the same discretion with regard to decisions concerning prolongation versus possible foreshortening of life. Some individuals are by nature highly conservative; others are more open to risk. But all are acting *ke-de-natri inshi*, in a manner in which similarly inclined people would act. In choosing a bailee, a bailor may well wish to assess the nature and predilections of his prospective bailee. It is for that reason that some people choose to invest their money only in investment funds guided by highly conservative managers while others seek to maximize their return by choosing growth funds managed by persons whose fiscal outlook is aggressive. Still others will balance risks by investing a portion of their resources in conservative funds and a portion of their resources in aggressive growth funds. The same disparate patterns of behavior are exhibited by individuals engaged in making choices involving medical risks.

The Creator did not fashion man with a single temperament; rather, He endowed some individuals with a highly prudent nature and others with a more venturesome temperament. To each the Creator entrusted the precious gift of life with full cognizance, and even the desire, that each is likely to exercise vigilance in accordance with his individual temperament in protecting the precious treasure entrusted to him. Thus, each person is given authority to exercise discretion, subject to established parameters, in making necessary medical decisions. And, in possibly arriving at conflicting decisions, each individual

is acting *ke-de-natri inshi* and thereby fulfilling the divine mandate with which he is charged.<sup>14</sup>

The risks that are acceptable are not simply those that would be undertaken by a reasonable and prudent person with regard to his own property. A person might well be unconcerned by the prospect of the loss of a particular item and hence not be inclined to spend time and effort to assure its preservation. Not so a bailee *vis-à-vis* bailed property. The bailee must safeguard the property on behalf of the bailor who has entrusted it to him in order to assure its preservation. Since man is but the steward of both his life and body the fiduciary nature of his responsibility requires that any risk assumed be prudent *vis-à-vis* preservation of the interests of the bailor, i.e., the Creator of all life. A physician is uniquely qualified to diagnose illness, to offer a prognosis and to evaluate the relative risks and benefits attendant upon medical intervention versus those of non-intervention. Whether or not assumption of the attendant risk is prudent when measured against potential benefits is a value judgement rather than a medical determination.

Recognition that the decision to accept or to reject such procedures reflects a moral judgment based upon a halakhically predicated value system serves to explain *Shevut Ya'akov*'s demand that any decision of such nature be endorsed by a rabbinic scholar. It is the rabbinic decisor rather than the physician who may be presumed to be sensitive to the role of individual persons within the divine scheme of creation and to be mindful of the need for measured assessment of the prospects for maximization of longevity.<sup>16</sup>

## IV. DEFINITION OF HAYYEI SHA'AH

In his glosses to *Shulhan Arukh*, R. Shlomoh Kluger, *Hokhmat Shlomoh*, *Yoreh De'ah* 155:1, postulates that the concept of *hayyei sha'ah* is not relative in nature but should be understood as connoting at least a limited, if not an ephemeral, period of time. He impliedly assumes that a perfectly healthy person has no right to jeopardize his anticipated life span for the sake of a potential increase in longevity. In seeking to understand the risks that may legitimately be assumed in the hope of achieving a cure he declines to define *hayyei sha'ah* as the residual period of life, regardless of duration, remaining to a person afflicted by an illness that, if left untreated, is terminal in nature. *Hokhmat Shlomoh* dismisses that definition on the grounds that all mortals will die of one

cause or another; hence, the fact that the specific cause of eventual death has been identified should not create a novel halakhic situation. In effect, *Hokhmat Shlomoh* argues that all persons suffer from a terminal condition known as life. Nevertheless, he remains convinced that *hayyei sha'ah* connotes a qualitative type of life that is different from ordinary longevity anticipation. *Hokhmat Shlomoh* candidly concedes that he has no direct evidence pointing to a definition of *hayyei sha'ah*. Nevertheless, he points to another halakhic category from which he seeks to derive a definition by way of analogy.

Halakhah posits a category known as "treifah" in a number of diverse areas of Jewish law. A treifah is a person or an animal suffering from a fatal congenital anomaly of certain specified organs or who has sustained a trauma resulting in the loss or perforation of one of those specified organs and, as a consequence, death will follow. To give but several examples of the implications of treifut: the meat of an animal that is a *treifah* is non-kosher; an animal that is a *treifah* may not be offered as a sacrifice; the murder of a human being who is a *treifah*, although assuredly forbidden, does not constitute capital homicide. Although the physical criteria that establish the various forms of treifut are quite complex, a common factor is present in each of the various conditions that are deemed to establish treifut in man or beast, viz., it may be anticipated that the person or animal suffering from that trauma or anomaly will not survive for a full twelve-month period. Taking the concept of treifah as his model, Hokhmat Shlomoh asserts that hayyei sha'ah should also be defined as longevity anticipation of less than twelve months. Much later, Iggerot Mosheh, Yorah De'ah, III, no. 36, independently formulated the same definition of hayyei sha'ah.<sup>18</sup>

R. Abraham I. Kook, *Mishpat Kohen*, no. 144, sec. 3, somewhat equivocally advances the identical definition of *hayyei sha'ah*, but with one significant qualification. The Gemara, *Hullin* 42a, records a dispute with regard to whether it is indeed the case that a *treifah* cannot be anticipated to survive for a period of twelve months. According to the talmudic opinion that *treifah hayyah*, i.e., that a *treifah* may well survive for a longer period, the sole determining criterion of *treifut* is that the cause of death is already present and, even if death is remote, the process of dying has already begun. That line of reasoning was, of course, rejected by *Hokhmat Shlomoh* as tenuous, but then *Hokhmat Shlomoh* fails to explain why such reasoning should not be accepted according to the opinion that maintains that *treifah hayyah*. Moreover, *Mishpat Kohen* himself concedes that the twelve-month definition of

hayyei sha'ah is open to criticism "on many grounds" and that the paradigm of treifah is but a remez, i.e., a hint or allusion, for delineation of hayyei sha'ah.

The categorization of treifut cannot serve as a conclusive source for establishing the limits of hayyei sha'ah for a number of reasons. The first reason is reflected in the controversy regarding treifah hayyah, or treifah einah hayyah, i.e., whether a treifah can or cannot survive for a twelvemonth period. According to the normative view that maintains that a treifah cannot survive for twelve months, there are two separate factors common to all treifot: 1) the cause of death is already present; and 2) survival for a minimum of twelve months cannot be anticipated. According to the view that maintains that treifah hayyah, treifut is defined solely on the basis of the first criterion, i.e., the cause of death is already present. What basis, then, is there for assuming that hayyei sha'ah is also determined on the basis of both criteria, since, according to one opinion, presence of the cause of future death is, in and of itself, a sufficient criterion for establishing treifut?

A far more telling objection arises from a more exact analysis of the nature of *treifut*. An animal experiencing a terminal physiological disorder, e.g., kidney failure, is not a treifah, even though its demise may be imminent. Euthanasia committed upon a terminally ill patient riddled with disease is a capital transgression. The category of *treifah* is restricted to the presence of particular anatomical anomalies that are congenital in nature and to excision or perforation of specific organs of the body as a result of trauma. Humans and animals afflicted by disease or physiological disorders, no matter how advanced or how devastating and regardless of the organ affected, are not included in the category of treifah. The concept of havvei sha'ah connotes a brief or ephemeral period of life-expectancy without reference to the reason for the cause of diminished life expectancy. Accordingly, there can be no hard and fast correlation between categorization as a treifah and the definition of hayyei sha'ah. Undoubtedly, it is this fundamental distinction between the two halakhic concepts that prompted Mishpat Kohen to dismiss the comparison as aught but a "hint" or "allusion."

Acceptance of the definition of hayyei sha'ah advanced by Hokhmat Shlomoh and Mishpat Kohen and the resultant conclusion that risk-taking is never warranted when a patient is expected to survive for more than a year even in the absence of intervention leads to a conclusion that is counterintuitive. Consider the situation of a patient afflicted with a slowly developing, but definitely lethal, form of leukemia. Assume

that it can be determined with a high degree of probability that, if left untreated, the patient will survive for thirteen months. Assume also that the sole therapy available to this patient is a bone marrow transplant which, if successful, will cure the leukemia and restore the patient to good health but which carries with it a significant risk of death due to tissue incompatibility or as a result of infection contracted during the period of suppression of the patient's white blood cell count.

According to the thesis propounded by Hokhmat Shlomoh and Mishpat Kohen, the potentially hazardous bone marrow exchange could not be sanctioned because the thirteen-month longevity anticipation is, qualitatively speaking, not mere hayyei sha'ah. Consequently, the patient refuses the transplant. A bit more than one month later the patient finds himself in the same severe straits only now, since it is one month later, the remaining survival period is less than twelve months. Since the period of remaining life expectancy is presently less than twelve months, the bone marrow transplant may, at this point, be undertaken in good conscience. However, since it is now one month later and the disease has progressed markedly, the likelihood of a cure is much lower. It turns out that applying the rule as formulated by Hokhmat Shlomoh and Mishpat Kohen does not guarantee twelve months of life but only a single month of life. The notion that a patient must delay therapy while the chance of successful intervention plummets may not offend the technicalities of the principles applied in such dilemmas but it is certainly counterintuitive.19

The position advanced by Hokhmat Shlomoh is apparently contradicted by another renowned rabbinic scholar, R. Israel Lifschutz, *Tiferet* Yisra'el, Yoma, Yakhin 8:3. Tiferet Yisra'el reports that, subsequent to the development of the smallpox vaccine, he was informed that, although the vaccine was highly effective in preventing smallpox epidemics, inoculation carried with it a small but significant risk of death. Tiferet Yisra'el observes that assumption of that risk for the sake of averting a statistically greater danger is justified. However, according to the position espoused by Hokhmat Shlomoh, the risk of death assumed by an as yet perfectly healthy individual could not be categorized as endangerment of only hayyei sha'ah. Thus, even in situations of possible imminent contagion, administration of the smallpox vaccine in an age in which the associated danger loomed as a significant risk would not appear to be consistent with the view of Hokhmat Shlomoh. It would appear to be the case that smallpox vaccination can be sanctioned only upon expanding the definition of hayyei sha'ah to encompass not only

situations in which the cause of death is already present, a position rejected by *Hokhmat Shlomoh*, but to include also situations in which the cause of death is merely a statistical possibility.

Similar halakhic issues arise with regard to other prophylactic procedures. During the early part of the twentieth century, it was common practice for missionaries dispatched to remote areas of Africa to undergo prophylactic appendectomies. Approximately seven percent of the population of the United States will at some time in their lives be afflicted with appendicitis.<sup>20</sup> Precise mortality rates for untreated appendicitis are not available but are certainly very high. Before the age of sulfonamides and antibiotics and in situations in which medical evacuation was not a possibility, the desire to limit the avoidable risk of death as a result of a perforated appendix was entirely cogent. Even taking into account the high risks associated at that time with anesthesia and perioperative infection, the statistical balance of risk versus benefit certainly augured in favor of the procedure. In our own age, some oncologists suggest that patients with a family history of breast cancer who are known to be carriers of the BRCA gene consider undergoing prophylactic bilateral mastectomy. It is highly unlikely that the risks associated with that procedure are either ignored or perceived as negligible in our society. Even if a genetic predisposition or a statistical probability is to be equated with a present danger,<sup>21</sup> the as yet unafflicted patient is highly unlikely to die within twelve months. In such circumstances, surgical procedures that present a recognized danger do not represent the gamble of mere hayyei sha'ah as defined by Hokhmat Shlomoh and Mishpat Kohen.

# V. HAYYEI SHA'AH DEFINED IN TERMS OF LIFE-QUANTA

The Gemara, *Yoma* 85b, cites the verse "and he shall live through them" (Leviticus 18:5) as establishing preservation of life as a paramount value. Mandatory suspension of *Shabbat* restrictions as well as of other halakhic strictures for the sake of prolongation of life for even the briefest of periods demonstrates that preservation of every moment of life is a paramount value. It seems to this writer that the willingness of Halakhah to sanction the risk of *hayyei sha'ah* does not compromise that value but is, in actuality, a reflection of precisely that underlying value.

Let us imagine a casino featuring a roulette wheel bearing only the numbers one through ten.<sup>22</sup> The house accepts ten-dollar wagers on

any one of the numbers and pays one hundred dollars to the winner. The statistical probability is that a person who spends an evening placing bet after bet upon the turning of the wheel will leave the casino no richer and no poorer than when he entered. Depending upon one's perspective, the player has either wasted his time or has engaged in an innocent pastime.

Let us imagine also a casino featuring a roulette wheel bearing only the numbers one through nine. The house accepts ten-dollar wagers on any of the numbers and pays one hundred dollars to the winner. On eight out of nine turns of the wheel the player will lose but the player has one chance out of nine of winning one hundred dollars. The statistical probability is that if he places bet after bet he will be ahead by ten dollars for every nine spins of the wheel. A player who takes advantage of such an opportunity is not a gambler but a shrewd entrepreneur. A player offered not simply marginal odds in his favor for modest gain but favorable odds for the opportunity to "break the bank" and walk away with all of the funds in the cashier's booth is offered a proposition that few reasonable men would refuse.

Imagine the more likely scenario in which the casino has a roulette wheel bearing the numbers one through eleven. The casino accepts tendollar wages on each of the numbers and returns one hundred dollars to the winner. The statistical probability is that a player will expend one hundred and ten dollars in order to recoup one hundred dollars while the casino owner will earn a ten-dollar profit for every eleven turns of the wheel. The proprietors of the casino are not gamblers but shrewd businessmen; the players are fools throwing away their money.

Roulette gambling and gaming in general represent enterprises entered into for the express purpose of enhancing the number of banknotes in one's pocket. Money is risked for the sake of acquiring more money. Medical risks are assumed for an analogous reason: limited longevity anticipation is wagered in the hope of a return in the form of a longer longevity anticipation. The period of time placed at risk and the enhanced period of life to be gained may be described as life-quanta. The function and goal of medical intervention is maximization of life-quanta. Such intervention often involves the gamble of ephemeral longevity anticipation, a period of time that may be described as life-certain quanta, in an attempt to restore normal longevity anticipation which, in turn, may be described as representing life-possible quanta. In some situations the prospective gain and the chance of realizing that gain may be so great as to make the choice seem compelling. But that

need not necessarily be the case. The gambling paradigm assumes that the opportunities for repeated wagers are open-ended. Humans do not enjoy the proverbial nine lives of a cat; each person has but one life. A person who has only one ten-dollar bill and no prospects of acquiring more will be extremely cautious in wagering that ten-dollar bill even when the odds of winning are weighted heavily in his favor.

The medical intervention risk-benefit calculus reflects two factors, viz., the number of life-certain quanta at risk versus the anticipated gain of life-quanta as well as the recognition that normal longevity anticipation is extremely desirable but largely unquantifiable. In the classic cases discussed by the Gemara and in rabbinic responsa the precise length of normal longevity anticipation is not a factor. Those situations involve persons who, if left untreated, will succumb to disease within a predictable and relatively short period of time but, if intervention is successful, the result will be a normal life span. Clearly, the presumption is that the life-possible quanta of normal longevity anticipation are much greater than the life-certain quanta that will be enjoyed by the patient in the absence of intervention.

If the notion of risking *hayyei sha'ah* is understood, not as reflecting an intrinsically inferior quality of life, but as an expression of the balancing of life-certain quanta against life-possible quanta, the duration of certain survival is relevant only in terms of formulating a comparative risk-benefit calculation. Accordingly, a ten percent mortality risk might legitimately be accepted in the treatment of a malignancy that, for example, will lead to death within one to two years but which treatment, if successful, will add many years of life.

A similar calculus can be applied to assumption of risk in conjunction with prophylactic procedures. In such cases, however, the calculations are much more complex and involve statistical probability rather than relatively firm medical prognoses. Thus, if it is established that there are cogent medical reasons for advising some carriers of the BRCA gene to undergo prophylactic mastectomy, the first step in assessing the halakhic propriety of the procedure is to determine the statistical probability of a carrier developing breast cancer over the course of a lifetime. The next step would be to establish the average age of which carriers of the BRCA gene who do develop breast cancer will succumb to the disease. The mastectomy candidate's present age should be subtracted from the average age of demise as statistically predicted. Assume, then, using statistics that are entirely hypothetical but convenient for purposes of illustration, that the woman in question has a one

in five chance of succumbing to breast cancer twenty years in the future as opposed to longevity anticipation of forty years subsequent to successful bilateral mastectomy and that the surgery itself presents, at the most, a one percent risk of imminent mortality. Since twenty percent of all BRCA carriers in this hypothetical will survive only twenty years, rather than forty years, twenty out of every one hundred such women will lose twenty years of life. Thus, failure to intervene represents a twenty percent chance of a loss of twenty years of life, or a net loss of forty-eight months of life-quanta. The surgical risk represents a one percent loss of forty years of life or a net loss of 4.8 months of life-quanta. The sacrifice of 4.8 months for a gain of forty-eight months is readily justified in terms of maximization of life-quanta.

A theory of such nature must have been the basis of *Tiferet Yisra'el*'s endorsement of smallpox vaccination. Present danger as a result of vaccination was extremely small, albeit not nil. Statistical danger of smallpox contagion lay in the future but was far greater. Even absent methods for calculating precise statistical probability, it would have been readily apparent to *Tiferet Yisra'el* that the goal of maximizing lifequanta augurs in favor of vaccination. Prophylactic appendectomies for persons about to establish residence in areas in which subsequent medical or surgical intervention is precluded can be similarly justified on the basis of a relative life-quanta analysis.

# VI. MINIMAL HAYYEI SHA'AH VERSUS ENHANCED HAYYEI SHA'AH

The question of whether a person may risk hayyei sha'ah, not in anticipation of a cure and hence a normal life span, but simply for prolongation of life, i.e., a longer period of hayyei sha'ah, is not addressed explicitly in the various codes of Jewish law. Nevertheless, Iggerot Mosheh, Yoreh De'ah, III, no. 36, rules that a person may jeopardize hayyei sha'ah only when it may reasonably be anticipated that, if the procedure is successful he will survive for at least twelve months. The same view is again expressed in Iggerot Mosheh, Hoshen Mishpat, II, no. 75, sec. 3.

There is, however, one early source that seems to address this issue in a few brief words and to formulate an entirely different view. Ramban, in his *Torat ha-Adam*, explains the phrase employed by the Gemara, *Avodah Zarah* 27b, "*Le-hayyei sha'ah lo haishinan*" as meaning, "we are not concerned with possible [loss of] *hayyei sha'ah* in the face of more life (*hayyei tuva*)."<sup>23</sup> This writer does not understand the phrase "*hayyei* 

tuva" as connoting a normal life span but as meaning quite literally "more life." If so, Ramban clearly affirms the principle that brief hayyei sha'ah may legitimately be hazarded, at least in some circumstances, in the hope of achieving a longer period of hayyei sha'ah.

Formulation of a life-quanta calculus also presents a vehicle for addressing the issue of limited hayyei sha'ah versus enhanced hayyei sha'ah, i.e., acceptance of the risk of the loss of a brief period of life on the part of a person afflicted by a terminal illness, not for the sake of a cure, but for the purpose of prolongation of life before succumbing to the ravages of that fatal disease. If justification of the risk of hayyei sha'ah is predicated upon the notion that it represents the gamble of a qualitatively less valuable form of life against the value of an intrinsically more valuable form of life, i.e., normal longevity, the risk of hayyei sha'ah for a marginally longer period of hayyei sha'ah could not be justified. If, however, the justification of the risk-taking involved in hayyei sha'ah is the maximization of life-quanta, the risk of hayyei sha'ah for a significantly longer period of hayyei sha'ah is readily justifiable.

A simple, but all too frequent, example lies in the case of a person suffering from terminal cancer who has developed an intestinal obstruction. Let us assume that it is known with certainty that, barring surgical intervention, the patient will survive no more than three days. If the obstruction is removed the patient may reasonably be assured of survival for a period of thirty days before succumbing to the effects of the underlying malignancy. The patient's general medical profile is such that he is deemed to have a thirty-three and one third percent chance of death during the course of surgery or shortly thereafter.

If presented with three such medically identical patients and surgery is performed upon all three, two of the patients will survive for a total combined life-quanta of sixty days. One patient will die immediately for a loss of a period of three days of life-quanta. The net gain in life-quanta as a result of surgical intervention will be sixty days minus three days, or a period of life-quanta equal to fifty-seven days. On balance, such a risk is entirely prudent.

The purpose of determining a risk-benefit calculus is to establish a means of distinguishing between prudence and foolhardiness. Medical prognoses with regard to survival periods are far from precise. Even more significantly, in any individual situation it is impossible to determine which choice will yield greater life-quanta. Hence, on this analysis, in all such circumstances, the decision to intervene and the decision not to intervene are, both halakhically and morally, equally acceptable.

As guardian of the body and soul, of the treasure of life entrusted to man, a person is duty-bound to avoid unnecessary risk and danger. In the course of daily life man has been granted license to engage in commonplace activities trusting that *shomer peta'im Ha-Shem*. Activities that are not routine in nature require more careful scrutiny. Ofttimes during a person's lifetime occasions arise when medical intervention becomes a necessity. Attendant medical decision-making requires careful assessment of potential danger. Some forms of intervention are, relatively speaking, risk-free and hence mandatory; others border on the foolhardy and are to be eschewed; yet others require judicious balancing of potential benefit against possible harm. Discretionary intervention in the latter cases may be undertaken with the prayer to the Guardian of all life that the carefully considered decision of the wise also merit providential blessing.

#### **NOTES**

1. It is on the basis of this consideration that R. Moshe Feinstein, Iggerot Mosheh, Yoreh De'ah, II, no. 49, peremptorily dismisses the contention that cigarette smoking constitutes a violation of Jewish law. In that brief responsum, but seven and a half lines in length, Iggerot Mosheh does little more than cite the various talmudic references to shomer peta'im Ha-Shem. To be sure, in earlier periods in Jewish history, the Sages promulgated decrees against specific forms of activity that they regarded as hazardous. Tosafot, Beizah 6a, describe the prohibition against drinking uncovered water, a practice forbidden lest a snake had previously partaken of the water and had deposited poisonous venom therein, as the subject of a davar she-be-minyan, a formal rabbinic decree. The hazards of cigarette smoking are quite probably greater than those of drinking uncovered water. Had smoking been prevalent in days gone by and the hazards of tobacco been known, the Sages of the Talmud might well have deemed it wise to ban smoking. Thus Iggerot Mosheh's responsum reflects the unexceptionable observation that, in the absence of biblical grounds and in the absence of a rabbinic decree either in the past or in the present, it cannot be maintained that a popularly accepted practice constitutes a violation of Halakhah because of an element of attendant danger. For a review of the controversy concerning smoking see this writer's "Smoking," Tradition, vol. 16, no. 4 (Summer, 1977), pp. 121-123.

It must be noted, however, that there is little question that *Iggerot Mosheh*'s responsum, written in 1964, accurately reflects the societal reality of that time, i.e., smoking was known to be fraught with danger but was nevertheless a path well-trodden by the multitude. However, it is more than likely that, at present, that condition no longer obtains. See also *infra*, note 4.

- 2. See infra, note 9.
- 3. For an application of this principle in another context see the letter of R. Joseph Shalom Eliashiv quoted in *Am ha-Torah*, vol. II, no. 3 (5742), p. 102.
- 4. Cigarette smoking might at first glance appear to be analogous to the situations ruled upon by *Binyan Zion*. No danger is present at the time the act is performed. The health hazards posed by smoking lie in the future. To be sure, certain physiological changes occur immediately upon inhalation of cigarette smoke, but such changes assume clinical significance only when they develop into symptoms of smoking-related illnesses. However, in light of presently available evidence, it appears that the cumulative risks of lung cancer, cardiovascular disease and respiratory illnesses will, in the aggregate, foreshorten the lives of the majority of smokers. If the majority of smokers do indeed face premature death as a result of cigarette smoking there is, according to *Binyan Zion*'s thesis, no halakhic basis for sanctioning the practice even though the multitude continues "to tread thereon." That is so even if longevity is reduced only marginally.
- 5. Jewish teaching thus stands in stark contradiction to the Catholic view expressed by the seventeenth-century Spanish Cardinal, Juan de Lugo, in his *De Justitia et Jure*, Disp. 10, n. 30: "The duty of preserving one's life . . . does not include the duty of using means that will prolong life so briefly that they may be considered morally as nothing." See this writer's, "The Obligation to Heal in the Jewish Tradition," *Jewish Bioethics*, ed. Fred Rosner and J. David Bleich, 2nd ed. (Hoboken, N.J., 2000), pp. 16-18.
- 6. See infra, note 16 and accompanying text.
- 7. As a practical matter, although it may not be difficult to establish the possibility of therapeutic efficacy it may be extremely difficult and even impossible to quantify the probability of success as more or less than fifty percent. For example, the four lepers described in II Kings had rational grounds to believe that feelings of pity might be evoked in the enemy but what basis might they have had for assuming that the chances of mercy were at least fifty percent? Cf., R. Moshe Feinstein, *Iggerot Mosheh*, *Yoreh De'ah*, II, no. 36.
- 8. See infra, note 14 and accompanying text.
- 9. See Iggerot Mosheh, Yoreh De'ah, III, no. 36, s.v. u-be-dvar. Iggerot Mosheh, however, does assert that if the chances of success are greater than fifty percent the procedure is obligatory. Iggerot Mosheh cites no evidence in support of that view and says only that it is "mistaber" ("logical" or "reasonable"). However, in light of the fact that the principle of rov is not applicable in restricting jeopardization of hayyei sha'ah, despite the paramount value of every moment of life, there seems to be no compelling reason to assume that the same principle can, in other circumstances, require such jepardization of hayyei sha'ah. It is because every moment of life is of infinite value that even discretionary jepardization of hayyei sha'ah requires justification. See infra, section V. As will be explained, those considerations do not serve to render assumption of such risk mandatory. Rabbi Feinstein's view is reiterated in Iggerot Mosheh, Hoshen Mishpat, II, no. 74, sec. 5.
- 10. Cf., however, R. Eliezer Waldenberg, Ziz Eli'ezer, IV, no. 12, sec. 1, s.v. velakhen, who somewhat tentatively forbids self-endangerment unless it is certain that, absent intervention, the patient will die. See also Iggerot Mosheh,

Yoreh De'ah, II, no. 36, s.v. ve-hineh, who regards it as self-evident that it is forbidden to perform a hazardous medical procedure on behalf of a patient who would otherwise suffer chronic pain and remain bedridden for life.

Cf., however, Ziz Eli'ezer, 13, no. 87, who notes that, in a terminally-ill patient, extreme pain may serve to hasten death. See also the comment of R. Shlomoh Zalman Auerbach cited by R. Joshua Neuwirth, Shmirat Shabbat ke-Hilkhatah, I, 2nd ed. (Jerusalem 5739), 32:56, note 150 as well as this writer's "Palliation of Pain," Tradition, vol. 36, no. 1 (Spring, 2002) p. 105.

- 11. See Kol Kitvei ha-Ramban, ed. R. Bernard Chavel (Jerusalem, 5723), II, 43.
- 12. See Bava Mezi'a 93b. The phrase "ke-derekh ha-shomrim—in the manner of bailees" employed by the Mishnah, Bava Mezi'a 42a, has the same connotation.
- 13. See Shulhan Arukh, Hoshen Mishpat 291:13.
- 14. Cf., *Iggerot Mosheh*, *Yoreh De'ah*, III, no. 36, who explains the discretionary nature of such decisions in terms of a notion of at least limited proprietorship of one's body. In this writer's opinion, the problem requiring resolution does not compel establishment of a notion of limited proprietorship.
- 15. See Shulhan Arukh, Hoshen Mishpat 291:14. See also Ginat Veradim, Hoshen Mishpat, klal 1, no. 5 and R. Joshua Blau, Pithei Hoshen, II, 2:1, note 3.
- 16. Another reason for requiring rabbinic endorsement of a decision to institute hazardous therapy may be gleaned from comments made in an entirely different context by R. Chaim Pelaggi, Hikkekei Lev, I, Yoreh De'ah, no. 50. Hikkekei Lev accepts the view of Rabbenu Nissim, Nedarim 40a, who states that it is permissible, and even praiseworthy, to pray for the death of a patient who is gravely ill and in extreme pain but expresses an important caveat with regard to such prayer. According to Hikkekei Lev, only totally disinterested parties may take any action, including prayer, which might lead to a premature termination of life. Husband, children, family, and those charged with the care of a patient, according to Hikkekei Lev, may not pray for death. The considerations underlying this reservation are twofold in nature: (1) Persons who are emotionally involved, if they are permitted even such non-physical methods of intervention as prayer, may be prompted to perform an overt act that would have the effect of shortening life and thus be tantamount to euthanasia. (2) Precisely because of their closeness to the situation, they are psychologically incapable of reaching a detached, dispassionate and objective decision in which consideration of the patient's welfare is the sole controlling motive. The human psyche is such that the intrusion of emotional involvement and subjective interest preclude a totally objective and disinterested decision.

There is no reason to assume that a physician will, or should, distance himself emotionally from the treatment of his patient. Unable to be completely dispassionate, the physician may well be inclined to accept an unwarranted risk if there is even a remote chance of achieving a cure. Alternatively, frustration at being unable to cure the patient may engender despair and hence the physician may fail to take proper cognizance of the value of even limited residual longevity. It is not easy for the physician to transcend his emotional involvement in the care of his patient, his personal

and professional interest in achieving a cure or his frustration when confronted by lack of success. Those factors, singly or in combination, may well color his judgment. In contradistinction, as is the case with regard to a judge sitting in a capital case, the rabbinic decisor is charged with reaching a dispassionate conclusion based solely upon the facts of the case untinged by emotional or psychological factors.

- 17. Rashi, Avodah Zarah 27b, s.v. hayyei sha'ah, comments: ". . . and perhaps he will live a day or two days." R. Abraham I. Kook, Mishpat Kohen, no. 144, sec. 3, categorizes that comment as contextually explanatory rather than as normatively definitive. Accordingly, Mishpat Kohen dismisses the position of his interlocutor who sought to define hayyei sha'ah as a period of no more than twenty-four hours.
- 18. *Iggerot Mosheh*, *Hoshen Mishpat*, II, no. 75, sec. 2, posits the same distinction for purposes of triage decisions.
- 19. Positing a definition of hayyei sha'ah as longevity anticipation of no more than twelve months leads to a quandary in many contemporary decision-making situations. Scholars such as Shevut Ya'akov and Mishnat Hakhamim address situations in which the degree of danger is manifest. In such cases the physician may well be able to assess the length of potential survival in an individual patient. But what of the case of the patient suffering from an aortic aneurysm? Left unattended, such a patient may survive for years and even decades; on the other hand, the aneurysm may rupture momentarily. There is simply no way to assess the longevity anticipation of any such individual patient in order to determine whether, without intervention, he will or will not survive for more than twelve months. Whether or not Hokhmat Shlomoh and Mishpat Kohen would accept statistical evidence establishing the probability of a mean survival period of more or less than twelve months as a basis for decision-making in such instances is a question that cannot readily be answered.

The identical issue presents itself with even greater force with regard to diagnostic procedures. For example, a patient suffering from blocked cardiac vessels requires angioplasty or bypass surgery. Assume that the patient may be suffering from a form of coronary disease such that, absent intervention, survival will be less than twelve months. However, the existence of a blockage can only be established on the basis of an angiogram, a procedure which does present a quantifiable risk. If the patient is afflicted with coronary disease and will survive less than twelve months, all authorities would endorse use of an angiogram as a diagnostic measure. However, if the patient is found to be free of coronary disease or to be afflicted by a relatively mild cardiac condition, it turns out that he has risked not hayyei sha'ah but a normal life span. If the thesis of Hokhmat Shlomoh and Mishpat Kohen is accepted, hazardous diagnostic procedures of such nature do not appear to be justifiable.

- 20. See D. Mike Hardin, Jr., "Acute Appendicitis: Review and Update," *American Family Physician*, vol. 60, no. 7 (November 1, 1999), p. 2027.
- 21. See this writer's *Bioethical Dilemmas: A Jewish Perspective*, I (Hoboken, N.J., 1998), 154-156.
- 22. The analogy presented herein as well as the notion of maximization of life-

- quanta as a basis for decision- making were earlier formulated in this writer's "Baby Jane Doe and Baby Fae," *Bioethical Dilemmas*, I, 333-337.
- 23. Kol Kitvei ha-Ramban, II, 38.
- 24. Cf., however, Avraham Steinberg, Encyclopedia Halakhatit Refu'it, V (Jerusalem, 5756), 3, who understands Ramban as sanctioning the risk of hayyei sha'ah only for hayyei olam, i.e., normal longevity anticipation. In this writer's opinion Ramban abjured use of the phrase "hayyei olam" or of the phrase "hayyei kiyyum" and advisedly employed the phrase hayyei tuva in order to negate the notion that hayyei sha'ah may be risked only in anticipation of gaining a normal life span.