# **Rationalist Judaism**

Exploring the legacy of the rationalist medieval Torah scholars, and various other notes

Monday, January 10, 2011

# The Critical Ramifications of Correctly Identifying a Scientific-Halachic Issue

Continuing from <u>yesterday's post</u>, I would like to illustrate two applications of the need to correctly differentiate scientific-halachic issues from halachic issues, and of the fact that incorrect scientific data invalidates the halachic conclusion, to the extent that it is relevant, and barring overriding factors.

The first application is kidney transplants. As I noted in my monograph, The Question of the Kidneys' Counsel, Rabbi Eliezer Waldenberg, the famed Tzitz Eliezer and posek for Shaarei Tzeddek Medical Center, had severe reservations about the halachic permissibility/ advisability of kidney transplants. His reason was based on the clear and unequivocal position of the Gemara that the kidneys provide counsel to the heart; hence, there is a danger of the donor's kidneys counseling the recipient in a harmful manner. Rabbi Ovadiah Yosef discourages receiving kidneys from a non-Jew for this reason.

To most of the readers of this website, it will be clear that the kidneys do not in fact counsel us. Since the halachic rulings of Rav Waldenberg and Rav Ovadiah were based on this mistaken belief, they are therefore invalid. My presumption is that it is for this reason that in the RCA's recent document about organ transplants, it does not mention these views of Rav Waldenberg and Rav Ovadiah in the section on kidney donation.

Now let us turn to the most important application of this principle: brain death, and its resultant ramifications for organ donation. Most (but not all) of those who reach conclusions about the halachic status of brain death, whether for or against, do so by examining the words of Chazal and the Rishonim, from which they draw various inferences. This is the usual halachic procedure - but how is it valid in this case? Chazal had a very, very different understanding than us as to the nature of various aspects of the human body, and they lived in a world in which the medical possibilities were very different. They believed that a person's mind resides in his heart. This is undeniable to any reasonable, honest student; in the same way as the Rishonim and early Acharonim universally acknowledged that Chazal believed the kidneys to provide counsel, they believed the heart to house the mind - after, it is the very same section of the Gemara, discussing the functions of different parts of the body, which describes the heart as receiving the kidneys' counsel and making decisions. See too this fascinating post by R. Josh Waxman concerning the Midrash's explanation of kaveid lev Pharaoh - that his heart became like his liver. Chazal lived in a world where there was no such thing as heart transplants, but if there were, they would have said that the person's identity is transferred with the heart. Chazal lived in a world where circulation was an excellent and sufficient indicator of life, but we live in a world where you can have blood circulation in a person who is quite definitely dead according to all views. Chazal

lived in a world where a person's mind and soul were mistakenly thought to relay their force and influence from the heart, via blood and breath, rather than from the brain, via neurons and nerves. That sentence cannot be emphasized enough.

As a result, the very idea of drawing halachic conclusions about brain-death from Chazal's statements relating to life and death is just as mistaken as drawing halachic conclusions about kidney transplants from Chazal's statements about kidney function. Dr. Noam Stadlan said it best, in the second paragraph of a two-paragraph comment on the Hirhurim blog (I have highlighted the most important parts):

At least two *shitot* exist that have been "rationalized, squared and equated in any fashion with the criteria of death set forth in the Talmud, Rishonim and Acharonim", namely 1. relying on the Gemara's determination that the irreversible cessation of breathing, under the proper circumstances is the criterion for death (brainstem death, which is the position of the Chief Rabbinate) and 2. extending the Gemara's discussion of decapitation, which is the physiological decapitation position. (There are actually others, such as the Rambam's approach to human treifot where he relies on the medical determinations of the doctors of the time, **and the position of Rav Azriel Rosenfeld (found in Tradition in the late 60-s early 70's) where he states simply that the brain is the seat of the soul and absent a brain there is no life).** 

A different approach which I alluded to is to realize that the non-neurological circulation based definitions of death do not produce coherent results in this day and age, and in fact with modern techniques circulation is actually rarely irreversibly absent (as long as arteries are present circulation is a possibility). With this realization, it is necessary to go back and try to understand not the details of the positions of the Rishonim and Acharonim, because the details no longer make sense, but the underlying rationale and concept of what it means to be alive or dead, and come to some conclusions with that in mind. For example, you would have to look at what Rashi wrote, and say to yourself, Rashi's medical knowledge told him that when the heart stopped, everything else in the body ceased to function as well. Doctors told him that a stopped heart never restarted. Since these are no longer a true assumptions, what would Rashi say under these different conditions? Would he still have the same position? One hint is that it seems that most if not all of the poskim in the past used the science of their day (see Rabbi Dr. Edward Reichman's excellent article on the definition of death in the light of medical history).

Thus, the entire halachic section of the controversial RCA document on brain death and organ donation is fundamentally in error. Without mentioning any of the aspects that I pointed out, the document simply engages in the traditional approach of analyzing inferences from statements of Chazal and the Rishonim, and quoting Poskim who engaged in such a procedure. Yet this is no different from Rav Waldenberg deducing that kidney transplants are problematic since the Gemara says that the kidneys provide counsel. I understand that this is the halachic methodology in the charedi world (except when it is blatant to them that the science of Chazal is incorrect), but a centrist/modern Orthodox rabbinic organization, which accepts the Rishonic view that Chazal were not infallible in scientific matters, should incorporate the ramifications of that principle into our approach to this topic - just as Rav Yitzchak Lampronti and other halachic authorities

incorporated it into their analysis of Chazal's ruling about killing lice on Shabbos, and just as the RCA itself would do regarding kidney transplants.

Posted by Natan Slifkin Accions:

#### 72 comments:



The real question is where do you stop. Shechita has been found to be outdated. One can stun the animal, and it will die in a much more humane way, meaning quicker. So now do you say the Torah is wrong (at least for today's times) and stop shechita.

January 10, 2011 11:06 AM 葷



Natan Slifkin said...

No! You are making an unfounded assumption: That the laws of shechita are fundamentally based upon the need to kill the animal in the most painless manner possible. But you will have a very hard time proving that!

And by the way, while there may be a question of where you draw the line, there is also that question in other direction, as in my example of kidney donation.

January 10, 2011 11:09 AM 📅

Pliny said...

"Since the halachic rulings of Rav Waldenberg and Rav Ovadiah were based on this mistaken belief, they are therefore invalid."

But earlier, you wrote, "incorrect scientific data invalidates the halachic conclusion, to the extent that it is relevant, and **barring overriding factors**."

Have you established that there are definitely no overriding factors?

January 10, 2011 11:39 AM 葷

Akiva said...

Can you prove that Chazal equated life with the mind? Do you have an unequivocal source in Chazal that the soul is in the mind? Chazal seem to equate defining life in animals and humans.

An organism providing itself with body heat might be considered alive by G-d even if

there is no mind - even if only because of the need to overcome one's natural tendency to consider such an organism as bearing some life.

How do you account for the Medrash that states that whether Chochmah is in the heart or mind is a debate between David and Shlomo?

As I mentioned before, Rebbi assumed that there thought was processed in the brain. Saying it "didn't filter down to the rest of Chazal", who knew the quote, is frankly very tenuous.

January 10, 2011 12:59 PM 🖶

HaDarda"i said...

Another example of this phenomenon: I recently heard R. Dr. Moshe Tendler in an audio shiur on YUTorah refer to the Tzitz Eliezer's refusal to use a blood test to determine paternity on the basis of the Gemara in Niddah that the "red" of foetus comes from the mother. I was quite shocked that a psak was given based on this scientically false assumption.

January 10, 2011 1:02 PM 🖶

Dr.J. said...

VERY interesting post, Rabbi Slifkin. I would compare this to the "relativist" school of thought with regards to the laws of Tzniyut. It is based on the assumption that talmudic rulings were not even intended to be absolute but were based on the knowledge and values of their day. We apply the underlying principle but the details are different. This seems to be a very reasonable assumption, but obviously adamantly disputed by fundamentalists.

Although I might not agree with Chaim1's slippery slope conservatism, his question is valid. For example, the second day of yom tov in chul was clearly established as a result of very specific conditions and limitations of the era, which are irrelevant now. Can we say, "if the talmudic rabbis were alive today, they would tell us just one day of yom tov?" [I say yes, BTW)I know that this is not a perfect example, but it illustrates the point. Heredim and many modern orthodox Jews reject our authority to reinterpret talmudic sayings in light of modernity.

Finally, you allude to "the underlying rationale and concept of what it means to be alive or dead". Can you elaborate on what you think that is? Or what the talmud thought?

[I suspect it might be something like the famous words of former US Supreme Court Justice Potter Stuwart when trying to define pornography: "I know it when I see it"]

<u>January 10, 2011 1:09 PM 葷</u>

🔁 Natan Slifkin said...

"Since the halachic rulings of Rav Waldenberg and Rav Ovadiah were based on this mistaken belief, they are therefore invalid."

But earlier, you wrote, "incorrect scientific data invalidates the halachic conclusion, to the extent that it is relevant, and barring overriding factors."

Have you established that there are definitely no overriding factors?

A potentially overriding factor in the case of lice is the canonization of a ruling by Chazal. I can't think of any with the kidney case, unless there are Sefardim who think that the authority of Rav Ovadia is more important than a healthy kidney.

January 10, 2011 1:52 PM 🛅

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Natan Slifkin said...

Can you prove that Chazal equated life with the mind? Do you have an unequivocal source in Chazal that the soul is in the mind?

No, and no. But it seems sufficiently likely, such that that any analysis of the topic which does NOT take the mistaken beliefs about the heart into account is entirely inadequate.

How do you account for the Medrash that states that whether Chochmah is in the heart or mind is a debate between David and Shlomo?

Can you provide a source, please?

As I mentioned before, Rebbi assumed that there thought was processed in the brain. Saying it "didn't filter down to the rest of Chazal", who knew the quote, is frankly very tenuous.

It's an explicit Gemara!

January 10, 2011 2:02 PM 🖶

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Nachum said...

chaim, it's clear you don't know what "stunning" means in this context. It means to shoot a bolt into the back of the cow's head, destroying the brain. Not so simple now, is it?

On the other hand, the entire need for metzitza is based on the "humors" theory of medicine that prevailed until modern times, e.g. that (in this case) an excess of blood causes infection. Is metzitza- not just metzitza b'feh- thus completely unnecessary?

# <u>January 10, 2011 2:49 PM</u> 葷

#### Garnel Ironheart said...

DrJ, when you say:

Can we say, "if the talmudic rabbis were alive today, they would tell us just one day of yom tov?" [I say yes, BTW)

it's clear you haven't read the gemara in Beitzah where those talmudic rabbis who lived after the introduction of the fixed calender by Hillel II asked that very question and decided to retain the second day anyway based on tradition.

At any rate, this is the problem with uber-rationlism. No, physically speaking the kidneys do not give counsel nor is the heart the home of the person's mind. But Judaism is also interested in the metaphysical. Yes, we tend to take such statements by Chazal in medical terms on physical terms but the metaphysical, which need not limit itself to physical law as we understand it, can be quite different.

So yes, from a strictly physical perspective the Tzitz Eliezer's concern about kidney transplants is questionable. Can we be so sure his concerns are unfounded from a metaphysical perspective?

January 10, 2011 3:26 PM 🖶

#### Yitzi said...

Everything you say seems to make sense -- but it does not remotely mean that you are Halachically correct -- precisely because of the very example you cite. Many Posekim say we don't change the pesak of the Gemara in cases like lice on Shabbos -- even when we know they were "wrong." You would need to show a world class Posek who adopted your method consistantly -- not on an isolated case by case basis. If not, you are creating a new style Judaism -- something you are not qualified to do.

Remember Chacham Ovadya & the Tzitz Eliezer are world class posekim, and can be pretty liberal in some issues. You need somebody to match up with them to take your position.

Also, aside from the slippery slope argument, you are basically calling for a complete split among halachic Jews. Debating the possibilty of Chazal making mistakes was very controversial, but the Halachic community probably could withstand that. You now are going very far from where you started when you were writing your books essentially asa kiruv tool. Such a fundamentally different style of Pesak would effectively split the Halachic community.

January 10, 2011 3:47 PM 葷

Akiva said...

But it seems sufficiently likely, such that that any analysis of the topic which does NOT take the mistaken beliefs about the heart into account is entirely inadequate.

בעקבי הצאן עמ' רמט

מגדולי רופאי זמננו שרצה לומר מכח סברא פילוסופית תיאולוגית, שהואיל וכל יחודו של ושמעני הצעת אחד האדם הוא בדעתו, יש לנו לקבוע הגדרת המות לגבי אדם כמות מוחי. ונראה שעל פי הלכה הבדל זה ]בין נו הגדרת המות באדם לבין הגדרת המות בשאר בע"ח[ לא ניתן להאמר, דתנן באהלות )פ"א מ"ו( אדם אי מטמא עד שתצא נפשו ואפי' מגוייד ואפי' גוסס... וכן בהמה וחיה אינן מטמאין עד שתצא נפשם. הותזו ראשיהם אע"פ שמפרכסים טמאים וכו' והמתבאר שמה מסתימת לשון המשנה ]ודרשת הספרא שהובאה הםהכל אחד ואין לחלק ביני -במפרשי המשנה שמה שגדר יציאת נשמה באדם בהמה שרץ חיה ועוף

Can you provide a source, please?

ילקוט שמעוני משלי רמז תתקכט

ד"א זש"ה והחכמה מאין תמצא מלמד שהיה שלמה מחפש ואומר היכן היא החכמה מצויה, ר' אליעזר אומר בראש, ר' יהושע אומר בלב, ואתיא כדעתיה דר' יהושע דאמר החכמה היא בלב דכתיב נתתה שמחה בלבי, אלא חכמה שנאמר חכם בני ושמח לבי, למ"ד אל תקרי למ"ד אלא לב שהלב הוא מבין דעת ואין שמחה שנאמר חכם לב יקח מצות חוזר באותיות, ואף דוד פרש עליה לב טהור ברא לי אלהים מפני מה נתנה חכמה בלב לפי שכל האברים תלוים בלב, אמר שלמה אני לא אעשה כמו שעשה אבא, אבא פתח חכמתו בראש יות וסיים באמצע, פתח בראש שנאמר אשרי האיש וסיים באמצע כל הנשמה תהלל יה, אבל אני איני אות עושה כן אני פותח באמצע אותיות ומסיים בסוף אותיות, פותח באמצע אותיות במקום שיש חכמה, והיכן עושה כן אני פותח בלב שנתונה באמצע האדם, נמצאת אומר שדוד תפס כדברי ר' אליעזר ושלמה תפס כיהושע, ולא עוד אלא שהלב נתון ביד הקב"ה שנאמר פלגי מים לב מלך ביד ה', וכיון שראה שלמה שהחכמה נתונה בלב משם התחיל

ואע"ג דלעיל אמר אף דוד פי' לב טהור מ"מ ס"ל דעיקר חכמה בראש -פירוש זית רענן

It's an explicit Gemara!

And there is a contradictory one.

January 10, 2011 4:23 PM 🖶



Natan Slifkin said...

Akiva - I have to look into those sources. But it doesn't make a difference if there are some sources that the brain houses the mind. Once there are sources which mistakenly believe that the heart houses the mind, then any analysis of the Gemara which doesn't take this into account, is flawed.

January 10, 2011 4:42 PM 🖶

Dovid S. said...

Rav Yitzhak Lampronti's position on killing lice actually points to the opposite conclusion than what you attributed to him. And it would seem to directly impact your thesis here.

As I recall, in the end, he only says "Were I not afraid to say it, this is what I would say . . "In other words, he makes a recommendation that people be stringent, as opposed to overturning established halacha.

He acknowledges his Rebbi's position, which is that concern for the stability of the halachic system trumps changing established halacha.

(This is not to say that there is an established psak that does not recognize brain death, but only that Rav Yitzhak Lampronti accepted the advice to not "open a Pandora's Box" by revisiting all sorts of halachos that were incompatible with the science of his day.)

The point is that one must acknowledge that while revisiting established halacha might make logical sense, this can only be done with great concern as to the long term benefit.

(At least according to Rav Yitzhak Lampronti. And yes, I know, that the alternative -- ossified halacha -- is fraught with danger as well.)

January 10, 2011 4:45 PM 🖶

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Natan Slifkin said...

Garnel, Yitzi - you are both missing the point.

So yes, from a strictly physical perspective the Tzitz Eliezer's concern about kidney transplants is questionable. Can we be so sure his concerns are unfounded from a metaphysical perspective?

We can be 99% sure. But even if we could only be 50% sure, this would be enough to question the validity of his pesak.

Many Posekim say we don't change the pesak of the Gemara in cases like lice on Shabbos -- even when we know they were "wrong."

For reasons which DON'T apply in this case. And many, many Poskim say otherwise. My point in this post is not necessarily that brain death is death. It is that any halachic analysis of Chazal and Rishonim which doesn't take into account the fact that they were working with an outdated understanding of physiology and a different world of medical possibilities, is fundamentally flawed.

Also, aside from the slippery slope argument, you are basically calling for a complete split among halachic Jews.

Yes, the ramifications are quite drastic. But I think that a split is pretty much inevitable. Also, I think that saving lives is sufficient cause.

<u>January 10, 2011 4:48 PM</u>

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Natan Slifkin said...

As I recall, in the end, he only says "Were I not afraid to say it, this is what I would say . . "In other words, he makes a recommendation that people be stringent, as opposed to overturning established halacha.

And is saving lives not something to be stringent with?

He acknowledges his Rebbi's position, which is that concern for the stability of the halachic system trumps changing established halacha.

That was NOT Rav Brill's position. Rav Brill's position was that Chazal are more reliable on science than scientists are. Rav Lampronti disagreed.

January 10, 2011 4:50 PM 🗂

Dovid S. said...

Natan Slifkin wrote:

>>That was NOT Rav Brill's position. >>Rav Brill's position was that >>Chazal are more reliable on >>science than scientists are. Rav >>Lampronti disagreed.

I don't have it in front of me, but I do not believe you are correct. I believe that Rav Yitzhak Lampronti's and Rav Brill's positions are precisely as I stated. As I recall, Rav Brill was not saying that Chazal were scientifically superior, but only that established psak should not be revisited.

January 10, 2011 5:02 PM 🖆



Natan Slifkin said...

I have it in front of me, and I am correct!

January 10, 2011 5:07 PM m

yakov r said...

In your post: "They believed that a person's mind resides in his heart. This is undeniable to any reasonable, honest student"

In a comment: "Akiva - I have to look into those sources. But it doesn't make a difference

if there are some sources that the brain houses the mind."

Oh, but it does make a difference, it makes your entire premise deniable.

THe gemara yevamos daf tes quotes a discussion amongst Levi and Rebbi. At one point Rebbi comments that he thinks that Levi has no MOAch in his skull. If the mind is in the heart, then why was Rebbi making comments about Levi's skull marrow?

January 10, 2011 5:18 PM 🖶

Anonymous said...

He acknowledges his Rebbi's position, which is that concern for the stability of the halachic system trumps changing established halacha.

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Interesting is even "academics" within the halachic system would likely agree to an extent - that halacha is evolutionary and sharp changes don't work - but IIUC they would suggest that information would be assimilated into the system and eventually reflected..

KT Joel Rich

January 10, 2011 5:26 PM 🖶



Natan Slifkin said...

*Oh, but it does make a difference, it makes your entire premise deniable.* 

You appear to misunderstand what my premise is.

At one point Rebbi comments that he thinks that Levi has no MOAch in his skull. If the mind is in the heart, then why was Rebbi making comments about Levi's skull marrow?

The fact that ONE of Chazal held that the brain has SOME cognitive function (if that is even what it means - even according to Aristotle, who held that the brain cools the blood, someone lacking a brain could be prone to error), does not mean that according to ALL of Chazal the heart has NO functions of the mind.

Again - it is abundantly clear that to at least some of Chazal, and probably most if not all of them, the heart and kidneys house the mind, free will and the soul. So any halachic analysis which does not take that into account, is fundamentally flawed.

January 10, 2011 5:27 PM 🖶

Akiva said...

any halachic analysis which does not take that into account, is fundamentally flawed.

We don't know for sure whether the basis for Chazal's approach to life and death is based on Sinaitic tradition or the science of the times or a combination. Even if it is based on the science of the times, the Chazon Ish's position is that we are beyond the הרות לש מיפלא and cannot change Chazal's determinations regarding determining the moment of death.

Anyhow, the equation of mind and life-force is simply not backed by the primary sources. Chazal do not link the two issues at all.

January 10, 2011 6:16 PM 🖶

S. said...

>To most of the readers of this website, it will be clear that the kidneys do not in fact counsel us. Since the halachic rulings of Rav Waldenberg and Rav Ovadiah were based on this mistaken belief, they are therefore invalid.

I thought your position was that we don't uproot halacha because of such things. Does this only apply to Chazal? If so, then it doesn't apply to the Rambam, Tur, Shulchan Aruch? Where does it begin and where does it end?

Like Chaim said, shechita. You say they are "fundamentally based upon the need to kill the animal in the most painless manner possible." This is a surprising assertion to me, but given your taking that position, at what point do you need to say the science is right and the rabbis are wrong for ignoring it?

Temple Grandin will only say that shechita is as humane for so long.

January 10, 2011 6:41 PM 🖶

#### Mechy Frankel said...

Anonymous Dovid S. said...

Natan Slifkin wrote:

- >>That was NOT Rav Brill's position. >>Rav Brill's position was that >>Chazal are more reliable on >>science than scientists are. Rav >>Lampronti disagreed.
- > I don't have it in front of me, but I do not believe you are correct... As I recall, Rav Brill was not saying that Chazal were scientifically superior, but only that established psak should not be revisited.>

In this matter i believe R Slifkin's reconstruction is more accurate. My own memory is that R. Brill's riff on the virtues of Chazal in the matter of liceicide also segues off to recall the astronomical machloqes in p'sochim about the path of the sun at night where chazal acknowledge intellectual defeat by the greeks. but R. Brill goes on to claim Chazal's concession was premature, as hundreds of years later modern science had swung

back to upholding Chazal's original position. So it seems clear he is maintaining unchanged tradition not merely for some meta-halochic considerations, but for the simple reason Chazal's understanding of science was deeper and more accurate - sod hashem lyrayov - than the other guys.

i do have some other comments about this and preceding essays - in particular the (it seems to me) confused conflation of mind and soul which have been used seemingly interchangeably, but shall reserve those for now.

January 10, 2011 7:05 PM 葷

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Natan Slifkin said...

We don't know for sure whether the basis for Chazal's approach to life and death is based on Sinaitic tradition or the science of the times or a combination.

But since there is a significant chance that it is one of the latter two, this has to be taken into account.

Even if it is based on the science of the times, the Chazon Ish's position is that we are beyond the הרות לש סיפלא and cannot change Chazal's determinations regarding determining the moment of death.

And since when does everyone follow the Chazon Ish? Certainly not everyone does with regard to this point.

Anyhow, the equation of mind and life-force is simply not backed by the primary sources. Chazal do not link the two issues at all.

It's overwhelmingly likely that the two are linked, because of transplants. If you transplant Reuven's heart and kidneys into Shimon, and give him artificial replacements, we would be certain that Reuven is still Reuven and Shimon is still Shimon, whereas Chazal would say that Shimon has been replaced by Reuven - or at least, significant aspects of him.

<u>January 10, 2011 7:10 PM</u>

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Natan Slifkin said...

I thought your position was that we don't uproot halacha because of such things. Does this only apply to Chazal? If so, then it doesn't apply to the Rambam, Tur, Shulchan Aruch? Where does it begin and where does it end?

It only applies to Chazal, according to Rav Herzog, Rav Fisher, etc., and also implicit in Kesef Mishneh.

You say they are "fundamentally based upon the need to kill the animal in the most painless manner possible." This is a surprising assertion to me

You misread what I wrote. I wrote that shechitah is NOT necessarily based on that.

January 10, 2011 7:12 PM 葷

S. said...

>You misread what I wrote. I wrote that shechitah is NOT necessarily based on that.

How embarrassing! My apologies.

Re the other point, which Chazal? Presumably you/ they meant that which wound up in the codes, because there are many halachos, eitza tova type things in the Talmudim which didn't end up in a code, while conversely some did. Presumably both types contain false scientific foundations. But if we're saying that Chazal could have other intentions, isn't this an argument for us being choshesh even for those things which were never codified? It's almost like this argument raises the stature of those things. On the one hand, they were never codified. On the other hand, now we're saying that Chazal didn't base their statements on mistaken scientific premises along.

January 10, 2011 7:23 PM 🖶

Akiva said...

But since there is a significant chance that it is one of the latter two, this has to be taken into account.

What has to be taken into account before allowing brain death to be determined as death is that G-d might have said otherwise at Sinai!

And since when does everyone follow the Chazon Ish? Certainly not everyone does with regard to this point.

Who says everyone does? If he is right, though, then taking a beating heart out is murder. Do we know he is wrong?

It's overwhelmingly likely that the two are linked, because of transplants. If you transplant Reuven's heart and kidneys into Shimon, and give him artificial replacements, we would be certain that Reuven is still Reuven and Shimon is still Shimon, whereas Chazal would say that Shimon has been replaced by Reuven - or at least, significant aspects of him.

This is just conjecture.

1) Chazal do not equate loss of one's identity and death. They viewed the human and

animal organism the same way. By your logic, when it becomes feasible to perform a brain transplant while leaving the brain stem, which has no cognitive/mind function, in the original organism, the recipient will become the new "Reuven", but Reuven retains his own brain stem, which nobody denies is a critical component of defining death.

2) Chazal might have said that the heart and kidneys only retain their respective cognitive functions while housed by an integrated human organism. We do not know Chazal's view of the **extent** of the cognitive functions they provided - whether alone or in tandem with the rest of the organism, and whether other parts of the organism contributed, and how.

January 10, 2011 7:32 PM 📅

#### I. Wiener said...

This thing about the shechita reminds me of a question I asked my Rav on Shavuos. I had recently seen those videos on YouTube of the animals post-shechita that were scrambling around and seemed to be very much conscious and alive, and according to PETA in tremendous pain.

I asked my Rav how we reconcile what we know & say about shechita vs what the videos show.

He basically said "who says it's alive anyway? Do you trust Chazal or some meshuganeh with a hidden camera. If Chazal say that severing the simanim renders the animal dead and pain free, then thats what it is."

I agree.

January 10, 2011 7:37 PM 🖶



Natan Slifkin said...

So do you also reason as follows:

And who are we going to trust about kidneys providing counsel, and about animals spontaneously generating - Chazal, or some goyishe scientists? If Chazal say that the kidneys provide counsel, and that mice grow from dirt, then that's how it is!

January 10, 2011 7:40 PM 🖶

#### I. Wiener said...

Absolutely. Emunas chachamim is paramount. If it doesnt jive with science, it means we are lacking in bina, not Chazal.

January 10, 2011 8:20 PM 葷



noam said...

Thank you Rav Slifkin for stating the case for rationality much more eloquently than I could have.

In response to Akiva, at the present time it is not remotely possible to sever a brainstem and connect it to another brain. There are millions of neurons that would have to be matched up and healed. This is similar to but an even greater problem with what is being tried to heal severed spinal cords. While theoretically it may be possible in the future, there are many things that could be possible in the future, but I dont think that we base present halacha on possibilities that may or may not come to fruition in the future. Theoretically, if it were possible to seperate the brainstem from the cerebral hemispheres, and both parts were still functional, it would be necessary to determine which was the source of identity. The way it is viewed presently is that the brainstem contains(among other important structures) the reticular activating system, which is the 'on/off' system for the rest of the brain. Without it, the hemispheres have no chance of functioning. Therefore, under the present state of knowledge, the brainstem is the crucial part of the brain(it is also the home of the respiration centers, if that is going to be halachically important). However, memory, emotion, and other aspects of what we consider "personality" or "identity" are associated with the cerebral hemispheres. So, if it were possible to dissociate the hemispheres from the brainstem, and attach them to alternate structures, it would be necessary to determine which was associated with the person, and which wasn't. At the present time, loss of brainstem function(including the reticular activating system) automatically means that the hemispheres are also non-functional, so that loss of the brainstem includes loss of the cerebral hemispheric function. Therefore, at the present time, no determination needs to be made.

In fact, the situation is pretty similar to premodern medicine, when loss of heart function automatically meant that everything else, including the brain, ceased to function. With modern technology, that is no longer true, and it is necessary to decide whether the identity of the person is attached to the heart, the brain, the kidney or some other part of the anatomy. With regard to brain function, it is not yet necessary to make a division, since it is not possible technically to seperate the brain into functioning components.

To briefly respond to point number two, it is necessary for any posek, from Chareidi to reform, to establish what part of the human being is the seat of identity. If you do not, you have no way of knowing if someone who has lost an arm is still alive, no way of knowing if someone who has donated a kidney is still alive, and no way to claim that an organ donor is dead, as long as the organ continues to recieve circulation, even if it is in a 'new' body.

Noam Stadlan

January 10, 2011 10:30 PM 🖶

elemir said...

>>> Absolutely. Emunas chachamim is paramount. If it doesnt jive with science, it means we are lacking in bina, not Chazal.

I think it's very reasonable to assume that if someone had asked any Tanna or Amore a sheileh: Is it permissible to allow oneself to be cut open and have the heart's valves' "treated"? he most certainly would have been told that it's assur gomer.

So, I ask you Mr. Wiener, if a reputable heart specialist tells you that you need (God forbid) immediate life saving bypass surgery, would you go for it? after all khazal know better..

January 10, 2011 10:31 PM 🖶

Akiva said...

Noam,

I disagree with you on the necessity of Halachah taking into account future theoretical possibilities. Either we take Halachah at face value or we'll constantly be playing around with potential murder.

More importantly, though, you are looking at the brain stem/cerebral hemisphere from a unidirectional perspective - if the brain stem fails, all else fails. But you must look at it from the reverse angle - if we equate mind and self-identity with the soul, why not harvest organs from one who is in a persistent vegetative state with no chance of recovery of any cognitive functions, but has a functioning brain stem?

On the second point, we can only surmise a clear definition of what it is, but we know what it is not - אברים שאין הנשמה חלו eno eveileb I .msinagro eht ot largetni ton era יה בהם of the commentors on the hirhurim site mentioned the Gemara regarding דוג יצח being critical. Maybe. I do not know the answer to that.

January 10, 2011 11:11 PM 葷

#### I. Weiner said...

I prefer not to address hypotheticals. Chazal would never and have never forbidden something that saved one's life, and have never permitted something that knowingly put it in jeopardy. So your question is a non-sequitur.

January 10, 2011 11:12 PM 🖶

е

noam said...

Akiva,

There are an infinite number of possible advances you could think of in the fields of medicine, technology, and other topics that have not been addressed by halacha(just think of technology from science fiction, magic, etc). Just because you can think of it doesn't mean that it is or will be possible. Taking Halacha at face value doesn't mean that one has to address every single eventuality that can occur in your imagination. That being said, there are articles on theoretical halacha(R. Azriel Rosenfeld touches on this, as do the articles in Tradition by Loike, and recently a discussion of what conditions need to be fulfilled for an intellegent computer to be considered a person). IF technology reaches that point, and it is a very big 'if', then Halacha needs to address the issue halacha l'maaseh. Until that time it is something of theoretical interest. One POSSIBLE avenue, that I explored, was that the brainstem COULD be seen as simply an on/off switch, and, IF a different functional on/off switch could be found, one approach would be to assign the "identity" of a person to the cerebral hemispheres, and not the brain stem. This is just my thought al regel achat. It would have to take into account the unanimous position of poskim that a baby born only with a brain stem but no cerebral hemispheres(anencephalic) is considered a live human being for all purposes. You may be interested in knowing that a similar possibility has been raised by Dr. Alan Shewmon, except that he would divide the brain in half, and ask which half is the person(again, this is not something that is technically possible, and will not be possible at least for the near future). One could also suggest that advanced technology that will allow these advances will also enable us to make more accurate halachic distinctions. In fact, the definition of death has changed over the years, in step with medical advances. Please see Rabbi Reichman's excellent article on the topic.

You are correct however, that Halacha does need to address everything that realistically is possible. So, for example, it is possible to take the head off one person and attach it to body of another person. This has been done in monkeys. So, if you take the head of Reuven and attach it to the body of Shimon(and destroy the rest of Reuven and the head of Shimon), Who is the person that is left? which wife sits shiva? It is an easy question to answer for those who hold by neurological criteria. But if you are holding by circulation, how do you answer that? If you hold rosho v'rubo(I think mentioned by R. Shalom Spero) how do you answer it?

In answer to your second point, someone in a persistent vegetative state(PVS) has brainstem AND cortical function. It is not one or the other, they have both. Secondly, there have been rare cases where people have improved after being labelled as PVS(something that has NOT happened after fulfilling criteria for brain death). In addition, more recent studies with functional MRI and other sophisticated functional testing have shown that some in PVS may have more function than previously realized. Therefore unless a person fulfills criteria for brain death, it is not possible to determine that just the cortex is not working.

"you can only surmise what it is".. so essentially you find problems with my position because it doesn't specifically answer questions about some theoretical possibilities, but the definition that you advocate cannot answer questions regarding very real and technically pretty easily achievable realities.

I Weiner- Chazal prohibited violating Shabbat for the sake of a baby born in the 8th month of gestation. These babies are viable, and my guess is that you will not find a posek who paskens by that gemara in this day and age.

January 11, 2011 12:52 AM T

Pliny said...

Noam writes: "To briefly respond to point number two, it is necessary for any posek ... to establish what part of the human being is the seat of identity."

This whole "seat" thing bothers me. A physical thing can have a seat in another physical thing, but how can a non-physical soul have a seat anywhere in the physical world? Most modern people just assume it's in the brain because we assume that if a brain were transplanted, the recipient would have the donator's personality. Most modern people assume it's not in the heart because the recipient of the heart does not have the donator's personality. But none of this is conclusive. Maybe the "seat" of the soul, if there is such a thing, is in the blood, but this soul is "stuck" to the blood; it is not sent along with the blood when the blood is transferred to another person. At least there's a passuk that could be interpreted that the soul is "seated in" the blood: Leviticus 17:11 "For the life of a creature is in the blood".

Of course, I suppose R' Slifkin can say that the Torah is wrong on the science here. Not that the Torah didn't come from God, chas v'shalom, but simply that it was speaking to the ancient Jews.

January 11, 2011 4:30 AM

Maverick said...

#### @ I Wiener:

But Chazal did just that! Based on inaccurate medical assertions they may have prevented people from engaging in healthy practices, and definitely endangered people's lives. Bloodletting is harmful and can be life threatening, and rotten fish is poisonous, but Chazal were proponents of using them!

If you respond Nishtana Hatevah and what was healthy then is unhealthy now (or the sun passes behind the sky at night then but doesn't now), then EACH AND EVERY statement of Chazal is unreliable and should never be taken into account seriously. Besides being able to Nishtana Hatevah any statement of Chazal, if the laws of physics change (especially if there is a Unified Theory) then the Universe is different and the present and past states become incomparable and irrelevant to each other. If Chazal is in that past state, then they are irrelevant.

If you say they were speaking on a spiritual level and their statement should not be taken literally, then I can respond: Chazal's statements about death had spiritual but not actual import.

January 11, 2011 4:36 AM T

IH said...

Joel Rich observes "Interesting is even "academics" within the halachic system would likely agree to an extent - that halacha is evolutionary and sharp changes don't work - but IIUC they would suggest that information would be assimilated into the system and eventually reflected"

This debate, similar to the issue of the changed role of women in society being debated on Hirurim, is about this very question: how does halacha evolve to the societal (including scientific) context. So, who in Orthodoxy, with mainstream credibility, is doing the relevant deep thinking on this broader meta-question of the halachic process?

January 11, 2011 6:31 AM

Hershy said...

Maverick,

Small comment: Chazal never said to eat rotten fish, only "close to its rotting," which is not poisonous.

January 11, 2011 6:54 AM 🖶

IH said...

Incidentally, for those of you haven't seen it, the extraordinary Hand Rosling video visualizing 200 years of global health statistics is very valuable context for this discussion:

http://www.youtube.com/watch?v=jbkSRLYSojo

January 11, 2011 8:08 AM 着

Pliny said...

Correction: Earlier, I wrote: "but this soul is "stuck" to the blood." I meant to write: "but this soul isn't "stuck" to the blood."

January 11, 2011 9:32 AM

Zohar said...

IMHO, the midrash yalkut shimoni here brought by Akiva is probably a later midrash, and the views expressed therein should not be attributed to the tanaim

January 11, 2011 11:07 AM T

Akiva said...

Noam,

PVS may not qualify for my test case due to technicalities, though I wonder if the absence of "higher functioning" cognitive aspects of the cortex would make one consider whether this person should indeed be considered as possessing a mind. But no matter. Anencephaly fits as a test case. The organism only has a functioning brainstem, no ability to be conscious ever, and is blind and deaf. If the mind is the soul, why may we not harvest his organs?

You also must bear in mind that just because you have AN answer to a dilemma, and I have a number of options that I cannot definitively choose one of, does not make my case any weaker or yours stronger. You want to overturn two millenia, at least, of existing halachic jurisprudence, not I. If there are reasonable doubts about your case, or, there is reasonable doubt that I might be correct, it won't change. Your case must be pretty much airtight to permit what would have been considered Retzichah, and all I need to do is cast some doubt.

January 11, 2011 1:22 PM 🛅

Anonymous said...

This debate, similar to the issue of the changed role of women in society being debated on Hirurim, is about this very question: how does halacha evolve to the societal (including scientific) context. So, who in Orthodoxy, with mainstream credibility, is doing the relevant deep thinking on this broader meta-question of the halachic process?

Funny you should say that - I was just venting to my wife that we seem to have the same debate in a number of contexts and I don't understand why so many electrons need to be spilt over what seems to be a very simply stated (but not resolved) issue.

KT Joel RIch

January 11, 2011 2:15 PM 🖶

#### I. Wiener said...

Actually, blood-letting is coming back into practice because it is beneficial, not harmful.

I have a more religious question than practical: Everyone has heard the stories of people who are near death, and all current medicine was tried and failed. Then some rebbe gives a bracha or says to drink some strange concoction like tea made from caraway seeds or such, and the person gets better to the astonishment of all the doctors. Do you say miracle or what?

January 11, 2011 4:39 PM 🖶

noam said...

Akiva, I did not say(or if I did, I did not mean to say) that the mind is the soul. My position is that when the human brain has been destroyed to the point that it has irreversibly ceased to function, the person is dead. If we define death as the departure of the soul, which is perfectly reasonable, then the soul has departed. The presence or absence of the soul is not something that can be determined through science. The determination of death is actually the determination of the first point in time when it can be known with certainty that the soul has departed, it is not necessarily the exact time of the departure. Science has not reached the point where it can determine with certainty which exact part of the brain holds the soul, and it may be that this particular determination is not possible. However, that does not impugn the idea that the brain as a whole is the seat of the soul.

Let us start with a live human being, and agree that he has a soul. We are going to remove parts and destroy them, and you tell me when the person is dead. First we cut off that person's arms and legs. So we have to decide if the soul went with the arms and legs, or stayed with the rest of the body. If the soul stayed with the arms and legs, and they are destroyed, then the soul has been lost and the person is dead. If we take out the kidneys and substitute a dialysis machine, you have to decide if the soul went with the kidneys. Next we we detach the head(with the brain), and attach just the head to a circulation pump. This has been done in monkeys. The head can mouth words, daven in fact, chew, and the brain waves(EEG) are normal. Is the head alive? has the soul gone? are you going to make the claim that a head that can daven, see, communicate, hear and think is dead?

Next we take the brain out, so that all is left is an empty skull and face, but it all still has circulation since it is attached to the pump. Next we destroy the rest, except leave one ear attached to a pump, so that ear has circulation. As the final act the ear is destroyed. So, when did the person die? when did the soul leave? If you are a posek, and each of these events happened on a seperate day, when do you tell the family they are aveilim, when is the wife a widow? And, by the way, if you want to say the ear by itself with circulation is still an alive human being, then you have to explain why, if I cut off an ear, and attach it to a pump, I have not created a new life. (By the way, some of this is discussed in much greater detail in the Meorot article that R. Slifkin kindly referenced in his new post. I suggest you read it as it may answer more of your questions)

Death is a label that is applied to a person. Outside of the Halachic realm it is not easy to prove or disprove a definition, since it frequently results in circular logic. However, a definition that provides coherent answers to all TECHNICALLY POSSIBLE situations

has to be prefereable to one that fails to do so.

I would also make the claim that Halacha has used science in the determination of death, and in fact the exact definition of death has changed over time to reflect medical advances. Therefore, the failure to use medical advances in establishing the halachic definition of death is in fact, the departure from tradition. Your position, in its deviation from the usual way halacha has been determined, is in fact the non-traditional one. Our Mesora has in the past taken into account medical advances in the determination of death.

January 11, 2011 5:37 PM 🖶

Akiva said...

Noam.

Please answer the question - do you support harvesting organs of an anencephalic patient or not? Why or why not?

January 11, 2011 6:54 PM 🖶

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noam said...

I will answer your question, and in return I expect that you will answer not only the question that I posed in the previous post, but 2 more questions: please give a definition of a human body- in other words, what organs or functions need to be present for that group of human tissue to have the label of an alive human being. and, number two, if the presence of circulation is a criterion for distinguishing between life and death, please define circulation and how you came to that definition- in other words, what has to be circulating, where does it have to be circulating, how fast, etc.

In answer to your question, a baby born with only a brain stem, an anencephalic, has brainstem function, which is brain function. The baby is considered alive as long as that function is present and harvesting organs would be murder.

I understand that you are trying to make a chiluk between brainstem function and function of the cerebral hemispheres, and trying to determine which part of the brain is crucial and which is not. It is a fascinating question. But it is moot at this point. If brain function is present, the person is alive, and we assume the soul is still there, and if brain function has ceased, the soul has similarly left. Some dont want to use the concept of the soul, which is fine. You can substitute 'the seat of personal identity'.

By the way, you could ask similar questions when using a circulation/respiration definition of death. If you find that a person has no pulse, is the soul still there? if the heart restarts has the soul returned? Does the soul leave after 5 seconds without a pulse? 30 seconds? 10 minutes? If you start CPR and the body has circulation even after being pulseless for 15 minutes, did the soul return? was it ever gone? How do you know?

# January 11, 2011 7:41 PM 🖶

Akiva said...

In answer to your question, a baby born with only a brain stem, an anencephalic, has brainstem function, which is brain function. The baby is considered alive as long as that function is present and harvesting organs would be murder.

Does this not demolish the equation of the MIND and the soul?

I am neither a medic nor a world-class Posek, and have no informed opinion on your questions. I do not know.

January 11, 2011 8:12 PM 🖶

Maverick said...

@I Wiener:

"Today it is well established that bloodletting is not effective for most diseases. Indeed it is mostly harmful, since it can weaken the patient and facilitate infections. Bloodletting is used today in the treatment of a few diseases, including hemochromatosis and polycythemia; however, these rare diseases were unknown and undiagnosable before the advent of scientific medicine."

How could Chazal be proponents of a technique that was harmful or useless in the vast majority of cases as a normative treatment of disease?

@Hershy:

Thanks for the correction.

January 11, 2011 9:07 PM 葷

noam said...

Only if you define the mind as absent when the cerebral hemispheres are absent. I think I would define anyone with brain function(even only brainstem function) as having some sort of mind. It also depends on how you want to define the word 'mind'. They may or may not be self aware, and there isn't any way as far as i know to test for self awareness in the absence of communication.

I guess the question you are getting to is can you have a soul without a mind? I think you are getting out of science and into metaphysics, and I am not sure that science can provide an answer to that.

Regarding the questions: you appear to be an very intellegent person, and you ask good questions. I hope that you will think about the questions I posed, and perhaps even ask them of your ray or posek. If you think about the answers, it should become clear that you cant define the necessary elements of a human being without including a working brain. This means that without a working human brain, the person no longer exists. So, even though you may want to hold a halachic position that defines death as the absence of circulation, if there isn't a functioning brain present, there really isn't a person there anymore, and it becomes moot if circulation is present or not. There is a similar issue with defining exactly what circulation is or has to be. We assume that when we say circulation we mean blood that has oxygen and can sustain human tissue. But, what if there is water circulating? does that qualify halachically as circulation? Why or why not? If we assume that Halacha defines circulation as something adequate to support human tissue, the next question is what tissue has to be present and supported? can it be just an arm or a leg? You should quickly realize that defining life as the presence of circulation depends on a lot of assumptions that dont have to be true. And, when you examine the assumptions carefully, they lead you to the conclusion that the only circulation that actually has meaning is when it supplies a functioning or potentially functioning brain.

<u>January 11, 2011 9:24 PM</u> 葷

Mayerick said...

@I Wiener:

Regarding your "stories":

- 1. You have to show documentation of those stories, beyond "I heard from so-and-so..."
- 2. You have to account for the Placebo effect, which would probably be especially significant in this case.
- 3. Many "folk medicines" may have an effect, although these are probably in the minority. For example, the anti-Alzheimers and anti-Cancer chemical curcumin (which I am presently researching) has been incorporated into the Indian diet for a long time. You have to show that the "treatments" these Rabbanim gave were not themselves significantly effective.
- 4. You have to show these incidents were unlikely. If there is a thousand to one chance that someone will survive, and the Rav "treats" a thousand people and one of them survive, the Rav has had no effect. In addition to all the "successes" you have to document the number of failures, and show that the cohort "treated" by a Rav fared significantly better on the whole than a comparable cohort not treated by a Rav. You also have to account for self-selection, and a host of other factors. Summarily: I highly doubt that your claim could be backed up by good data.

To answer your question "Do you say miracle or what?" I say that the ability of

Rabbanim to carry out miracles is not supported by data and as it flies in the face of well supported findings and conclusions the claim of miraculous powers can be treated as being false.

January 11, 2011 9:33 PM 🖶

Akiva said...

Noam.

How much of the rest of the organism would need to be present in the anencephalic baby for you to consider it alive?

January 11, 2011 9:35 PM 🖶

#### I. Weiner said...

Maverick: Why not say the Rav had an effect, just not every time because the patient wasn't worthy of such a cure? The doctors give the patient 24 hours to live, the Rav goes in, does his thing, the doc takes a new xray and poof, no more tumor. I say the Rav performed a miracle. If the tumor is still there, than either he didnt try hard enough or Hashem saw to it that the patient had to die anyway for some unknown reason. Actually I do know personally, told to me by the patient himself, of such a case. The caraway tea cured him of a heart condition and he was told he had less than 24 hours to live. The wife went to a mekubal, gave him the tea, and voila, he's still around today. Whats more amazing is that the mekubal said to the wife, you have a bag of seeds in your cupboard, make tea from it and give it to your husband. The mekubal had never been to their house. The bag of seeds came from the wife's grandmother who before she dies gave it to her and said one day you will need this.

It's not rational, but it is true, and it is a Neis, no doubt about it.

January 11, 2011 9:55 PM 🖶



noam said...

Akiva- As long as the brainstem has recogizable clinical function, such as reflexes and/or directing spontaneous respiration. I have not made a study of how much more tissue is necessary for a newborn to be determined to be a human being, as opposed to non-human collection of tissue.

January 12, 2011 1:43 AM 🖶

Yitzi said...

The Chasam Sofer gives a definition of death according to the Torah, then adds "no winds in the world" will move us away from the position of the Torah.

Rabbi Slifkin: do you think the "wind" of current scientific-medical knowledge would move the Chasam Sofer away from his position?

January 12, 2011 1:57 AM

YoelB said...

Science's story about itself is that its understanding about nature isn't static but changes, "evolves," as information becomes fuller and more precise. Part of *that* evolution has been the development of the concept that biological processes operating over many generations (however long that may be for a given organism) mean that types of organisms, species, are capable of (and do) change.

Our mesorah's story about itself is somewhat different, and more diverse than science's. The dominant strain in the Chareidi world has bet the farm on a limited subset from that diverse range.

Rabbi Slifkin, with respect to the kidneys: as I understand medical history, up until relatively recently (into the era of the Acharonim) the kidneys and adrenals were conflated. This doesn't change your basic point about the seat of will and consciousness, but I consider a catecholamine dump from the "kidneys," aka the adrenal medulla, into the blood to be a fairly forceful piece of advice, and "kidney" weakness in the form of chronic cortisol excess or deficiency (even outside of the ambits of Cushing's and Addison's diseases,) to be a persuasive piece of advice about how much one can do in life.

Finally, I don't know about *Rabbanim* and miracles, but the Catholic Church has investigated cures at its shrine in Lourdes and, following medical investigation, certifies some as miraculous. FWIW.

January 12, 2011 4:59 AM 🖶

Akiva said...

YoelB,

I have long thought that Gemara to be referencing the adrenal (ad-renal) glands. Yishar Koach.

January 12, 2011 6:49 AM

Akiva said...

Noam,

Then have you not reduced the definition of life to nothing more than reflexes and respiration?

January 12, 2011 6:51 AM m



YoelB said...

Akiva, baruch tihyeh. Certainly in classical Chinese medicine, adrenal related problems are mainly a "kidney" thing.

Classical Chinese medicine is interesting in this context: it includes approaches somewhat similar to the historical humoral approach in Western medicine, but because of the discipline of pulse diagnosis, which is teachable and seems to be reproducible, its explanations can be seen as useful metaphors. You don't have to give up your understanding of physics, chemistry and biology to perceive an imbalance between wood and fire, and carry out a treatment plan based on *that* understanding. But because both the 5 elements and the periodic table have strong empirical bases within their observational system and neither requires a single, dateable, recent creation, they can coexist.

January 12, 2011 8:11 AM 葷



Natan Slifkin said...

I consider a catecholamine dump from the "kidneys," aka the adrenal medulla, into the blood to be a fairly forceful piece of advice, and "kidney" weakness in the form of chronic cortisol excess or deficiency (even outside of the ambits of Cushing's and Addison's diseases,) to be a persuasive piece of advice about how much one can do in life.

That is **absolutely not** what Chazal were talking about. Have you seen the sources? Have you read my essay?

January 12, 2011 8:21 AM 🖶



<u>הגיין</u> said...

R.NS: "Most (but not all) of those who reach conclusions about the halachic status of brain death, whether for or against, do so by examining the words of Chazal and the Rishonim, from which they draw various inferences."

Who are those who do not?

Thanks.

### January 12, 2011 6:06 PM 🖶

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noam said...

Akiva- The definition of death has always been not the exact moment that life has ended, but trying to establish the first moment that there is certainty that the life has ended. No one as far as I know can measure human life(or the presence of the soul if you want to use that construct). Therefore, irreversible loss of brain function, as demonstrated by permanent absence of breathing and reflexes(in the case of the brainstem) is the earliest timepoint where we can know with certainty that the person is dead. That doesn't mean that the reflexes and breathing are life, only that when they are present there is the potential for life, and we assume that it exists, and when they are absent, we know that the human life has ended. that is why we apply the label of dead.

January 12, 2011 8:45 PM 🖶



Natan Slifkin said...

...dias הגיין

R.NS: "Most (but not all) of those who reach conclusions about the halachic status of brain death, whether for or against, do so by examining the words of Chazal and the Rishonim, from which they draw various inferences."

Who are those who do not?

rationalistmedicalhalacha.blogspot.com

January 12, 2011 9:08 PM 🖶



said...

R.NS: "[...] rationalistmedicalhalacha.blogspot.com"

Thanks, R. Slifkin. I've been following that site since you mentioned it not long ago.

I see now that my question was imprecise. Any *poskim*, past or present, that you know of?

Thanks.

January 12, 2011 9:37 PM 📅

Akiva said...

That doesn't mean that the reflexes and breathing are life, only that when they are present there is the potential for life, and we assume that it exists, and when they are absent, we know that the human life has ended. that is why we apply the label of dead.

What other functions that (may) exist in this anencephalic baby do you think might qualify as the true moment of death? Were we to eliminate that function as emanating from the brainstem, would you advocate harvesting its organs?

January 12, 2011 9:51 PM 🖶

noam said...

Akiva, there is a mystery to life and the soul that is not explainable by science, at least the present level of science. The most accurate statement I can make is that when brain function is present, it is possible for there to be human life and the soul to be present, and when the brain has irreversibly ceased to function, the human life has ended and the soul has departed. Please note that I have not equated brain function with the soul, merely that the presence of brain function indicates the possibility that the soul is present.

January 13, 2011 6:40 PM 葷



That is absolutely not what Chazal were talking about. Have you seen the sources? Have you read my essay?

I read your monograph shortly after you posted it. As I said, [t]his doesn't change your basic point about the seat of will and consciousness or dispute Noam's fine exposition, which is nonetheless incomplete in a related but non central way. The heart can continue to pump regulated solely by the pressure of the blood entering and leaving it; were this not so, heart transplantation would be impossible. The life and death implications of what Noah wrote, and of your questions, remain. And Halachic (and medical) determination of whether a person is dead or alive necessarily must boil down to a binary determination: dead or alive? That is an excellent hammer, and while the dead or alive question is a good nail, not everything else is.

Speaking of things that aren't nails, the heart's ability to communicate to the body that contains it is not completely abolished by cutting its nerve connections (which, according to some studies, may at least partially regenerate over time anyway.)

The heart has a significant intrinsic electrical activity with some interesting properties, including that the that the frequency of the heart's electrical output may fall along a continuum from a noisy looking spread of frequencies to a single narrow peak of frequencies; the two states of noise and coherence appear to correlate with different physiological parameters such as heart rate variability including brain wave activity, as well as felt sense of the body and states of consciousness.

The single frequency peak also appears to be able to entrain other electrophysiological phenomena, including brain wave activity -- and not just in the person whose heart it is, either.

To move away from physiology for a moment, it is a common, if not universal, cross-cultural phenomenon that when asked to indicate themselves people point to their hearts. Why that should be is an interesting question, though not, I think a halachically relevant one. In that respect your thesis stands.

However, my point about the kidneys, or "kidneys" also stands. Chazal and the Rishonim did not, as I understand it, differentiate the kidneys and the adrenals; certainly the science of their day did not, nor, as I understand it, did anyone before about 1550 CE. Inasmuch as the word "adrenal" is not found in your monograph, I am assuming that this fact pertaining to the history of anatomy did not occur to you or else you would have addressed it, if only to dismiss it.

I don't consider it to be far fetched at all to ascribe an emotional or advisory function to the adrenals. Hence the kidneys, or rather "kidneys" could be advisory to the seat of consciousness; it's just that that isn't the heart. Am I trying to "vindicate" Chazal? Not at all. The crux of your question remains, and I am not addressing that. I think your analysis of metaphor vs fact is still good, too.

January 16, 2011 9:19 AM 🖶

YoelB said...

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January 16, 2011 9:20 AM

E YoelB said...

(continued)

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January 16, 2011 9:20 AM 👚



YoelB said...

I would like to comment on the following relevant quotation from an earlier post: *Chazal lived in a world where a person's mind and soul were mistakenly thought to relay their force and influence from the heart, via blood and breath, rather than from the brain, via neurons and nerves. That sentence cannot be emphasized enough.* 

The word "mistakenly" is not precise and has connotations that are unfortunate. To not know something that nobody of their era knew isn't really a mistake.

"Wrongly" would work, and "from the brain, via the yet to be discovered neurons..." might be even better.

January 16, 2011 3:33 PM