Talmud Bavli, Yoma 85a

תנו רבנן עד היכן הוא בודק? עד חוטמו ויש אומרים עד לבו... נימא הני תנאי כי הני תנאי: דתניא מהיכן הולד נוצר? מראשו... אבא שאול אומר מטיבורו... אפילו תימא אבא שאול: עד כאן לא קא אמר אבא שאול התם אלא לענין יצירה דכל מידי ממציעתיה מיתצר אבל לענין פקוח נפש אפי' אבא שאול מודי דעיקר חיותא באפיה הוא דכתיב (בראשית ז) כל אשר נשמת רוח חיים באפיו

Concerning clearing rubble from a building that collapsed on a person on Shabbat: the Rabbis discussed in a Baraisa what part of the [unconscious] body do you need to check to determine if he is dead or alive? Since digging on Shabbat is only permissible to save a life, if you discover the person is dead, you have to stop digging.

- 1. *Nose:* The first opinion says dig until you uncover the nose. If he is [unconscious and] not breathing he's dead.
- 2. *Heart:* **Some** say you check his heart. If [he is unconscious and] his heart is not beating he is dead.

The Gemara suggests that this debate between the nose and the heart is similar [ask yourself why?] to another dispute among Tannaim concerning what part of the embryo forms first inside a pregnant woman, the head or the naval.

1. *Head:* One opinion says the head forms first inside the uterus, based on verses.

2. *Navel:* Abba Shaul said the navel forms first inside the uterus, based on a verse.

The Gemara rejects the connection between the Baraisos because the first debate is talking about signs of human life, while the second debate is concerning what part of the human body begins to form first in the womb. There is no conceptual connection. [So why did they compare them?] The Gemara says that even Abba Shaul (who said the navel forms first) can still agree with the first opinion of the first dispute about checking the nose for signs of life. "With regards to saving a life, even Abba Shaul agrees that the essence of life is found at the nose, as it is written in the Torah [concerning the flood in the time of Noah] "All in whose nostrils was the breath of the spirit of life, of everything that was on dry land, died."

OBSERVATIONS

- Unconscious: The Gemara must be talking about someone who is unconscious. If he had been conscious, the person would clearly have been alive regardless if you can or cannot detect breathing or pulse.
- 2. *Heart is the minority opinion:* The fact that the Talmud says "Some say" and it is listed second shows this is the minority opinion.
- 3. The nose wins: The Gemara, the Rambam, and the Shulchan Aruch all conclude that cessation of autonomous breathing is death. They do not mention cessation of heartbeat in their psak. Some claim that since at that time (4th CE) if one function stopped (respiration) the other (heart beat) stopped very soon afterwards (there was no ventilator to supply oxygen to allow the heart to continue to beat) so cessation of breathing also indicated cessation of a heartbeat - so there is no practical difference and you need to wait for both to stop. The counter argument is that the mere fact that there is a debate in Chazal as how to establish the moment of death means that there is a difference between them! If they assumed that one happens almost instantaneously when the other happened – there is no point in the debate. Moreover, we find examples in Chazal discussing theoretical situations in their time which subsequently became real issues [e.g Chagiga 15a – artificial insemination in bathtub – at that time such a situation was not possible]. Hence, even if in their time the "nose &
- heart/naval" argument was only theoretical it has far reaching consequences when it becomes practical such as today.
- 4. *Nose & navel:* Is our printed Gemara the original Gemara? Besides Rashi and the Me'iri, all other Rishonim had a Talmudic text which reads the debate (the first one concerning the end of life) as being between the nose & navel. Such a text would mean it was merely a diagnostic debate (do you check the nose or the navel) for breathing (It was written before the invention of the stethoscope.)
- 5. *Nose & navel:* 11 out of 14 Talmudic manuscripts extant today cite the debate as between nose & navel.
- 6. Nose & navel: The Yerushalmi has the debate between nose & navel
- 7. *Nose & navel makes sense:* If the original Gemara originally understood the debate as nose and navel, the comparison to the fetus debate (head and navel) finally makes sense in that they both mention the same body part, navel.
- 8. What do you check the heart for? Even assuming the original debate was between "nose & heart," most likely breathing was still the critical issue because in those days the heart was considered a respiratory organ not a blood-driving one (circulation by heart discovered only in the 17th century). So even according to Rashi who lists the heart-beat as a critical element, it was still for him a clinical debate about breathing and not a difference in principle between blood circulation and breathing.



Oholoth, Chapter 1, Mishnah 6

אדם אינו מטמא, עד שתצא נפשו: אפילו מגוייד, אפילו גוסס זוקק לייבום, ופוטר מן הייבום, מאכיל בתרומה, ופוסל בתרומה. וכן בהמה וחיה אינן מטמאין, עד שתצא נפשם. הותזו ראשיהן אף על פי שהן מפרכסין טמאין, כגון הזנב של לטאה שהיא מפרכסת.

Humans do not impart impurity until the soul expires. Even if he was chopped up, even if he was in the throes of death, he obligates Levirate marriage and he exempts from Levirate marriage; he permits the eating of Terumah and he disqualifies from

Terumah. Likewise, a domestic and a wild beast do not impart impurity until their souls expire. If their heads were cut off, even if they were still convulsing, they are impure, like the tail of a lizard which convulses.

קהתי

אדם אינו מטמא: Human do not impart — corpse — impurity until the soul departs — thus: "Whoever touches a corpse, the soul of a person who has died" (Numbers 19:13) — i.e. he does not impart impurity until he dies (Sifrei), i.e. when he is completely dead, viz., when breathing stops (Tiferet Yisrael, following Yoma 85a) — even if he was chopped up, even if he was in the throes of death — some refer "chopped up" to a person who is definitely about to die, but still retains a clear mind and "in the throes of death" to a person whose mind is gone, but could survive; both of these do not impart impurity (Eliyahu Rabah).

לייבום: He — a dying person, still — obligates levirate marriage — i.e., if his brother had already died childless and he was the only living brother, his sister-in-law may not marry anyone else until his soul expires — and he exempts from levirate marriage — i.e., if his father died while he was in his death throes leaving no

other offspring, his father's wife is permanently exempt from marrying her brother-in-law since her husband had living offspring when he died. *He permits the eating of Terumah* – i.e., an Israelite woman who married a kohen may eat Terumah so long as her husband, or any offspring she had from him, still lives (*Yev. 9:6*), even if he was in his death throes.

וכן בהמה: Likewise, a domestic animal and a wild beast do no impart — nevelah — impurity until their souls expire — and similarly for a sheretz (Sifrei, ibid.; see Tiferet Yisrael).

הותזו ראשיהן: If their heads – i.e. of people or anmals – were cut off – even if still attached to the body by the skin (Rambam) – even if they were still convulsing, they are impure – as corpses or nevelahs, or dead sheratzim; the convulsion is viewed – like the tail of a lizard – after it is cut off – which convulses – quite actively for some time, although not alive.

Rambam's Commentary on the Mishnah

ופרוש הותזו ראשיהן הובדלו ראשיהן. מפרכסין מתבוססין, והתנועה שמתנועעין האברים אחר המות קוראים אותו פרכוס. ולטאה הוא "אלסאה אברץ" לפי שבעל חי זה מתנועע זנבו זמן מה אחר שנכרת. ויארע זה למקצת מיני בעלי החיים אם לא היה הכח המניע מתפשט בכל האברים מיסוד ומוצא אחד אלא יהיה מפולג בכל הגוף.

הותזו ראשיהן: Their heads were separated from their bodies (decapitation). מתבוסטין מפרכטין: מפרכטין (?) bodily movement after death is called פרכוס. The lizard (thought to be the newt) is known as אלטאה אברץ because this animal moves its tail for a short period of

time after it is cut off. This happens to a few species of animals when their bodily movement is not controlled from **one centralized source in the body** and the limbs moves independently and separately from each other.