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Circumcision during Neonatal Jaundice

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summary

The subject of this study is circumcising a baby with neonatal jaundice. This is a medical-*Halacha* issue. On the one hand, the *Halacha* should instruct whether it is required/allowed/forbidden to circumcise a baby with jaundice. On the other hand, it is a medical issue to determine if there is a medical risk in performing the circumcision in such a case. Hence, this study includes both areas of expertise: the medical and the *Talmudic-Halachic*.

This study is based on the latest medical literature. It should be noted that important progress has been made in the last decades in the medical understanding of the jaundice mechanism and the risks of high levels of bilirubin in the blood.

This study also deals with the *Talmudic* discussion and its interpretation by *Halachic authorities* and circumcisers' records throughout the generations, in which it was mentioned that it is forbidden to circumcise a "green baby". This, in order to determine if there is a reference in *Chazal* that forbids circumcising a baby with jaundice.

The dilemma of circumcising a baby with neonatal jaundice is very common. Two out of three infants during their first week and over 30% on the 8th day appear yellow to the untrained eye.

In the *Halachic* literature hundreds of answers can be found on this subject. There is no singular *Psak* regarding this *Sugya*, the same thing is true regarding the reason. Nowadays, it is accepted among circumcisers that *Chazal* forbade circumcising a baby with jaundice without distinguishing its cause. According to the circumcisers, that is what *Chazal* meant by forbidding to circumcise a "green baby". This study undermines this opinion based on both *Halachic* and medical grounds.

The first chapter gives a medical survey of neonatal jaundice. In that chapter the causes, treatments and risks of jaundice are described and explained. The distinction between physiological neonatal jaundice, which is a normal developmental process for an infant, and pathological jaundice, which is caused by illness that requires treatment, is explained. The conclusion of this chapter is that in the case of physiological jaundice there is no medical reason to forbid circumcision of a full-term infant when the level of bilirubin is lower than 25mg/dL without comorbidity.

The second chapter discusses the meaning of the color green in the bible and in *Chazal* as a basis for the "green baby" *Sugya*. In that chapter it is proven that the word "green" in ancient sources included several colors and at least the following colors: green, yellow-orange, blue, pale. Hence, there is no necessity that the color of the "green baby", which *Chazal* forbade circumcising, should be understood in the meaning of green nowadays. Instead, it should be understood by the context in order to understand which color *Chazal* meant.

The third chapter analyzes in detail the statement of Rabbi Nathan that "a green baby is not to be circumcised until his blood drops". That statement of Rabbi Nathan can be found in 5 different sources in *Chazal* literature in different contexts. This chapter discusses the context of that statement in each source in order to understand what the color of the baby was and what his illness was. The main conclusion of the chapter is that the baby was not yellow, but green as leek whose leaves are green and its tuber is white. Moreover, it seems that the baby suffered from a genetic illness, which caused his older brothers to die after the circumcision.

In the fourth chapter there is a synoptic survey of Rabbi Nathan statement in the 5 sources in *Chazal* literature. The survey compares manuscripts and the *Vilna printed Edition*. The survey shows that there are significant differences between those sources. The *Talmud Yerushalmi* doesn't mention that the baby was green unlike the other sources. In addition, there is a contradiction among the different sources on how many older brothers of the baby died after the circumcision, whether two or three.

The fifth chapter elaborates and explains extensively the interpretations of the *Rishonim* on that *Sugya*. The *Rishonim* raised several different interpretations and even disagreed on the color of the baby. According to *Rashi*, the baby was green as grass, i.e. green in the modern meaning. On the other hand, the *Rambam* probably understood that the baby was pale. These two interpretations are each supported by the *Talmudic* statement that the baby was green as leek because its leaves are green and its tuber is white. According to Rabbi Gershom Hagozer, the baby was yellow as turmeric, however his interpretation seems to be contradicted by the *Talmud*. The etiology of the green color of the baby is controversial among the *Rishonim*. *Rashi* and other *Rishonim* opine that the green color was caused by an extreme blood deficiency, while others related it to other causes. It seems that the *Rishonim* relied on erroneous medical conceptions and knowledge that were accepted by physicians in the middle age prior to the discovery of the circulatory system in the 17th century.

The sixth chapter discusses the interpretations of the *Acharonim* on this *Sugya*. Starting 300 years ago the color of the baby has been amply discussed by the *Halacha deciders* and in circumcisers' literature. This question is still discussed nowadays. This chapter shows four different approaches of the *Acharonim* regarding the color of the baby, which is forbidden to be circumcised: a) green, yellow or blue; b) green or yellow; c) only green; d) only yellow. Also, it is proven in this chapter that several of the *Acharonim*, who dealt with this Sugya (and even the physicians they consulate with), didn't know what the etiology of jaundice is, which affected their decision.

The seventh chapter elaborates on modern interpretations of this *Sugya*. In the past 100 years, this *Sugya* also started to be interpreted by orthodox Jewish physicians. Those physicians tried to interpret that *Sugya* in light of the updated contemporary medical knowledge. All of them estimated that the baby was anemic, as was implied by the statement of Rabbi Nathan that the baby didn't have "*Dam Brit*". The controversy between the physicians' interpretations is the cause of the anemia and several options were raised by them. Another hypothesis suggested that Rabbi Nathan didn't mean a specific illness, but a general sign of blood deficiency, which may be related to many different diseases.

The eighth chapter summarizes the *Sugya* of the "green baby", which is discussed from the second till the seventh chapter. This chapter lays out the main methods to identify the "green baby". This chapter is a basis for the ninth chapter, which concludes with a practical conclusion regarding a baby with neonatal jaundice.

The ninth and last chapter attempts to present a practical approach regarding the dilemma of circumcising a baby with neonatal jaundice that is based on the medical survey of the first chapter and the different Halachic aspects, which were discussed from the second till the eighth chapter. The conclusion of this chapter is that there is no basis to forbid circumcising a baby with neonatal jaundice after an expert physician confirms that there is no risk in performing the procedure. The reasons for that approach are that the *Peshat* implies that the color of the baby wasn't yellow. Even if it was yellow, one of the Rishonim didn't require that the baby facial color would return to normal, but only to ensure that there is no risk to perform the circumcision in his condition. Moreover, some of the Rishonim wrote that it is forbidden to circumcise an extremely "green baby". However, we do not have a measurement to distinguish "extremely green" from "slightly green". Hence, it appears that the decision on that matter should be made by physicians who reached to conclusions regarding the level of bilirubin, which is a risk for the baby. As proven in this chapter, this is the instruction of two contemporary Halacha deciders.