

Weight of the kidney is important when considering transplantation.

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Abstract

When it comes to kidney transplantation, one important factor that must be taken into consideration is the weight of the kidney. Kidney weight plays a crucial role in the success of the transplantation, as it can affect the function of the transplanted kidney and the overall health of the recipient.

Keywords: Kidney, Transplantation, Kidney transplantation, Nephrology.

Introduction

The normal weight of a healthy adult kidney is around 120-150 grams. However, in patients with chronic kidney disease, the weight of the kidney may increase due to various reasons such as inflammation, scarring, or cyst formation. In some cases, the weight of the kidney may even exceed 200 grams. The increased weight of the kidney can be a concern for transplant surgeons, as it may affect the success of the transplantation [1].

There are several reasons why the weight of the kidney is important when considering transplantation. Firstly, the size and weight of the transplanted kidney can affect the blood flow to the kidney. A larger kidney may require more blood flow to function properly, which can be a challenge for the recipient's circulatory system. This can result in complications such as blood clots, thrombosis, and even kidney failure. Therefore, it is important to ensure that the transplanted kidney is not too large or too heavy for the recipient's body [2].

Secondly, the weight of the kidney can affect the surgical process of transplantation. Transplant surgeons need to carefully match the size and weight of the donor kidney with the recipient's body size and weight. If the donor kidney is too large or heavy, it may require more complex surgical procedures to fit it inside the recipient's body. This can increase the risk of complications during the surgery, such as bleeding, infection, and organ damage [3].

Thirdly, the weight of the kidney can also affect the function of the transplanted kidney. A heavier kidney may have a larger amount of scar tissue or cysts, which can affect the function of the kidney. This can lead to complications such as reduced kidney function, fluid retention, and electrolyte imbalances. Therefore, it is important to evaluate the weight of the kidney before transplantation to ensure that the transplanted kidney will function properly and improve the recipient's overall health. In addition to the weight of the kidney, there are other

factors that must be considered when evaluating the suitability of a donor kidney for transplantation. These include the age of the donor, the health of the donor, the blood type of the donor and recipient, and the compatibility of the donor and recipient's immune systems [4].

One way to evaluate the weight and suitability of a donor kidney for transplantation is through a process called perfusion. Perfusion is a technique that involves assessing the function of the donor kidney outside of the body, using a machine that pumps a nutrient-rich solution through the kidney. This technique can provide valuable information about the size, weight, and function of the kidney, which can help transplant surgeons make an informed decision about whether to use the kidney for transplantation. In addition to perfusion, there are also other techniques that can be used to assess the suitability of a donor kidney for transplantation. These include imaging tests such as MRI or CT scans, which can provide detailed information about the size and weight of the kidney, as well as any abnormalities that may affect its function [5].

Conclusion

In conclusion, the weight of the kidney is an important factor to consider when evaluating the suitability of a donor kidney for transplantation. A kidney that is too large or heavy can increase the risk of complications during the surgical process and can affect the function of the transplanted kidney. Therefore, it is important to carefully evaluate the weight and function of the donor kidney before transplantation, using techniques such as perfusion and imaging tests. By doing so, transplant surgeons can ensure that the transplanted kidney will function properly and improve the health and quality of life of the recipient.

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Received: 17-Feb-2023, Manuscript No. AACNT-23-89953; Editor assigned: 20-Feb-2023, PreQC No. AACNT-23-89953(PQ); Reviewed: 06-Mar-2023, QC No AACNT-23-89953; Revised: 09-Mar-2023, Manuscript No. AACNT-23-89953(R); Published: 16-Mar-2023, DOI:10.35841/aacnt-7.2.136

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Citation: Zanden S. *Weight of the kidney is important when considering transplantation. J Clin Nephrol Ther.* 2023;7(2):136