Clinics in Surgery

Editorial
Published: 25 Sep, 2019

Recurrence of Diabetic Nephropathy in Kidney Allograft

Kubra Kaynar[1], Beyhan Guvercin[1], Ali Pir[2] and Sevdegul Mungan[3]*

[1]Department of Nephrology, School of Medicine, Karadeniz Technical University, Turkey

[2]Department of Internal Medicine, School of Medicine, Karadeniz Technical University, Turkey

[3]Department of Pathology, School of Medicine, Karadeniz Technical University, Turkey

Keywords

Allograft failure; Diabetic nephropathy; Recurrence

Editorial

In many countries, diabetic nephropathy is still the leading cause of chronic kidney failure which needs renal replacement therapy and renal transplantation has been well documented choice for renal replacement therapy of these patients. However posttransplantation recurrence is an emerging problem, and an important risk factor for graft function loss. We described a case with recurrence of diabetic nephropathy nine years after kidney transplantation. We aimed to emphasize more strict glycemic control with limitation of diabetogenic immunosuppressive drugs for these patients after kidney transplantation.

A 63 years old male patient who received first kidney graft nine years ago from his brother applied to our department for routine control. His past medical history revealed diabetes mellitus type 2, chronic coronary artery disease with coronary bypass surgery, and celiac disease with medications of tacrolimus, mycophenolic acid, prednisolone, acetylsalicylic acid, atorvastatine, and insulin glulisine. He was found to be overweight (body mass index: 28 kg/m^2) and prehypertensive (blood pressure 135/85 mmHg). Diabetic retinopathy and amputation of 5th digit in his right foot were present. Biochemical results showed elevated serum creatinine (1.74 mg/dL), and uric acid levels (7.8 mg/dL), low serum albumin (33 g/L), anemia (hemoglobin: 9.9 g/dL), low creatinine clearance (21.62 mL/min), proteinuria (8.76 g/day) normal HbA1c (5.6%). Serological tests for CMV, BKV, antibodies used to screen vasculitis, and lupus were negative. Allograft with normal size and slightly increased echogenicity was reported ultrasonographically. Graft biopsy was performed and 12 of the 27 glomeruli were globally sclerotic, nodular sclerosis was noted in 5 glomeruli, extensive interstitial fibrosis (50%), and arterial subintimal fibrosis of 40% were found. No specific deposition was seen in immunofluorescent evaluation. Recurrence of Diabetic Nephropathy (DN) was reported to occur an average of 6 years after KT [1]. Poor glycemic control, hypertension, obesity, genetic susceptibility, smoking habit, high dose diabetogenic drugs like prednisolone, tacrolimus are known risk factors for progression of graft dysfunction due to recurrence of DN [1-3]. The risk for graft loss due to recurrence of DN has not well documented. More studies are needed to enlighten this topic.

Author Contribution

Kubra Kaynar drafted and approved the final version of the manuscript; Beyhan Guvercin and Ali Pir edited and revised the manuscript. Sevdegul Mungan contributed pathological data of the manuscript.

References

1. Rodriguez Cubillo B, Rodriguez B, Calvo M, Dela Manzanara V, Bautista J, Perez-Florez I, et al. Risk Factors of recurrence of diabetic nephropathy in renal transplants. Transplant Proc. 2016;48(9):2956-8.
2. Ponticelli C, Moroni G, Glassock RJ. Recurrence of secondary glomerular disease after renal transplantation. Clin J Am Soc Nephrol. 2011;6(5):1214-21.
3. Nyumura I, Honda K, Babazono T, Horita S, Murakami T, Fuchinoue S, et al. Recurrence of diabetic kidney disease in a type 1 diabetic patient after kidney transplantation. Nephrology (Carlton). 2015;20(2):90-2.

OPEN ACCESS

Correspondence:
Kubra Kaynar, Department of Nephrology, School of Medicine, Karadeniz Technical University, Tip Fakültesi, Nefroloji Bilim Dali, 61080 Trabzon, Turkey, Tel: + 90 542 241 58 79; Fax: +90 462 325 22 70; E-mail: kkaynar@yahoo.com

Received Date: *26 Aug 2019*
Accepted Date*: 19 Sep 2019*
Published Date*: 25 Sep 2019*

Citation:
Kaynar K, Guvercin B, Pir A, Mungan S. Recurrence of Diabetic Nephropathy in Kidney Allograft. Clin Surg. 2019; 4: 2589.