

Two Years follow up of a Patient with Renal Fibrosis: from Renal Transplantation to Normal Functional Restoration Following the Use of *Ammi visnaga* and *Urtica pillulefera*

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Abstract

Kidney transplantation is the appropriate treatment for patients with end stage kidney disease. Although it offers survival and quality of life, it is still costing and has its complications such as transplantation failure mainly due to immunological reactions. The main objective of the present study is to describe a case study of a patient with renal failure and kidney fibrosis. Kidney transplantation was recommended. The patient and his family asked for possible alternative therapeutic options. The patient was male, 26 years age. The therapeutic option was a combination of the crude extract of *Ammi visnaga* and the powder of dried leaves of *Urtica pillulifera* mixed with honey. This regimen was applied for 21 days. At the end of the regimen, both creatinine and urea were restored to their physiological limits. Taken together, it is possible to use herbs of medical importance to replace kidney transplantation.

Keywords: kidney transplantation; creatinine; urea; renal failure; *urtica pillulifera*; *ammi visnaga*

Introduction

Kidney transplantation, also known as renal transplantation, is considered as the most appropriate therapeutic option to enhance both the endurance and better life quality for the patients who have end-stage kidney disease (ESKD) [1]. However, due to the improvements in protocols involving surgery, immunosuppressive agents and monitoring, significant success rates of one-year kidney allograft survival of >95% have been reported [2]. Renal transplantation can fail because of the existence of immunological rejection [21]. Other factors participate to the transplantation failure such as the occurrence of primary kidney disease, cardiovascular diseases, infections, and malignancy [3-5].

Kidney transplantation is considered a surgical therapeutic option that permits placing a healthy kidney from a donor into the patient. Kidney transplantation is the appropriate treatment for those suitable patients for a transplant [6].

From an epidemiological point of view, at the international level, the number of patients with renal failure who were subjected to kidney transplantation surpasses 1.4 million with increased 8% each year [7,8]. According to the UK renal registry, about forty-seven thousand patients had received kidney transplantation in the UK [9]. What encourages pushing forward the treatment with kidney transplantation is its positive

impact such as rising survival in addition to the improvement of life quality parameters for persons with advanced kidney failure [10,11].

Case presentation:

A male, 26 years old, was diagnosed with advanced kidney failure due to renal fibrosis according to his consultant physician. The patient was recommended for kidney transplantation. Consultant physician at Royal Medical Services gave the patient specialized form to test if a donor is an appropriate. The patient and his father were in bad conditions. Due to the considerations that kidney transplantation is a long process, and they may be required to travel outside the country carry out this procedure if conditions were not met in Jordan. They started looking for other alternative solutions.

Study approach:

Following the revision of patient's profile, it was apparent that both creatinine and urea levels were increased. In addition to the existence of kidney fibrosis. Based on previous experience, the following alternative therapeutic treatment was designed:

- 1- The crude extract of *Ammi visnaga* in boiling water, 200 ml daily.
- 2- The ground leaves of *Urtica pillulifera*, one spoon mixed with honey, twice daily.

This program was applied for 21 days, at the end of this period kidney function tests were restored to physiological levels, particularly creatinine, and urea tests. The patient was followed for 2 years till writing this article, with good health, and physiological function tests.

Discussion:

Each day, we are more convinced that therapeutic alternatives could be available, a matter that deserves deep investigations. In one of our previous studies, we showed that *Ammi visnaga* was used to treat urolithiasis and hypertriglyceridemia [12]. *Ammi visnaga* includes visnagin, effective constituent that has an antioxidant furanocoumarin derivative [13]. *Ammi visnaga* has been known and used by Egyptians to treat kidney stones [14]. Visnagin is able to induce vasodilator effects in vascular smooth muscles [15]. It also has a very important property by the inhibition of nitric oxide (NO) production [16]. We think that the previous properties make *Ammi visnaga* a good candidate to be included in our program.

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I have previously conducted several studies using *Urtica pillulifera* that showed it has unique properties such as lowering the expression of iNOS in kidneys and increasing the expression of HSP70 in the kidneys [17]. Further, I have developed the idea of disease control based on downregulation of iNOS and upregulation of HSP70 [19].

We think that the use of this approach as an alternative therapeutic approach for kidney transplantation is worthy to be in-depth investigated so that effective ingredients can be found to be more helpful in more professional treatment options.

Conclusions

The results of the present study showed the potential of herbal treatment as a replacement of kidney transplantation without surgical treatment efficiently.

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