

**The possibility of Producing Herb Extract for The
Treatment of Urinary Tubular Inflammation**
Dr. Karim Majeed **Salman Al-Zubaidi**

karimalzubaidi@yahoo.co.uk

kendiharthya@gmail.com

Abstract:

The idea of this study to find way to control the inflammation occurs in the urinary tubular there is evidence that large number of individuals suffering from this case despite trying for the management by taken different antibiotic. So as alternative herbs may help in this case.

Number of volunteers involved in this research the total of 160 men and women in different age group took part in it, the idea behind it to identified if the herb extract affects and limited the tubular inflammation with or without taken the antibiotic.

The antibiotic is useful and successful methods to cause death to many microorganisms (2,8)

those microorganism cause damage to different body system for example breathing include lungs. Also, microorganism may damage digestive methods like stomach, intestinal tract, and urinary, kidney, gall bladder (16), moreover, the antibiotic limited the Inflammations caused by wounds, or different work injuries, or after the surgical operation (1,2)

The antibiotic is a compound that can be synthesized in laboratory and produced in pharmaceutical manufacture in larger quantity (11,12,13). There process is reducing the growth of the microorganism until they have little effect or no effect, those microorganism with the growth will cause Inflammation in urinary system and other system as well (5,6). Some antibiotic may synthesize or made from different sources (5,6).

There is different antibiotic, all of them can derivative from chemical compound with little change in the structure of each individual antibiotic, some of those that interfere with the permeability or the synthesis of the cell membrane, other group Interfere within the cell synthesis itself and other of antibiotic interfere with molecules that are involved in protein synthesis replication and the transfer of biological information (9,10)

All the antibiotic that produced will be tested and it will then check again for possibility of any side effect to identified what the side effect has (14,15).

The antibiotic will be tested biologically (16,17,18) to the humans in order to have more information on what affect the Antibiotic will have (14,15). Once the antibiotic's function is known, and there are no possible toxic effects are noted then it is ready for human to use.

The antibiotic has vital role to deal in positive way with number of diseases causes loss for humankind, and the research studies asked to Carry on their research for new antibiotic and made it possible to be used by human (16,18) Some of microorganism resist to antibiotics therefor there is limited benefit from usen it in the longer term because of the resistance from the bacteria and the microorganism (19,20,21). Such case called 'antibiotic resistance' therefore the research must continue to find out other substitution.

There is evidence that the inflammation in urinary tubular for both sex male & female (20), cause dangers health Problems (19,20), it effects the individual, all thought there is available antibiotic to be use for the treatment of urinary inflammation but no harm to know more and have more information regarding this case, therefore, other product in this field is useful to deal with the inflammation of urinary tubular.

The extract applied in this study has been used numbers of time to those whom suffering from inflammation of Urinary tubular and the result encouraging.

Keyword: Antibiotic, Microorganism, Injuries, Inflammation, System Urinary , Tecurium polium, Urtica dioical

Introduction:

The aim of this research not to identified the classification of the antibiotic whom they used to management of urinary tubular inflammation in fact the aim is to find way or ways to control this case. It is well known how the affect of antibiotic on different inflammation.

Regarding the urinary tubular inflammation there is different area may be affected the kidney, urinary tubes, upper or lower part, it is important to know here that not the aim of this research to classified the urinary inflammation. It is rather to deal with all the inflammation occurs in the urinary system.

Some antibiotics substance produced has affect to the microorganism in a way they can stop the growth and even of destroying germs, the role of those substance comes by using very small amount of these compound in it. There are many substances at present come under this method, however, dealing

with such method not using all of them, clinically few useful and accepts to form those antibiotics.

Urinary tubular inflammation known as inflammation it can be treated by very active drug; antibiotics known has great effect to limit or stop the inflammation. Moreover, some drugs have limited effect on urinary tubular inflammation.

Number of individuals complain from urinary tubular inflammation probably the cause of this

Inflammation is either from water or pollution from any food sources or by other reasons.

Antibiotics have known that they affected the microorganism and useful to deal with human disease, but they are not easy to investigate and to study because the compounds forming the antibiotic affected by many factors such as PH, heating, enzymic activities (6,7).

Antibiotics they can cause problem for the human life for those have allergy they must be very careful if they plan to take antibiotic, they are active to microbial substance (24,23).

Materials & Methods:

One hundred sixty individuals had urinary tubular inflammation. This disease never cured for them although they were taken different treatment for many weeks the treatment varies from drugs together with some antibiotics. The symptoms of this disease were 1. pain during urination, 2. uncomforted in bladder, 3. the urine test shows pus cells, red blood cells and crystal in urine. From the long period of experience some herbs contain active ingredient(substances) it can treat such case effectively.

Each patient given herb extract for one course staid for 14 days, and they were asked for the symptoms they have before and after the treatment; the result shows that the pain disappear

Within the 4th and 5th of the day from taken the extract, and the urine test after the end of 14 days shows no pus cells (zero), red blood cells zero and no crystals in urine, the patients were very comfortable without any pain during urination and no pain in bladder or in kidney.

The urine sample was collected by the patients and each one takes its sample to the liberatory for the analyzing so, there was different method sued for analyzing the samples.

There are active ingredients in the herb those took part for treatment of urinary inflammation and they (ingredient) form the antibiotic, the

ingredients(substances) are secretin, albumen, formic acid, Silicic acid, lecithin, carbonic acid, Vitamin C, mucilage, ammonia, Essen, and Oil. The names of the herbs used is teucrium polium, Urtica dioical.

Those ingredients have the ability to destroy or limit the viral, bacterial, fungal material which any of them responsible for inflammation, all those ingredients has no toxic or side effect, this proved by the Patient themselves The extract of the herb was taken twice a day before meal at the morning and at evening 5 mg each time.

Urine sample has been taken from the patients and stored in deep frizzier until it analyzed.

160 sample were collected males & female. The analysis were done for RBC, Pus cells, and crystals according to clinical laboratory analysis method.

Results:

160 patient's men and women were involved in this research they divided according to their age and sex table 1 and 2 shows how they classified according to their age and sex.

The patients asked to stop taken any antibiotic before taken the herb extract and after.

The patients took different drugs from antibiotics and not antibiotics without improvement.

The urine analysis done before they start, they taken the herb extract and after it weekly.

After 14 days from taken the extract, the inflammation was disappearing from most of the patient.

See table 1 & 2. There were number of patients whom require anther Corus to complete the treatment

This probably because the patient suffers from this disease for a long time (chronic). Nevertheless, the treatment was excellent and no inflammation in urinary tract. Table 1 shows the results from the men patients (80) they divided according to their age group 1 include patient age 20-30 years Old (16 patients), group 2 patients age 30-40 years old (16 patients), group 3 patients age 40-50 years old (16 patients), group 3 patients age 40-50 years old (16 patients), group 4 patients age 50-60 years old (16 patients), group 5 include patients age over 60 years old (16 patients).

The patients (160 men & woman) were voluntarily they were asked to take this herbal extract treatment which they did. The knowledge for the herbs were comes from the literature and careful studies with scientific background

for two phases, the toxicity and the stability the extract herb used has no toxic or side effect and it is stable when the extract is heated.

Table 2 shows the results from the women patients (80 women) they divided according to them

Age group consist from 16 patient's women and the age group are 20-30 years old group 1, 30-40 years old group 2, 40-50 years old group 3, 50-60 years old group 4, and over 60 years old group 5.

Number of groups	Pre- Treatment			Post- Treatment		
	RBC in urine	Pus cells	Crystals	RBC in urine	Pus cells	Crystals
Group 1	3-6 $\pm$ 1	3-5 $\pm$ 0.6	+++	0-1	0-1	Zero
Group 2	4-5.9 $\pm$ 0.5	2-4 $\pm$ 0.9	++++	Zero	Zero	0.1
Group 3	3-7 $\pm$ 0.8	3-4 $\pm$ 0.2	+++	0.2	0.2	0.1
Group 4	3-8 $\pm$ 0.5	3-7 $\pm$ 0.2	++++	Zero	0.1	0.1
Group 5	7-10 $\pm$ 0.4	5-7 $\pm$ 0.3	++++	Zero	Zero	0.1

Table 1: Shows the result of urine sample for 80 patients men they have urinary tubular inflammation after and before the treatment

They divided according to their age group (group 1) 20-30 years of age, (group 2) 30-40, (group 3) 40-50 years, (group 4) 50-60 years, (group 5) over 60 years of age. Each group 16 patients.

Number of group	Pre- Treatment			Post -Treatment		
	RBC in urine	Pus cells	Crystals	RBC in urine	Pus cells	Crystals
Group 1	4-6 $\pm$ 0.5	3-7 $\pm$ 0.7	+++	Zero	0-1	Zero
Group 2	5-6 $\pm$ 0.3	3-5 $\pm$ 0.5	+++	0.1	0-2	Zero
group 3	4-7 $\pm$ 0.4	4-6 $\pm$ 0.3	+++	o.1	Zero	Zero
Group 4	6-8 $\pm$ 0.1	3-7 $\pm$ 0.2	+++	Zero	0-3	0-1
Group 5	8-10 $\pm$ 0.1	2-6 $\pm$ 0.1	+++	0.1	0-1	Zero

Table 2: Shows the result of the urine test for 80 women in different age group they have urinary tubular inflammation they divided in a groups as the men.

Discussion:

It's important to know that the incidence of this disease rising in the last ten years, probably because of poor nutritional status for large number of people, Pollution of food,

people consuming fast food on regular basis those contain variety of additives ingredient, other factors water and air pollution all those factors have substantial effect on tubular inflammation, so the requirement for treatment of this disease is essential, the evidence shows this disease caused by one of either viral, bacterial, fungi or and any microorganism (40,41)

Some antibiotics such as Chlortetracycline used for the treatment of some kind of urinary tract infections, oxytetracycline also known used for managing this case as tobramycin used to treat some other urinary tract inflammation (24,25,26).

Polymyxin is a term which refers to a group of antibiotics that closely related to treat infection of tubular tract case within this group and most popular is polymyxin B the latter is particularly effective against infection of urinary tract (35,36).

The use of one antibiotic some time not enough so it is most likely combined with other antibiotic moreover to manage this case different drugs added to used too but even with other drugs used the inflammation is so complicated so using one antibiotic does not given satisfaction results. The above treatment has been used by some specialist in order to control the inflammation despite the possibility of the side-effect (19,20).

It has been reported that Sid-effect may happen it appears in skin irritation, cramps, nausea and allergic reaction, it has been reported also that some of allergic reaction are sever. However, no sign of side effect reported with the treatment of the herb extract used in this study.

The extract of herbal material used here can be apply to patient have urinary infections caused by bacteria, which is comparatively common particularly among diabetic among females of all ages. Fortunately, most urinary inflammation can be dealt by this extract as it proves with Safety without any irreversible tissue damage (22,23).

Pyelitis is acute or chronic it is an infection of pelvic area of the kidney, in its acute form pyelitis is the most common of all kidneys infection it caused by bacteria that invaded the kidney from the bladder. Bacteria may accumulate if a kidney stone or a congenital obstruction happen this case means that the normal flow of urine is not happening this case happen during pregnancy or during catheterization (30,31,32).

To investigate the source of bacteria introduced into the urinary tract once can suggest it may come even from unsterilized equipment (39)

Bacteria that enter the bladder through the urethra and from outside or that descend from an infection in the kidney cause cystitis, it also be a secondary case in manifestation of enlarged prostate, bladder stone, tumor, and neurological disorder (33,34).

The case in women known as systole in which part of the bladder protrudes through the vaginal wall is another cause of cystitis (40,41).

So, the recommendation is to use this extract because its herbs, which studied carefully with no side effect and no harm appears to those patients whom they took part in this study. It is well known however that herbs also useful to consume it, especially if it tested by scientific methods in which what happen in this study (36,37,38).

References:

1. Sex differences in lower urinary tract biology and physiology
2018 Oct 22;9(1):45. doi: 10.1186/s13293-018-0204-8
By: [Benjamin Abelson](#) , [Daniel Sun](#) ,and et al
2. Assessment of four in vitro phenotypic biofilm detection methods in relation to antimicrobial resistance in aerobic clinical bacterial isolates
2023 Nov 22;18(11):e0294646. doi: 10.1371/journal.pone.0294646. eCollection 2023.by [Ajaya Basnet](#) , [Basanta Tamang](#) ,and et al
3. Role of ultrasound in medical management of patients with renal stone disease
1992;14(3):131-8. doi: 10.1007/BF02926914.by [T J Vrtiska](#) , [R R Hattery](#),and et al
4. Contemporary concepts for imaging urinary tract obstruction
By J J Cronan Urol Radiol. 1992;14(1):8-12. doi: 10.1007/BF02926894
5. Inflammation in kidney repair: Mechanism and therapeutic potential
Pharmacol The 2022 Sep;237:108240. doi: 10.1016/j.pharmthera.2022.108240

By: [Ying Fu](#) , [Yu Xiang](#) ,and et al

6. Interaction between systemic inflammation and renal tubular epithelial cells

Nephrol Dial Transplan 2014 Nov;29(11):2004-11. doi: 10.1093/ndt/gfu046

By: [Vincenzo Cantaluppi](#) , [Alessandro Domenico Quercia](#) and et al,

7. Stem cells in 2013: Potential use of stem or progenitor cells for kidney regenerate

2014 Nov;29(11):2004-11. doi: 10.1093/ndt/gfu046

By: [Vincenzo Cantaluppi](#) , [Alessandro Domenico Quercia](#) ,and et al

8. Targeting Inflammation in So- called Acute Kidney Injury

Semin Nephrol 2016 Jan;36(1):17-30. doi:

10.1016/j.semnephrol.2016.01.006

By: [Shrikant R Mulay](#) , [Alexander Holderiedand and et al](#) ,

9. A unified theory of sepsis-induced acute kidney injury: inflammation, microcirculatory dysfunction, bioenergetics, and the tubular cell adaptation to injury.

PMID: 24346647 PMCID: [PMC3918942](#) DOI: [10.1097/SHK.0000000000000052](#). 2014 Jan;41(1):3-11. doi: 10.1097/SHK.0000000000000052. By

[Hernando Gomez](#) , [Can Ince](#) , and et al

10. Acute kidney dysfunction and the critically ill. Minerva Anestesia 2006 Mar;72(3):133-43. By: [E A J Hoste](#) , [J A Kellum](#)

11. Defining acute renal failure: the RIFLE criteria. J Intensive Care Med 2007 Jul-Aug;22(4):187-93. By: [Ramesh Venkataraman](#) , [John A Kellum](#)

12. Defective fatty acid oxidation in renal tubular epithelial cells has a key role in kidney fibrosis development. Nat Med. 2015 Jan;21(1):37-46. doi: 10.1038/nm.3762. Epub 2014 Dec 1. By [Hyun Mi Kang](#) , [Seon Ho Ahn](#) ,and et al

13. Extracellular vesicles in kidney disease. Nat Rev Nephrol 2022 Aug;18(8):499-513. doi: 10.1038/s41581-022-00586-9. By: [Cristina Grange](#) , [Benedetta Bussolati](#)

14. Magnesium in renal fibrosis. Int Urol Nephrol 2022 Aug;54(8):1881-1889. doi: 10.1007/s11255-022-03118-3. Epub 2022 Jan 20. By: [Mengtuan Long](#) , [Xiaoyu Zhu](#) , and et al

15. Activated Protein C Ameliorates Tubular Mitochondrial Reactive Oxygen Species and Inflammation in Diabetic Kidney Disease. Nutrients. 2022 Jul 29;14(15):3138. doi: 10.3390/nu14153138. By: [Rajiv Rana](#) , [Jayakumar Manoharan](#) ,and et al

16. Oxidative stress and inflammation in diabetic nephropathy: role of polyphenols. Front Immunol. 2023 Jul 21;14:1185317. doi: 10.3389/fimmu.2023.1185317. By: [Qi Jin](#) , [Tongtong Liu](#) ,and et al
17. Inflammation: A Key Contributor to the Genesis and Progression of Chronic Kidney Disease. Contrib Nephrol 2017;191:72-83. doi: 10.1159/000479257. Epub 2017 Sep 14. By: [Qi Qian](#)
18. Ischemic acute tubular necrosis models and drug discovery: a focus on cellular inflammation. Drug Discov Today 2006 Apr;11(7-8):364-70. doi: 10.1016/j.drudis.2006.02.010. By: [Masahiro Ikeda](#) , [Worapat Prachasilchai](#),and et al
19. Review of potential biomarkers of inflammation and kidney injury in diabetic kidney disease. Diabetes Metab Res Rev 2022 Sep;38(6):e3556. doi: 10.1002/dmrr.3556. By: [Vuthi Khanijou](#) , [Neda Zafari](#) , and et al
20. Acute kidney injury transcriptomics unveils a relationship between inflammation and ageing. Nefrologia 2012;32(6):715-23. doi: 10.3265/Nefrologia.pre2012.Aug.11667. By : [M Concepción Izquierdo](#) , [Ana B Sanz](#),and et al.
21. Nephropathic Cystinosis: Pathogenic Roles of Inflammation and Potential for New Therapies. Cells 2022 Jan 6;11(2):190. doi: 10.3390/cells11020190. By: [Mohamed A Elmonem](#) , [Koenraad R P Veys](#) , [Giusi Prencipe](#)
22. Inflammatory processes in renal fibrosis. Nat Rev Nephrol 2014 Sep;10(9):493-503. doi: 10.1038/nrneph.2014.114. By: [Xiao-Ming Meng](#) , [David J Nikolic-Paterson](#) , [Hui Yao Lan](#)
23. Renal Lipid Metabolism and Lipotoxicity in Diabetes. Am J Med Sci 2020 Feb;359(2):84-99. doi:10.1016/j.amjms.2019.11.004. By: [Laongdao Thongnak](#) , [Anchalee Pongchaidecha](#) , [Anusorn Lungkaphin](#)
24. Inhibition of inflammation using diacerein markedly improved renal function in endotoxemic acute kidney injured mice. Cell Mol Biol Lett. 2018 Aug 16;23:38. doi: 10.1186/s11658-018-0107-z. eCollection 2018. By: [Guangzhe Yu](#) , [Qian Liu](#) , and et al
25. Urinary oxalate as a potential mediator of kidney disease in diabetes mellitus and obesity. Curr Opin Nephrol Hypertens. 2019 Jul; 28(4):316-320. By: [Orhan Efe](#) , [Ashish Verma](#) , [Sushrut S Waikar](#)
26. Fatty acid-binding protein 4 is a therapeutic target for septic acute kidney injury by regulating inflammatory response and cell apoptosis. Cell Death Dis. 2022 Apr 11;13(4):333. doi: 10.1038/s41419-022-04794-w. By: [Bo Wang](#) , [Jun Xu](#) , and et al

27. Diabetic nephropathy and proximal tubular damage. J Ren Nutr 2015 Mar;25(2):230-3. doi: 10.1053/j.jrn.2014.10.020. Epub 2015 Jan 8. By: [Sydney C W Tang](#) , [Wai Han Yiu](#) , and et
28. The role of lymphatics in renal inflammation. Nephrol Dial Transplant. 2012 Jul;27(7):2634-41. doi:10.1093/ndt/gfs140. By [Harald Seeger](#), [Marco Bonani](#), [Stephan Segerer](#)
29. Apoptosis modulated by oxidative stress and inflammation during obstructive nephropathy. Inflamm Allergy Drug Targets. 2012 Aug 1;11(4):303-12. By: [Walter Manucha](#), [Patricia G Vallés](#).
30. Chronic kidney disease: Lancet 2012 Jan 14;379(9811):165-80. doi: 10.1016/S0140-6736(11)60178-5 by: [Andrew S Levey](#) , [Josef Coresh](#)
31. Kidney stones. Nat Rev Dis Primers. 2016 Feb 25;2:16008. doi: 10.1038/nrdp.2016.8. By: [Saeed R Khan](#) , [Margaret S Pearle](#) , and et al
32. Kidney Stones: Treatment and Prevention Am Fam Physician. 2019 Apr 15;99(8):490-496 By: [Leonardo Ferreira Fontenelle](#) , [Thiago Dias Sarti](#)
33. Empiric therapy for kidney stones. Urolithiasis. 2019 Feb;47(1):107-113. doi: 10.1007/s00240-018-1090-6 By: [David S Goldfarb](#)
34. Kidney stones: pathophysiology and medical management. Lancet. 2006 Jan 28;367(9507):333-44. doi: 10.1016/S0140-6736(06)68071-9. By: [Orson W Moe](#).
35. Treatment and prevention of kidney stones: an update. Am Fam Physician. 2011 Dec 1;84(11):1234-42. By: [Lynda Frassetto](#), [Ingrid Kohlstadt](#).
36. Dietary Plants for the Prevention and Management of Kidney Stones: Preclinical and Clinical Evidence and Molecular Mechanisms. Int J Mol Sci. 2018 Mar 7;19(3):765. doi: 10.3390/ijms19030765. By: [Mina Cheraghi Nirumand](#) , and et al
37. Nutrition and Kidney Stone Disease Nutrients. 2021 Jun 3;13(6):1917. doi: 10.3390/nu13061917. By: [Roswitha Siener](#) and et al.
38. The genetics of kidney stone disease and nephrocalcinosis. Nat Rev Nephrol. 2022 Apr;18(4):224-240. doi: 10.1038/s41581-021-00513-4. By: [Prince Singh](#), [Peter C Harris](#), and et al.
39. Kidney Stone Prevention. Adv Nutr. 2023 May;14(3):555-569. doi: 10.1016/j.advnut.2023.03.002. By [Paleerath](#) [Peerapen](#) , [Visith Thongboonkerd](#)

40. Calcium and Vitamin D Supplementation and Their Association with Kidney Stone Disease: A Narrative Review. *Nutrients*. 2021 Dec 4;13(12):4363. doi: 10.3390/nu13124363. By: [Matteo Bargagli](#), [Pietro Manuel Ferraro](#), and et al
41. Gender Differences in Kidney Stone Disease (KSD): Findings from a Systematic Review. *Curr Urol Rep*. 2021 Oct 8;22(10):50. doi: 10.1007/s11934-021-01066-6. By: [Kathryn Gillams](#), [Patrick Juliebø-Jones](#), and et al

دراسة امكانية ايجاد مستخلص اعشاب للسيطرة ومعالجة التهابات الجهاز البولي

ا.م.د. كريم مجيد سلمان الزبيدي
مكان العمل كلية النخبة الجامعة - بغداد - المنصور - حي دراغ
٠٧٧٠٧٩٧٧٧٥٩

مستخلص البحث:

هناك مجموعة من الالتهابات ينتج عنها امراض مزمنة وغير مزمنة في اجهزة الجسم المختلفة مثل امراض جهاز التنفس امراض الجهاز الهضمي امراض الكلى والجهاز البولي وغيرها وفي كل هذه الامراض تستخدم المضادات الحيوية كوسيلة للسيطرة وأيقاف الالتهابات الناتجة من البكتريا والاحياء المجهرية المنتشرة نتيجة التلوث البيئي وتلوث المياه والمواد الغذائية والملاحظ والمثبت علميا ان استخدام المضادات الحيوية لا يمكن استعمالها بشكل مستمر اولا كما ان بعضها يكون استعمالها لا تأثير له نتيجة مقاومة الجسم لتلك المضادات بعد فترة من استعمالها. لذلك ايجاد بدائل للمضادات الحيوية ضرورة ملحة دائما للسيطرة على البكتريا والميكروبات المستعملة ولهذا كان هذا البحث عبارة عن محاولة لاجاد بدائل للتعامل مع البكتريا والميكروبات التي تصيب الجهاز البولي في الكلى والمثانة والمجاري البولية المستخلص المستعمل في هذا البحث عبارة عن شراب يحتوي على مركبات كيميائية يتم استخلاصها من مصادر طبيعية من الاعشاب الطبية كما يمكن ان تصنع هذه المركبات مخبريا في مختبرات صيدلانية. كانت نتائج استخدام هذا المستخلص جيدة وتم السيطرة وتقليل تثار البكتريا والميكروبات المسببة لامراض الجهاز البولي مع ملاحظة ان استمرار البحث والدراسة في هذا المجال ضروري جدا وبلطبع هناك دراسات وبحوث في هذا المجال ومستمرة علما ان هذا البحث غير مستل من دراسة ماجستير او دكتوراة

الكلمات المفتاحية : مضادات حيوية، الميكروبات او الاحياء المجهرية، الاصابات، الالتهابات، الجهاز البولي. جعدة ، قريص.