

桃園分院中醫護藥聯合討論會

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2012.12.27

主題

- 中醫病房泌尿道感染病患防治策略
 - 病例探討
 - UTI & Stroke 相關文獻
 - 泌尿道感染中醫藥相關文獻及其他
 - 護理衛教

病例探討

病患基本資料及病史

- 病歷號碼：95169xx
 - 性別：男性
 - 姓名：陳XX
 - 年齡：53歲
 - 1.Left basal ganglia hemorrhage, onset: 2004 Nov. complicated with right hemiplegia
 - 2.Hydrocephalus, IICP s/p V-P shunt placement, onset: 2005 Jan.
 - 3.Respiratory failure history s/p tracheostomy
 - 4.2005 Myoclonus history, under clonazepam control
 - 5.Hypertension, essential, under amlodipine, irbesartan control.
 - 6.Gout history, without medication
 - 7.Hyperlipidemia history, without medication
 - **8.Urinary tract infection in 2010, E. coli**
 - 9.Benign prostate hyperplasia under tamsulosin
- 意識狀況E4VtM4-5，氣切，NG feeding，曾有抽搐史(使用clonazepam)

時序圖

12/04

NG decompression, no more vomiting
K 3.7 Na 132 → stop KCl+D5S run 80cc/hr
try NG feeding

整日尿液自解800cc
當晚仍困難排尿 → ICP

2012/12/05

D5S run 40cc/hr, keep NG feeding
泌尿科門診林柏宏醫師
(1) cefadroxil 500mg q12h
(2) give adequate hydration
(3) may arrange ICP to check residual
urine → observe the urination condition

(4) keep Tamsulosin
整日尿液自解1220cc, 色深稍減

12/03 02:15

fever 37.4度 P:115 RR:28 BP:107/80mmHg

嘔吐2次, 小便未解

→ T-mask O2 3L/min

→ NG decompression, 抽血, 驗小便

→ WBC 7600, Hb 19.4, CRP 22.5, BUN 96, Cr. 0.5,
Na 128, K 2.9

UA: cloudy, pH 6.5, nitrite +, mucus +,
bacteria +, WBC 225

→ impression:

Vomiting, Gastritis? hypokalemia?

Bacteriuria with decreased voiding, UTI?

→ EKG: sinus rhythm, non-specific STT change,
but compared with previous data, no
obvious change

→ IV: D5S 500cc+20meqKCl run 80cc/hr

時序圖

12/08 15:55

T:36度 P:59/min R:18/min P:106/66mmHg

病患早上至今未解尿液,小腹輕微鼓脹

→ICP stat, 350CC,橘黃色尿液,氣味重

21:35

T:35.2度 P:63/min R:18/min BP:105/70mmHg

病患下午ICP後至今未解尿液,小腹無鼓脹

→ICP stat,180CC,橘黃色尿液,氣味重

UA: clear, ph 7.0, nitrite +, mucus-, bacteria+,
WBC 40

→要求看護每小時經由鼻胃管給予100cc水

12/06

尿液自解1150cc 色較淺

DC IV

12/09

尿液自解2450cc

12/10

上午8小時尿量100cc，ICP餘尿10cc

→放置Foley + IVF NS run 40cc/hr

腎臟科許景瑋醫師門診：

建議轉急診使用靜脈型抗生素

→通知病患妻子，要求留在中醫病房

時序圖

12/12

UA : dark yellow, cloudy, ph 6.5, nitrite +,
mucus+, bacteria+, WBC 258

→泌尿科林柏宏醫師門診

Cefadroxil 500mg , q12h

Urine culture

12/15

Kleb. pneumoniae >100000

Sensitive to ciprofloxacin

更改抗生素為口服ciprofloxacin

500mg,q12h(12/15-18)

12/11

尿液自解3150cc , input 3598

(impression: primary polydipsia)

上午尿液顏色黃橘，下午色淺黃

12/14

病患尿管有血塊，利用3頭尿管沖洗膀胱
洗出皆為乾淨液體，欲更換2頭尿管時仍
帶血絲，故移除尿管

→泌尿科虞凱傑醫師認為無尿道損傷

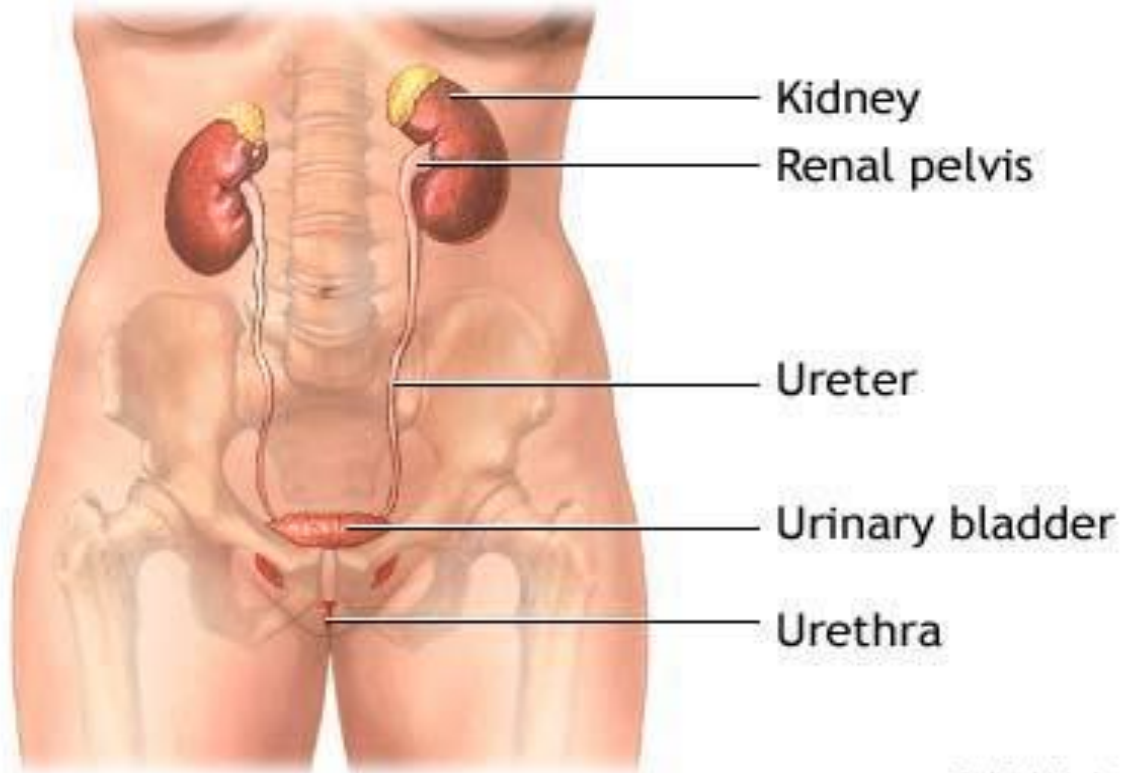
→病患可自行解尿，故並無放回尿管

UTI vs. Stroke 文獻探討

Outline

- Impact for stroke patient
- EBM for urinary tract infection
- Conclusion

Urinary tract infection



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UTI & Stroke

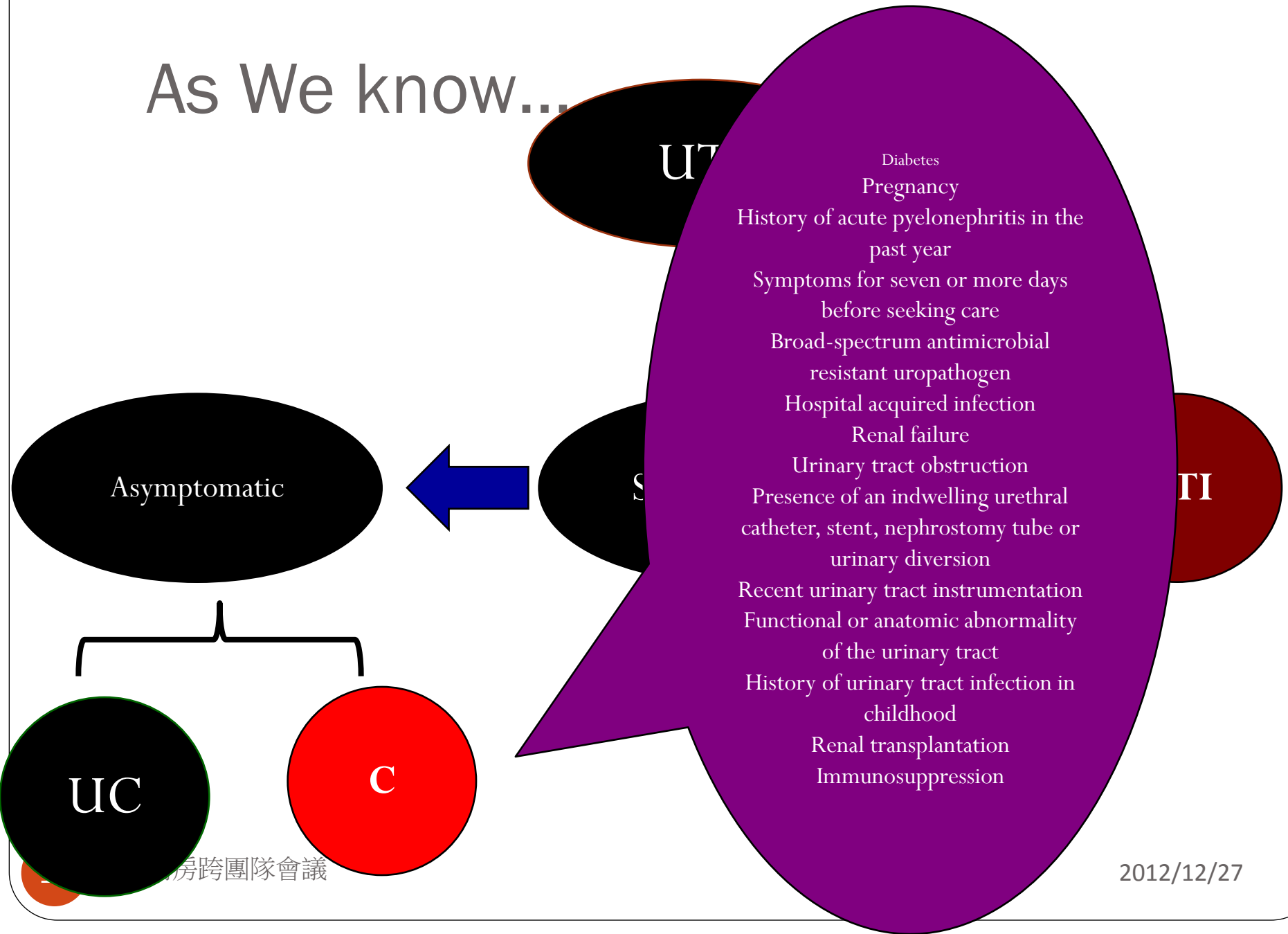
- 延長住院時間
- 影響復健
- 增加病患在醫療照護機構的時間

Ifejika-Jones NL, Peng H, Noser EA, Francisco GE, Grotta JC; Physical medicine and rehabilitation, 2012

PICO

- **Problem:** Asymptomatic UTI in patient with stroke
- **Intervention:** Antibiotics (prophylactic)
- **Comparison:** Placebo, CIC
- **Outcome:** Prognosis.....

As We know...



Key word

- UTI
- Stroke
- Asymptomatic pyuria or bacteriuria

Urinary catheter policies for long-term bladder drainage (Review)

Niël-Weise BS, van den Broek PJ, da Silva EMK, Silva LA

Asymptomatic bacteriuria, antibiotic use, and suspected urinary tract infections in four nursing homes

BMC Geriatrics 2012, **12**:73 doi:10.1186/1471-2318-12-73

Asymptomatic bacteriuria

Prevalence in the elderly population

Table 5. IDSA guidelines for the management of asymptomatic bacteriuria where screening and treatment is recommended⁷

Patient category	Strength of recommendation and level of evidence
Pregnant women	A-I
Before transurethral resection of prostate	A-I
Before other urological procedure where mucosal bleeding is expected	A-III
Persistent catheter associated bacteriuria 48 hours after catheter removal	B-I

Strategies

- **Electronic memorandum**
- **Types of catheters**
- Antibiotic prophylaxis ?
- Alternative treatment
 - Acupuncture
 - Food

Conclusion

- Urinary tract infection in stroke patient
- **Policies for prevention**
 - **Electronic memorandum**
 - **Types of catheters**

Future

- **Study on patient with stroke**
 - **Prevention policies**
- **Acupuncture or Herbal medicine**
 - **Treatment?**
 - **Prophylaxis**

泌尿道感染中醫藥相關文獻及其他

八正散合五味消毒飲治療尿路感染

- 熱淋:小便頻數,點滴而下,灼熱刺痛,尿黃赤,急迫不爽或腰腹疼痛,或寒熱交作,口苦,噁心嘔吐,苔黃膩,脈濡,滑數

表 1	治疗组疗效观察				(例)	
	热淋	血淋	气淋	劳淋	总计	%
治疗前	51	13	3	2	69	
治 好转	1	2	1	1	5	7.2
疗 治愈	49	9	1		59	85.5
后 无效	1	2	1	1	5	7.2

表 2	对照组疗效观察				(例)	
	急性肾 盂肾炎	慢性肾 盂肾炎	膀胱炎	尿道综 合征	总计	%
治疗前	48	2	3	7	60	
治 好转	12	1		1	14	23.3
疗 治愈	33		3	6	42	70
后 无效	3	1			4	6.7

● 八正散→ 使E coli不能黏附尿道上皮細胞

[3]孫大錫,等.治則不同方劑對尿道致病性大腸桿菌的血凝作用和粘附尿道上皮細胞的影響.中醫雜誌, 1985, 26 (8)B57

- ◆ 濕熱下注,熱結下焦
- ◆ 瞿麥 扁蓄 滑石 木通 車前：清熱除濕 利水通淋藥
- ◆ 梔子 大黃：導泄肝膽三焦膀胱之熱
- ◆ 瞿麥 扁蓄：有利尿作用,
- ◆ 木通：有利尿強心作用,對革蘭氏陽性和陰性菌均有抑制
- ◆ 大黃：對大腸桿菌 淋病雙球菌 葡萄球菌等細菌及病毒都有抑制作用

- ◆ 五味消毒飲：清熱解毒 消散癰結
- ◆ 蒲公英 野菊花 紫花地丁：對各種化膿性感染效佳
- ◆ 野菊花：對多種細菌(葡萄球菌 變性桿菌 綠膿桿菌等) 病毒真菌有抑制作用，促進白細胞吞噬功能，提高免疫力

- 中藥治療尿路感染：
 - 多數尿菌轉陰需1~3個月守方一般以4周為宜
 - 已見效者,不要驟然停藥,需續治療3~6個月
 - 尿菌轉陰後不易復發
- 治療老年患者尿路感染：
 - 療程應適當延長
 - 用藥劑量亦應酌減
 - 避免使用對肝腎有毒性的藥物

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100-06-07

反覆性泌尿道感染之中醫會診病例報告 J

Chinese Medicine Consultation of Bedridden with Recurrent Urinary Tract Infection: A Case Report

王健豪(Chien-Hao Wang) ; 柯建新(Chien-Hsin Ko)

長期臥床；泌尿道感染；附子湯；豬苓湯；bedridden；recurrent UTI；Fu Zi Tang；Zhu Ling Tang

臺灣中醫臨床醫學雜誌

17卷4期(2011/12/30)

38 -46

繁體中文

本病例是一位88歲女性患者，長期患有心房振顫、糖尿病、高血壓、高血脂症及老年失智症服用西藥控制。於94年2月13日因中大腦動脈阻塞合併日漸嚴重的失智症狀而長期臥床，並接受居家護理師及家醫科醫師定期家訪照顧。於99年05月起因反覆性泌尿道感染合併意識混亂而多次住院治療，出院期間由於尿液容易混濁及多量沉澱物產生而使導尿管阻塞，進而導致反覆性泌尿道感染。多次投與預防性抗生素治療但是無法改善症狀而會診中醫科，經中醫師診斷為淋證，脾腎陽虛型。以鼻胃管灌食中藥粉附子湯加減，經中醫治療後患者長期尿液混濁及泌尿道感染的現象明顯改善。

This 88-year-old bedridden women patient had history of Congestive mellitus, essential hypertension, hyperlipidemia, right MCA infarction and cystostomy. The patient received Chinese medicine treatment due to recurrent cystostomy tube obstruction in more frequent in recent one year. The syndrome of Kidney and Spleen, moisture in Bladder. Modified Fu Zi Tang and Zhu turbid urine and recurrent urinary tract infection have improved significantly. Chinese medicine intervention that improves the quality of life.

藥名	用量
豬苓湯	1.80 公克
藿香	0.30 公克
佩蘭	0.30 公克
滑石	0.30 公克
大黃	0.10 公克
附子	0.80 公克
白朮	0.80 公克
芍藥	0.60 公克
茯苓	0.60 公克
黨參	0.40 公克

1wk→無阻塞 尿轉清澈 但有沉澱物
2mons→少許白色沉澱物附著尿管

00 證實：吃蔓越莓 尿道光滑、細菌難住

◆ 【聯合報／記者陳信利／斗六報導】2012/07/31

◆ 台大醫院雲林分院研究證實，一天內食用蔓越莓產品2次以上，可減少感染泌尿道機率，原因是裡面花青素，使尿道內皮光滑細菌不易附著。

◆ 泌尿道感染經常困擾女性朋友，台大醫院雲林分院醫療團隊，研究證實一天內食用蔓越莓產品2次以上，比一般人泌尿道感染機率減少約38%至51%，尤其蔓越莓果汁最顯著。這項研究成果日前獲美國官方權威醫學期刊發表，並獲100多家國際媒體報導或電台專訪，肯定台灣的研究成就。

蔓越莓?

◆ 台大雲林分院急診醫學部醫師王志宏說，早期研究認為因蔓越莓酸化尿液，才使得細菌不易成長；但台大的研究推翻了這項理論，研究發現蔓越莓在尿液中的代謝物，能抑制細菌生長，之後更會分離出原花青素，黏著在泌尿道內側，使泌尿道內皮光滑細菌不易附著。

◆ 急診部主任李建璋表示，市面上蔓越莓產品有果汁、濃縮液、膠囊及錠劑等，經研究發現果汁類產品對預防泌尿道感染最有效，可能是蔓越莓果汁含較多天然成分，有助減低感染。

◆ 該研究同時發現，蔓越莓代謝物在尿液中的有效濃度，大約只能維持8小時左右，因此1天內食用蔓越莓產品次數最好是2次以上，每次約60至200CC。

◆ 蔓越莓原汁頗為苦澀，市面上蔓越莓果汁都添加了不少糖分，每天喝要小心發胖，糖尿病患者來更要小心糖分控制，患有反覆性泌尿道感染或脊椎神經受損需長期導尿患者，建議飲用不含糖分的蔓越莓原汁。

UpToDate: Recurrent UTI in women

蔓越莓?

- ◇ Cranberry juice — We do not routinely suggest cranberry juice to reduce the incidence of recurrent UTI. Although there are plausible biological mechanisms for such an effect, clinical studies to date have not definitively demonstrated efficacy in prevention of recurrent uncomplicated cystitis [40-49]. However, for women with recurrent UTI who are interested in trying cranberry juice and can tolerate it, there is likely little harmful effect other than an increase in calorie and glucose intake. There may also be an increased likelihood of gastrointestinal side effects such as heartburn with cranberry juice, as suggested by some studies [48].
- ◇ Recurrent urinary tract infection and cranberry juice — Clinical data have not yet demonstrated clear efficacy of cranberry products in the prevention of recurrent uncomplicated cystitis. In a meta-analysis of nine randomized trials, there was a decreased risk of urinary tract infection (UTI) among patients who used cranberry products compared with controls, particularly among patients with recurrent UTI [8]. However, the meta-analysis was limited by substantial statistical and clinical heterogeneity. Furthermore, the meta-analysis excluded a large randomized trial that showed no effect of cranberry juice on recurrent UTI incidence [9]

Cranberries for preventing urinary tract infections.

Jepson RG, Williams G, Craig JC.

Department of Nursing and Midwifery, University of Stirling, Stirling, UK. ruth.jepson@stir.ac.uk.

蔓越莓?

Abstract

BACKGROUND: Cranberries have been used widely for several decades for the prevention and treatment of urinary tract infections (UTIs). This is the third update of our review first published in 1998 and updated in 2004 and 2008.

OBJECTIVES: To assess the effectiveness of cranberry products in preventing UTIs in susceptible populations.

MAIN RESULTS: This updated review includes a total of 24 studies (six cross-over studies, 11 parallel group studies with two arms; five with three arms, and two studies with a factorial design) with a total of 4473 participants. Ten studies were included in the 2008 update, and 14 studies have been added to this update. Thirteen studies (2380 participants) evaluated only cranberry juice/concentrate; nine studies (1032 participants) evaluated only cranberry tablets/capsules; one study compared cranberry juice and tablets; and one study compared cranberry capsules and tablets. The comparison/control arms were placebo, no treatment, water, methenamine hippurate, antibiotics, or lactobacillus. Eleven studies were not included in the meta-analyses because either the design was a cross-over study and data were not reported separately for the first phase, or there was a lack of relevant data. Data included in the meta-analyses showed that, compared with placebo, water or no treatment, cranberry products did not significantly reduce the occurrence of symptomatic UTI overall (RR 0.86, 95% CI 0.71 to 1.04) or for any the subgroups: women with recurrent UTIs (RR 0.74, 95% CI 0.42 to 1.31); older people (RR 0.75, 95% CI 0.39 to 1.44); pregnant women (RR 1.04, 95% CI 0.97 to 1.17); children with recurrent UTI (RR 0.48, 95% CI 0.19 to 1.22); cancer patients (RR 1.15 95% CI 0.75 to 1.77); or people with neuropathic bladder or spinal injury (RR 0.95, 95% CI: 0.75 to 1.20). Overall heterogeneity was moderate ($I^2 = 55\%$). The effectiveness of cranberry was not significantly different to antibiotics for women (RR 1.31, 95% CI 0.85, 2.02) and children (RR 0.69 95% CI 0.32 to 1.51). There was no significant difference between gastrointestinal adverse effects from cranberry product compared to those of placebo/no treatment (RR 0.83, 95% CI 0.31 to 2.27). Many studies reported low compliance and high withdrawal/dropout problems which they attributed to palatability/acceptability of the products, primarily the cranberry juice. Most studies of other cranberry products (tablets and capsules) did not report how much of the 'active' ingredient the product contained, and therefore the products may not have had enough potency to be effective.

AUTHORS' CONCLUSIONS: Prior to the current update it appeared there was some evidence that cranberry juice may decrease the number of symptomatic UTIs over a 12 month period, particularly for women with recurrent UTIs. The addition of 14 further studies suggests that cranberry juice is less effective than previously indicated. Although some of small studies demonstrated a small benefit for women with recurrent UTIs, there were no statistically significant differences when the results of a much larger study were included. Cranberry products were not significantly different to antibiotics for preventing UTIs in three small studies. Given the large number of dropouts/withdrawals from studies (mainly attributed to the acceptability of consuming cranberry products particularly juice, over long periods), and the evidence that the benefit for preventing UTI is small, cranberry juice cannot currently be recommended for the prevention of UTIs. Other preparations (such as powders) need to be quantified using standardised methods to ensure the potency, and contain enough of the 'active' ingredient, before being evaluated in clinical studies or recommended for use.

Lactuca indica extract interferes with uroepithelial infection by Escherichia coli.

Lüthje P, Dzung DN, Brauner A.

Department of Microbiology, Tumor and Cell Biology, Division of Clinical Microbiology, Karolinska Institutet and Karolinska University Hospital, 17176 Stockholm, Sweden.

Abstract

ETHNOPHARMACOLOGICAL RELEVANCE: Uropathogenic *Escherichia coli* is the major cause for urinary tract infections (UTI). Due to emerging antimicrobial resistances treatment of UTI is becoming increasingly difficult. Therefore, alternative treatment strategies are required. We sought to investigate the molecular mechanisms of a traditionally used decoction from Vietnamese dandelion (*Lactuca indica* L.) mediating local protection of the bladder epithelium.

MATERIALS AND METHODS: To study the influence of herbal preparations on the interaction between bladder epithelial cells and uropathogenic *Escherichia coli*, a cell culture model of UTI was applied. In addition, the direct effect of the herbal extract on *Escherichia coli* was analyzed.

RESULTS: Although no direct antibacterial activity was determined, *Lactuca indica* decreased bacterial colonization of bladder epithelial cells remarkably. Reduced bacterial adherence was accompanied by lowered activation of focal adhesion kinase (FAK) in *Lactuca indica* exposed cells. Treatment with a chemical FAK inhibitor supported this mechanism of action.

CONCLUSIONS: These findings indicate that, in addition to its diuretic action, *Lactuca indica* exhibits secondary effects directly on epithelial cells which may protect against *Escherichia coli* infection. These properties might be useful for the development of alternative strategies in the treatment of UTI.

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 **Publication Types, MeSH Terms, Substances**

 **LinkOut - more resources**

Due to emerging **antimicrobial resistances** treatment of UTI is becoming increasingly difficult. Therefore, **alternative treatment strategies are required.**



資料識別：

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主題與關鍵字：

界: 植物界 界 (英文): Plantae 門: 種子植物門 門 (英文): Spermatophyta 綱: 雙子葉植物綱 綱 (英文): Dicotyledons 目: 菊目 目 (英文): Asterales 科: 菊科 科 (英文): ASTERACEAE 屬: 萵苣屬 屬 (英文): Lactuca

二八、鵝仔草

科名：菊科 Compositae

學名：*Lactuca indica* Linn

別名：山萵苣、蒲公英

分佈地：全省平地以迄低海拔山區

植株類型：二年生草本

應用與特性：幼苗和嫩莖葉可食

大公英 vs 小公英(台灣中藥用)

◆ 同科不同屬

◆ 藥效上有雷同之處（均有清熱解毒之功效），但成分藥理不同

蒲公英	菊科植物蒲公英Taraxacum mongolicum Hand.-Mazz.、 鹼地蒲公英Taraxacum Sinicum Kitag.或同屬數種植物的 乾燥全草	清熱解毒 消腫散結 利尿通淋
小公英	以兔耳菜Lactuca chinensis Makino為主	乳癰 消炎退黃 解熱陣痛
大公英	山萵苣Lactuca indica L.或同屬植物萵苣、苦菜等	清熱解毒 活血祛瘀 理氣

**Thanks for
Your
Attention!**

