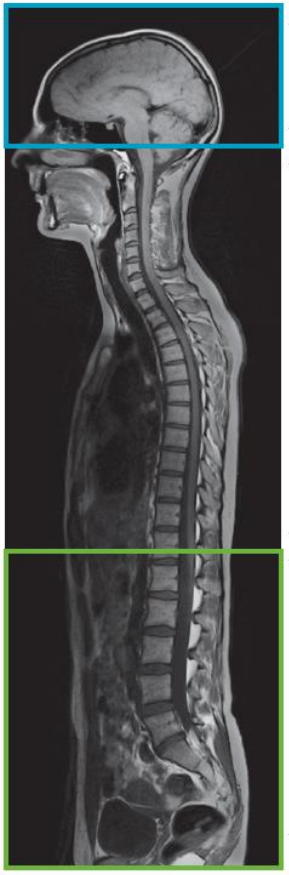
Vessie neurogène



Suprapontine lesion
- **History:** predominantly storage symptoms
- **Ultrasound:** insignificant PVR urine volume
- **Urodynamics:** detrusor overactivity

Over-active
Normo-active

Spinal (infrapontine–suprasacral) lesion
- **History:** both storage and voiding symptoms
- **Ultrasound:** PVR urine volume usually raised
- **Urodynamics:** detrusor overactivity, detrusor–sphincter dyssynergia

Over-active
Overactive

Sacral/infrasacral lesion
- **History:** predominantly voiding symptoms
- **Ultrasound:** PVR urine volume raised
- **Urodynamics:** hypocontractile or acontractile detrusor

Under-active
Normo-active

Under-active
Underactive

On regroupe sous le terme de vessie neurogène, l'ensemble des dysfonctions vésico-sphinctériennes que l'on peut associer à une pathologie neurologique acquise ou traumatique

Jalesh N Panicker, lancet Neurol 2015

Mr B , 58 ans

- Infections urinaires à répétition
- Hypospadias avec multiples reprises chirurgicales.
- Vessie hyper contractile secondaire à obstruction chronique
- Autosondage depuis 8 mois
- 4 à 5 cystites par mois avant les autosondages
- 2 à 3 depuis
- Pas d'épisodes d'infection urinaire fébrile

Examen macroscopique ou chimique

Aspect	**limpide**		

Examen microscopique

Cytométrie de flux IQ200 Iris (OR)

Leucocytes	**19 000**	/ml	inf. 10 0(
Hématies	**2 000**	/ml	inf. 10 0(

Culture myco-bactériologique

Gelose CPS - Vitek2 / VitekMS - Biomérieux (OR)

Culture positive avec présence de :
10.5 UFC/mL 1 germe (cf ID1)

ANTIBIOGRAMME 1er GERME

Nom du germe 1 isolé — **Klebsiella pneumoniae ssp pneumoniae**

BETA-LACTAMINES:PENICILLINES	
AMOX.+A.CLAV en cas de cystites (Augmentin°)	**Résistant**
AMOX.+A.CLAV en dehors de cystites (Augmentin°)	**Résistant**
AMPICILLINE (Amoxicilline°)	**Résistant**
PIPERACILLINE+TAZOBACTAM (Tazocilline°)	**Résistant**
TICARCILLINE (Ticarpen°)	**Résistant**
BETA LACTAMINES:CEPHALOSPORINES ET PENEMES	
CEFIXIME (Oroken°)	**SENSIBLE**
CEFOXITINE (Mefoxin°)	**SENSIBLE**
CEFTAZIDIME (Fortum°)	**SENSIBLE**
CEFTRIAXONE (Rocephine°)	**SENSIBLE**
ERTAPENEME (Invanz°)	**SENSIBLE**
AMINOSIDES	
AMIKACINE (Amiklin°)	**SENSIBLE**
GENTAMICINE (Gentalline°)	**SENSIBLE**
QUINOLONES	
AC.NALIDIXIQUE (Negram°)	**SENSIBLE**
OFLOXACINE (Oflocet°)	**SENSIBLE**
ANTIBIOTIQUES DIVERS	
COTRIMOXAZOLE (Bactrim°, Eusaprim°)	**SENSIBLE**
NITROFURANTOINE (Furadoïne°, Furadantine°)	**Intermédiaire**
TEMOCILLINE (Negaban°)	**SENSIBLE**

Que proposez- vous?

L'antibiocycle (1)

Journal of Antimicrobial Chemotherapy (2006) 57, 784–788
doi:10.1093/jac/dkl010
Advance Access publication 10 February 2006

JAC

Prevention of urinary tract infection in spinal cord-injured patients: safety and efficacy of a weekly oral cyclic antibiotic (WOCA) programme with a 2 year follow-up—an observational prospective study

Jérôme Salomon[1], Pierre Denys[2], Corinne Merle[1], Emmanuel Chartier-Kastler[2], Christian Perronne[1], Jean-Louis Gaillard[3] and Louis Bernard[1]*

- **PRINCIPE :** 1 prise unique hebdomadaire alternée d'un antibiotique A ou B

Parmi : nitrofuranes, fosfomycine, trimethoprime-sulfaméthoxazole, céfixime

- **Objectif principal :** éviter IUS chez blessés médullaires sous sondages intermittents,

- **Objectifs secondaires :** tolérance, consommation ATB, BMR rectal (entérobactéries BLSE)

JAC 2006

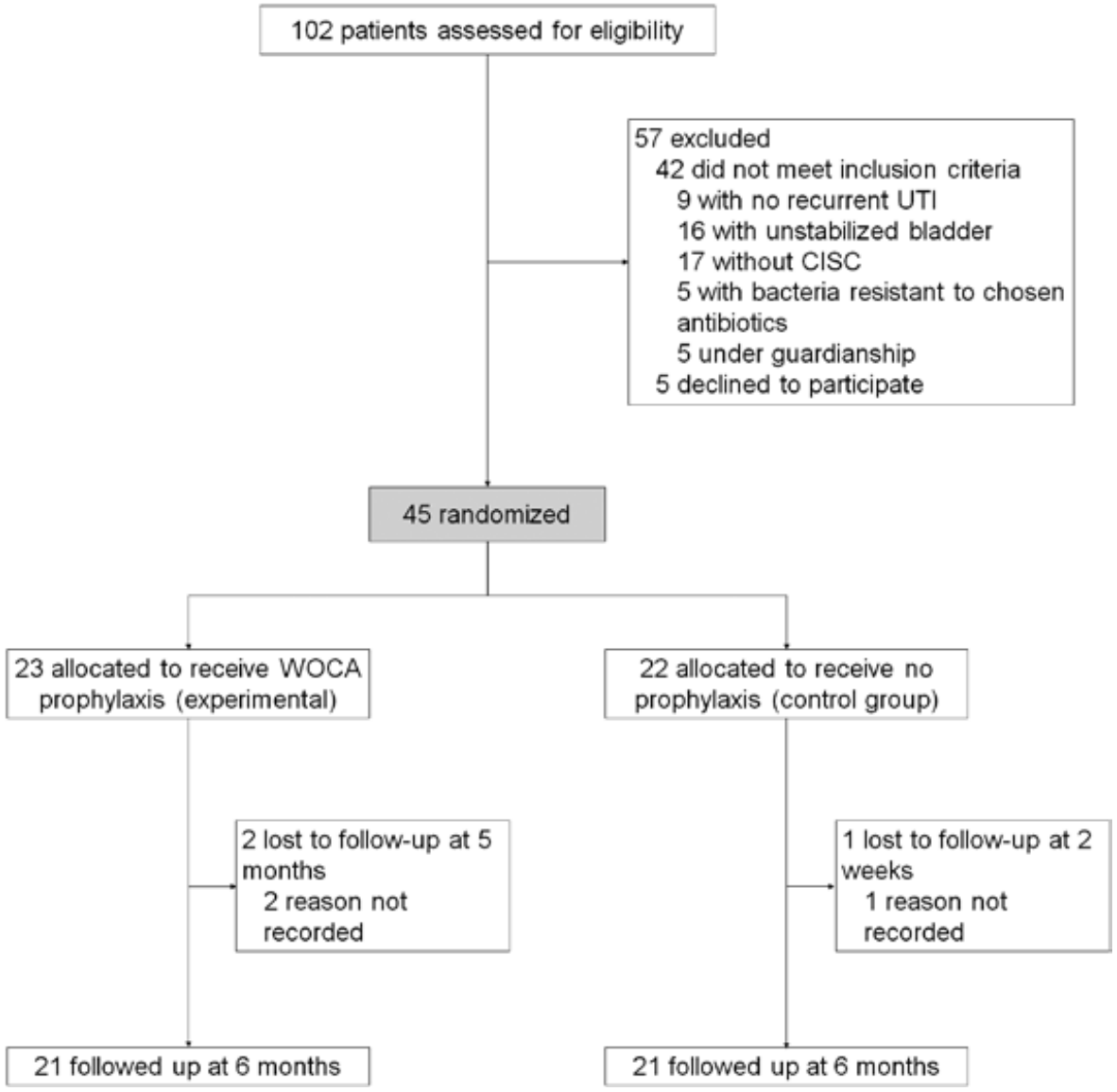
Clinical Infectious Diseases

MAJOR ARTICLE

Weekly Sequential Antibioprophylaxis for Recurrent Urinary Tract Infections Among Patients With Neurogenic Bladder: A Randomized Controlled Trial

Aurélien Dinh,[1] Marie-Charlotte Hallouin-Bernard,[2] Benjamin Davido,[1] Adrien Lemaignen,[2] Frédérique Bouchand,[3] Clara Duran,[1] Alexia Even,[4] Pierre Denys,[4] Brigitte Perrouin-Verbe,[5] Albert Sotto,[6] Jean-Philippe Lavigne,[7] Franck Bruyère,[8] Nathalie Grall,[9] Elsa Tavernier,[10] and Louis Bernard[2]

Variable	Antibiocycle N = 23	Pas d'antibiocycle N = 22
Sexe (n, %)		
Femme	7 (30.4%)	8 (36.4%)
Homme	16 (69.6%)	14 (63.6%)
Age (an, médiane, IQR)	48.7 [41.5 ; 60.0]	49.6 [34.7 ; 57.5]
N IU par an (médiane, IQR)	12.0 [6.5; 12.0]	9.5 [6.0; 11.8]
N IU fébrile par an (médiane, IQR)	0.0 [0.0; 2.0]	2.0 [0.0; 3.0]
Comorbidités (n, %)		
Diabète	3 (13.0%)	2 (9.1%)
Cirrhose	0 (0%)	0 (0%)
Traitement immunosuppressif	0 (0%)	0 (0%)
Cancer or hémopathie	0 (0%)	0 (0%)
Insuffisance rénale sous dialyse	0 (0%)	0 (0%)
Insuffisance hépatique	0 (0%)	0 (0%)
Maladie auto-immune	0 (0%)	0 (0%)
VIH	0 (0%)	0 (0%)
Orchi-épididymite	3 (13.0%)	1 (4.5%)
IU fébrile	13 (56.5%)	16 (72.7%)
Poids (kg, médiane, IQR)	68.0 [62.0; 72.5]	70.5 [65.2; 93.5]



CID 2020

Clinical Infectious Diseases

MAJOR ARTICLE

Weekly Sequential Antibioprophylaxis for Recurrent Urinary Tract Infections Among Patients With Neurogenic Bladder: A Randomized Controlled Trial

Aurélien Dinh,[1] Marie-Charlotte Hallouin-Bernard,[2] Benjamin Davido,[1] Adrien Lemaignen,[2] Frédérique Bouchand,[3] Clara Duran,[1] Alexia Even,[4] Pierre Denys,[4] Brigitte Perrouin-Verbe,[5] Albert Sotto,[6] Jean-Philippe Lavigne,[7] Franck Bruyère,[8] Nathalie Grall,[9] Elsa Tavernier,[10] and Louis Bernard[2]

	Antibiocycle N = 23	Pas d'antibiocycle N = 22
Bactéries identifiées à l'inclusion (ECBU)		
Escherichia coli	21 (91%)	17 (77%)
Klebsiella spp.	4 (17%)	2 (9%)
Proteus spp.	0 (0%)	2 (9%)
Citrobacter spp.	0 (0%)	1 (5%)
Enterococcus spp.	1 (4%)	1 (5%)
Streptococcus spp.	2 (9%)	0 (0%)
SCN	1 (4%)	1 (5%)
SAMS	0 (0%)	1 (5%)

Associations antibiotiques utilisées	
Fosfomycine-trometamol / Cefixime	14
Fosfomycine-trometamol / Amoxicilline-clavulanate	2
Fosfomycine-trometamol / Sulfamethoxazole-trimethoprim	2
Fosfomycine-trometamol / Amoxicilline	2
Fosfomycine-trometamol / Furadantine	1
Cefixime / Sulfamethoxazole-trimethoprim	1

CID 2020

Clinical Infectious Diseases

MAJOR ARTICLE

IDSA Infectious Diseases Society of America | hivma hiv medicine association | OXFORD

Weekly Sequential Antibioprophylaxis for Recurrent Urinary Tract Infections Among Patients With Neurogenic Bladder: A Randomized Controlled Trial

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	Antibiocycle N = 23	Pas d'antibiocycle N = 22	P-value
Evolution			
N IU (médiane, IQR)	1.0 [0.5-2.5]	2.5 [1.2-4.0]	0.024
IU fébrile (n, %)	0 (0%)	9 (45%)	<0.001
Hospitalisations (n, %)	3 (14%)	6 (29%)	0.281
Hospitalisations dues à IU (n, %)	0 (0%)	2 (9%)	0.233
N cure d'antibiothérapie additionnelle (médiane, IQR)	0.0 [0.0-2.0]	3.0 [2.0-5.0]	0.004
N jours d'antibiothérapie (médiane, IQR)	0.0 [0.0; 12.0]	11.0 [3.2; 28.5]	0.018

CID 2020

Antibiotic cycling prevents urinary tract infections in spinal cord injury patients and limits the emergence of multidrug resistant organism

CrossMark

Sex	
○ Male	n = 30 (60%)
○ Female	n = 20 (40%)
○ Sex ratio	1.5
Age (years)	
○ Mean (±SD)	51 ± 13.5
○ Min	20
○ Max	81
Injuries	
○ Paraplegia	n = 33 (66%)
○ Tetraplegia	n = 6 (12%)
○ Multiple sclerosis	n = 4 (8%)
○ Others	n = 6 (12%)
○ No data	n = 1 (2%)
Voiding activity	
○ Self-catheterization	n = 44 (88%)
○ Hetero-catheterization	n = 2 (4%)
○ Endoprothesis	n = 2 (4%)
○ Bladder plasty	n = 0
○ Indwelling catheter	n = 0
○ Reflex urination	n = 2 (4%)
○ Others	n = 2 (4%)
○ No data	n = 1 (2%)

Suivi > 2 ans (moy 63 mois)

	Prior WOCA	Under WOCA	*p*
Urinary tract infection (UTI) per patient per year:			
Cystitis	9.45	1.57	0.0001
Febrile UTI	5.25	0.18	0.0001
Hospitalization and antibiotic use:			
Hospitalizations per patient per year	0.86	0.02	0.002
Total hospital days per patient per year	5.37	0.16	0.001
Total days of curative antibiotic treatment per patient per year	92.83	34.5	<0.0001
MDR colonization:			
Percentage of positive urine sample cultures	86%	57%	<0.0001
MDRO-colonized patients	9	4	NS

C. Poirier *et al.* J. of infection 2015

backup

Canneberge

Cochrane Library

Cochrane Database of Systematic Reviews

Cranberries for preventing urinary tract infections (Review)

Jepson RG, Williams G, Craig JC

Cochrane Database of Systematic Reviews 2012, Issue 10. Art. No.: CD001321.
DOI: 10.1002/14651858.CD001321.pub5.

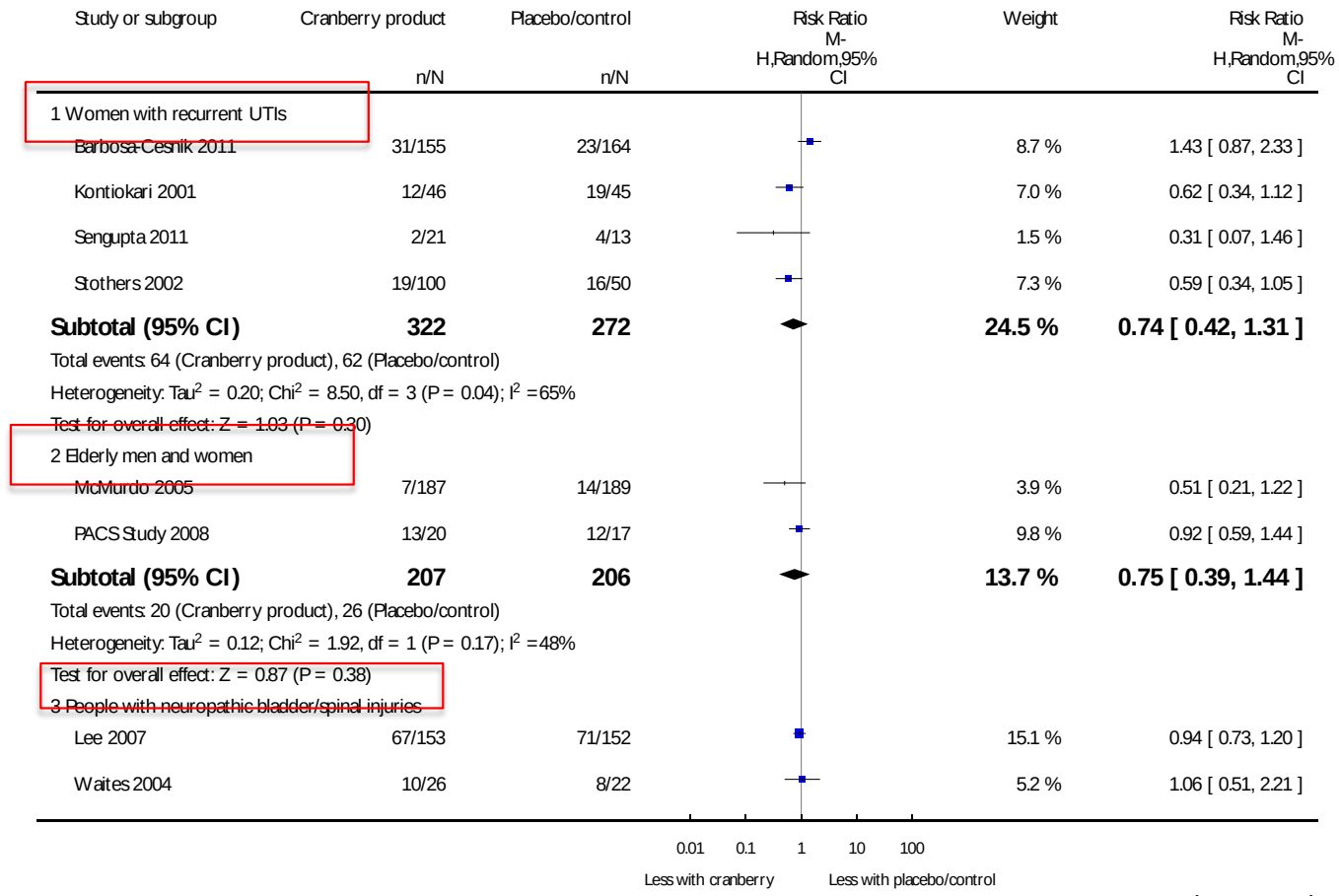
Efficacité *vs* placebo

Analysis 1.1. Comparison 1 Cranberry products versus placebo/control, Outcome 1 Participants with one or more UTIs at follow-up.

Review: Cranberries for preventing urinary tract infections

Comparison: 1 Cranberry products versus placebo/control

Outcome: 1 Participants with one or more UTIs at follow-up



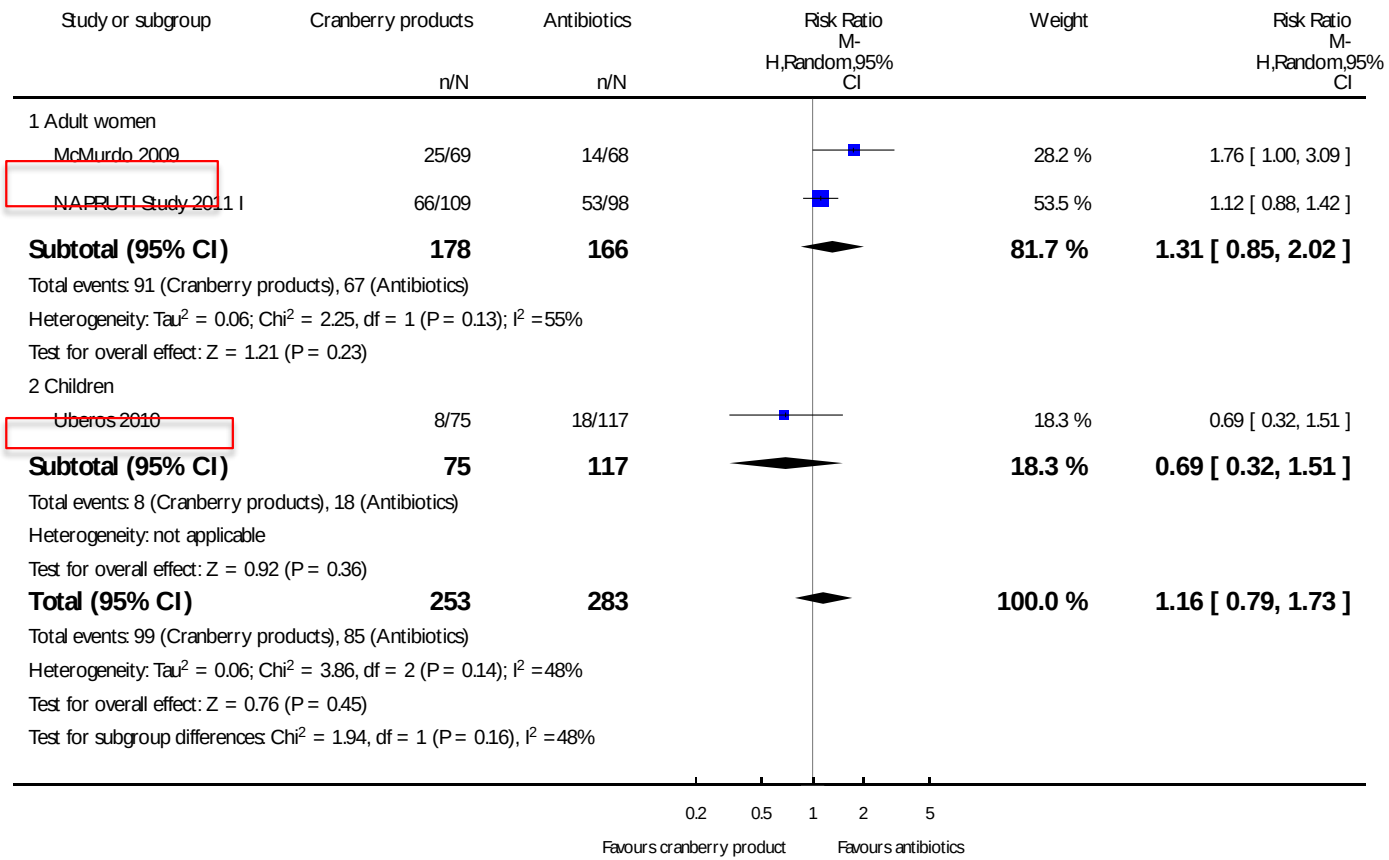
Efficacité *vs* ATB

Analysis 2.1. Comparison 2 Cranberry products versus antibiotics, Outcome 1 Repeat symptomatic UTI.

Review: Cranberries for preventing urinary tract infections

Comparison: 2 Cranberry products versus antibiotics

Outcome: 1 Repeat symptomatic UTI



Conclusions

- Biais méthodologiques :
  - Population hétérogène
  - Pharmacopée variable
  - Compliance ?
- Avantages :
  - Absence de toxicité
  - Pas d'émergence de R

La canneberge peut être proposée en prévention des cystites récidivantes à *E. coli*, à la dose de 36 mg/jour de proanthocyanidine *(IV-C)*.

Etude randomisée, en double aveugle vs placebo de l'efficacité d'une association de propolis, de canneberge et de zinc dans la prévention des infections urinaires récidivantes chez la femme.

- **Objectif :** Comparer la fréquence et le délai de survenue des cystites aiguës chez les femmes consommant une association de canneberge, de propolis et de zinc (groupe DUAB®) ou un placebo

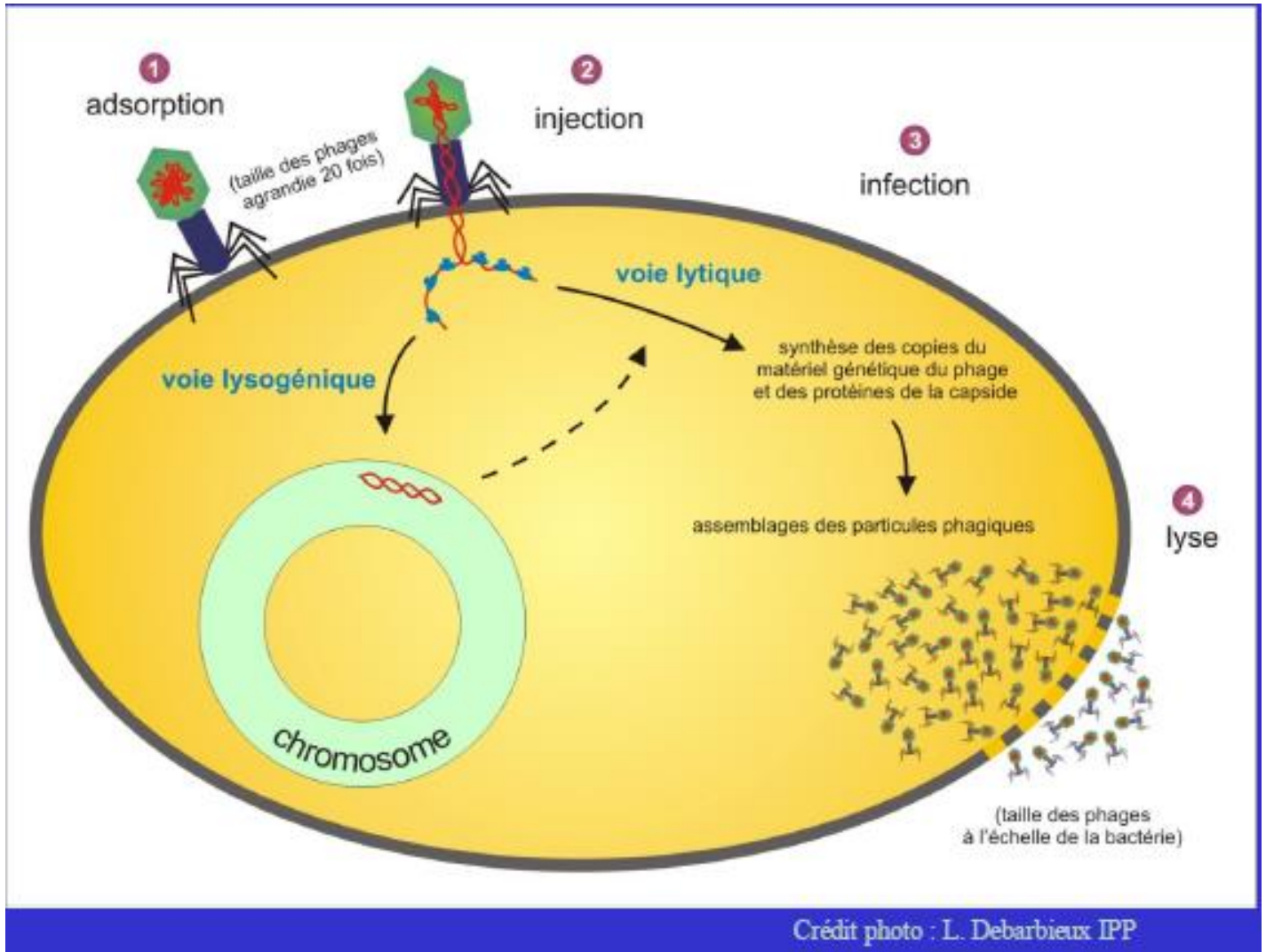
- **Méthodes** :
  - étude multicentrique contrôlée, randomisée, en double aveugle vs placebo ; femmes > 18 ans ; au moins 4 épisodes de cystite au cours des 12 mois précédents.
  - au moins un épisode avec culture + à *E. coli*
  - stop ATB, propolis, canneberge depuis plus de 7 jours
  - suivi de 6 mois = survenue d'une cystite confirmée par un ECBU

Etude randomisée, en double aveugle vs placebo de l'efficacité d'une association de propolis, de canneberge et de zinc dans la prévention des infections urinaires récidivantes chez la femme.

- **Résultats :**

  - 42 femmes groupe DUAB et 43 groupe placebo,
  - Âge moyen de 53 ± 18 ans ; 6,2 ± 3,6 cystites au cours de l'année précédente sans différence entre les deux groupes.
  - Anamnèses urinaires et les facteurs favorisant comparable à l'exception de la diurèse (ajustement)
    - le nombre total de cystites / 3 premiers mois < groupe DUAB (0,7 ± 1,1 vs 1,3± 1,1 ; p=0,0257).
    - délai moyen de survenue de 1ère infection urinaire significativement plus long dans le groupe DUAB : 68 ± 54 jours vs 46 ± 36 jours (p= 0,0258).
    - *E. Coli* le + fréquent dans les 2 groupes
    - Tolérance idem

Phages



Crédit photo : L. Debarbieux IPP

Clinical Aspects of Phage Therapy

Advances in Virus Research, Volume 83

Ryszard Międzybrodzki,[*,†,1] **Jan Borysowski,**[‡] **Beata Weber-Dąbrowska,**[*,†] **Wojciech Fortuna,**[*,†] **Sławomir Letkiewicz,**[†,§] **Krzysztof Szufnarowski,**[†,‖] **Zdzisław Pawełczyk,**[†] **Paweł Rogóż,**[†,¶] **Marlena Kłak,**[*] **Elżbieta Wojtasik,**[#] and **Andrzej Górski**[*,†,‡]

* Bacteriophage Laboratory, Ludwik Hirszfeld Institute of Immunology Experimental Therapy, Polish Academy of Sciences, Wrocław, Poland

TABLE XII Detailed evaluation of results of phage therapy in women with urinary or vaginal infections

	Way of administration of the phage preparation								Type of phage preparations applied							
	Vaginal ($n = 6$)		Oral ($n = 4$)		Rectal ($n = 3$)		Other[a] ($n = 9$)		*E. coli* ($n = 10$)		Enterococcal/ *E. coli* ($n = 7$)		Other[b] ($n = 5$)	
Category of response to treatment	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
A - pathogen eradication and/or recovery	1	16.7	1	25.0	1	33.3	0	0.0	1	10.0	1	14.3	1	20.0
B - good clinical result	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
C - clinical improvement	2	33.3	1	25.0	0	0.0	2	22.2	2	20.0	1	14.3	2	40.0
D - questionable clinical improvement	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
E - transient clinical improvement	1	16.7	1	25.0	0	0.0	2	22.2	3	30.0	1	14.3	0	0.0
F - no response to treatment	2	33.3	1	25.0	2	66.7	5	55.6	4	40.0	4	57.1	2	40.0
G - clinical deterioration	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Good response (total A–C):	**3**	**50.0**	**2**	**50.0**	**1**	**33.3**	**2**	**22.2**	**3**	**30.0**	**2**	**28.6**	**3**	**60.0**
Inadequate response (total D–G):	**3**	**50.0**	**2**	**50.0**	**2**	**66.7**	**7**	**77.8**	**7**	**70.0**	**5**	**71.4**	**2**	**40.0**

[a] Including sitz bath ($n = 1$); topical ($n = 1$); oral/topical ($n = 1$); oral/rectal/topical ($n = 1$); rectal/topical ($n = 1$); vaginal/rectal ($n = 1$); vaginal/oral ($n = 1$); vaginal/topical ($n = 1$); and vaginal/oral/topical ($n = 1$), where topical refers to compresses soaked with the phage preparation applied to the vulva.
[b] Including enterococcal ($n = 2$), staphylococcal ($n = 1$), *Enterobacter* ($n = 1$), and enterococcal/*Proteus* ($n = 1$).

Compétition bactérienne

De quoi s'agit il ?

- 2 souches d'*E. coli*
  - *E. coli* 83792 : n'exprime pas P. *fimbriae* (contient gène *pap*)
  - HU2117 : E. coli sauvage délétion de 800 pb codant pour le gène *papG*
- Capacité identique à coloniser la vessie et inhiber la formation de biofilm sur matériel
- *Lactobacillus*

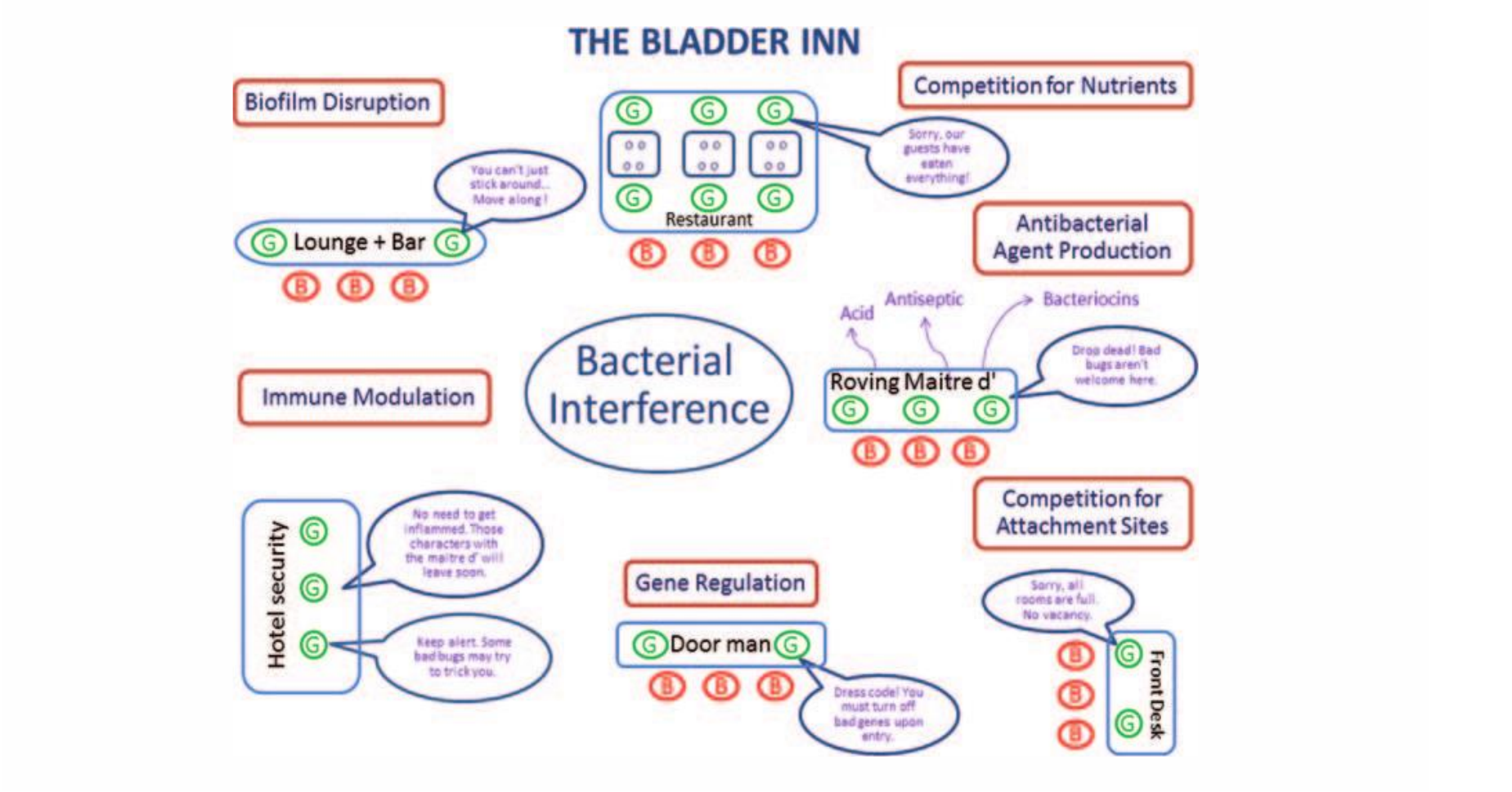
E. Coli vs lactobacillus

Attribute	*E. coli*	Lactobacillus species
Site/method of inoculation	Direct bladder inoculation or coated catheter	Vaginal suppository or oral drink
Mode of action	Controls pathogens at the site of infection	Controls the source of pathogens
Safety	Could cause local inflammatory findings	No known issues
Efficacy	Consistent reduction of urinary tract infection	Inconsistent results
Practicality	Could be cumbersome	Easy application
Cost	Could be high	Moderate
Coreceipt of antibiotics	Antibiotics consistently given before inoculation	Inconsistent
Applicability	Patients with neurogenic or dysfunctional bladder	Mostly in healthy women
Regulation	Food and Drug Administration(FDA)	FDA vs dietary supplement

RO Darrouiche CID 2012

Bacterial Interference for Prevention of Urinary Tract Infection

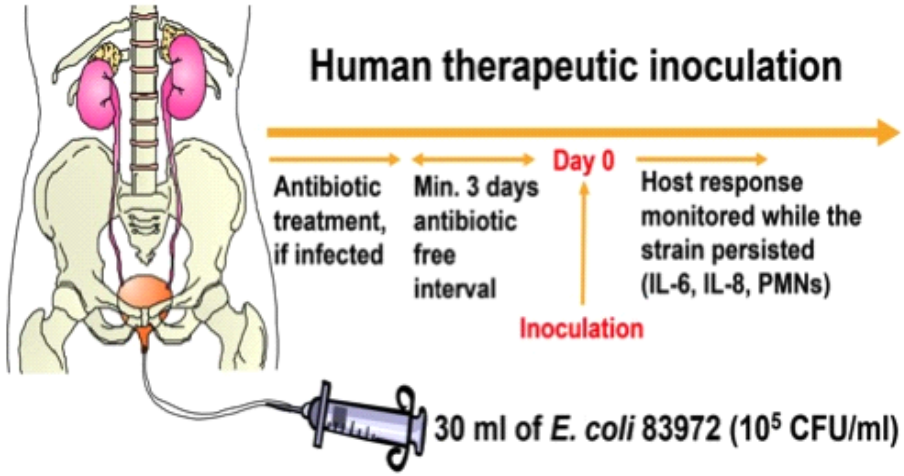
Rabih O. Darouiche[1,2,3,4] and Richard A. Hull[5]



RO Darrouiche CID 2012

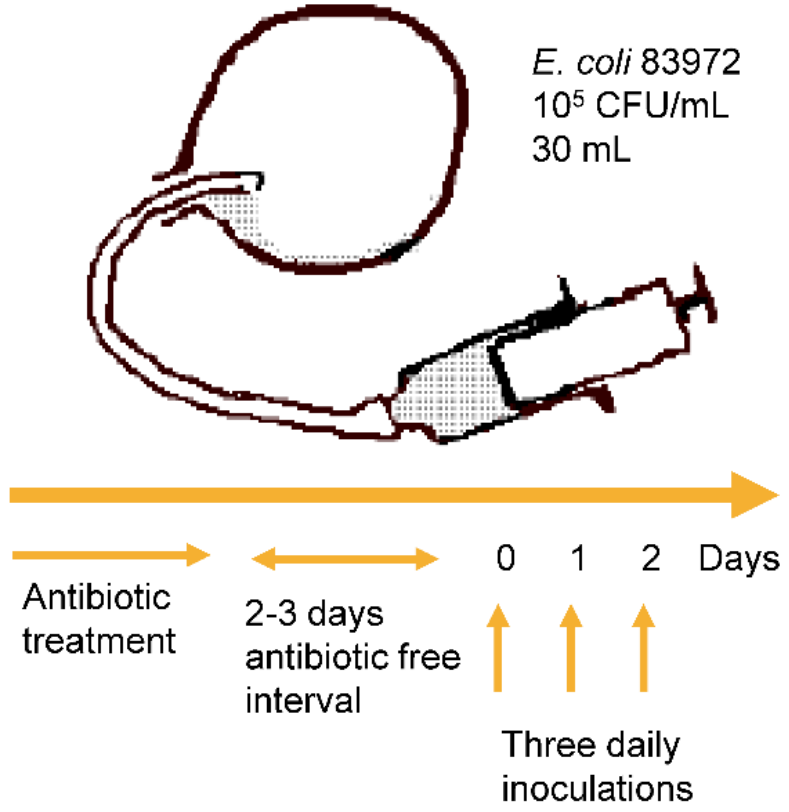
Comment ça marche ?

Inoculation of different human hosts with a single *E. coli* strain
Identification of genome alterations in re-isolates from different hosts



Human therapeutic inoculation is safe and protects against symptomatic UTI

(*Wullt, J Urology, 2010*)



B. Wullt et al. Cell Microbiol 2001

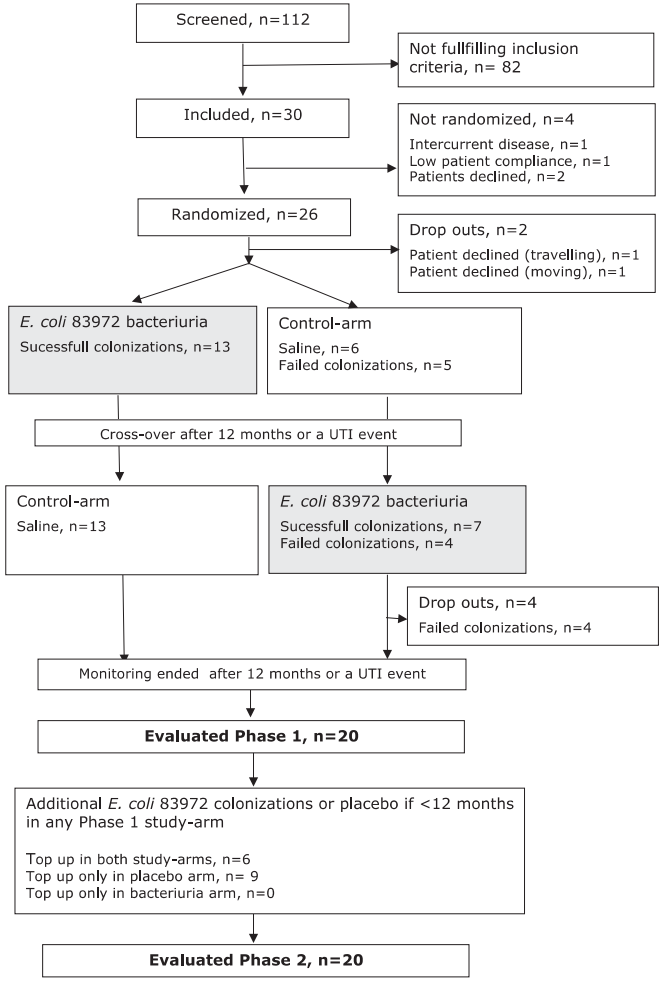
E. coli

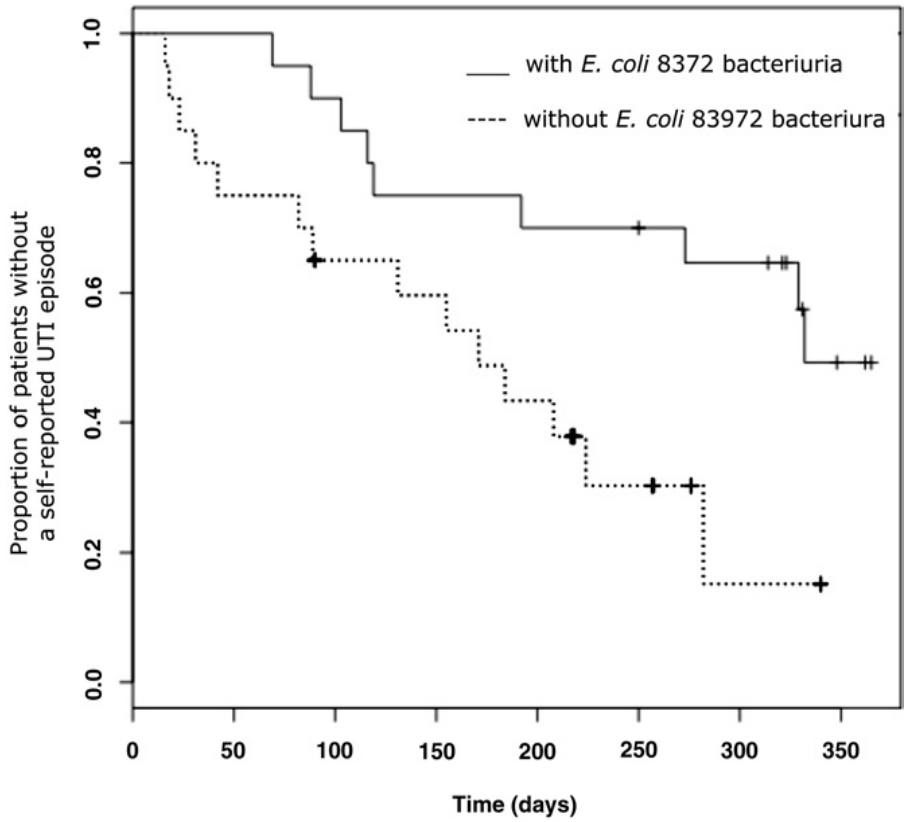
Author/Year	*E. coli* Strain	Study Design	Enrolled Patients	Intervention	Reported Safety[a]	Reported Efficacy[b]
Darouiche 2011	HU2117	Randomized, placebo-controlled, double-blind	65	Bladder inoculation	Yes	Average no. of episodes of symptomatic UTI per patient-year was lower in the experimental group than in the control group (0.50 vs 1.68, $P = .02$).
Sundén 2010	83972	Crossover, placebo-controlled, double-blind	20	Bladder inoculation	Yes	The time to first symptomatic UTI was longer with than without *E. coli* 83972 bacteriuria (median 11.3 vs 5.7 mo, sign test $P = .013$). There were fewer reports during 1 year of symptomatic UTI with than without *E. coli* 83972 bacteriuria (13 vs 35 episodes; paired *t* test, $P = .009$, 95% CI: .31–1.89).
Prasad 2009	83972	Open-label, compared *E. coli* colonizers to historic control	13	Insertion of a coated bladder catheter for 3 d in patients practicing intermittent bladder catheterization	Yes	Lower rate of symptomatic UTI while colonized with *E. coli* 83972 than during prestudy period (0.77 vs 2.27 episodes per patient-year). Statistical comparison not provided.
Trautner 2007	HU2117	Open-label, compared *E. coli* recipients to historic control	12	Insertion of a coated bladder catheter for 28 d in patients with indwelling bladder catheters	Yes	Calculated rate of symptomatic UTI in the experimental group was lower than the reported historic rate in spinal cord–injured subjects with indwelling bladder catheters (0.15 vs 2.72 cases per 100 patient-days). Statistical comparison not provided.
Darouiche 2005	83972	Randomized, placebo-controlled, double-blind	27	Bladder inoculation	Yes	Mean number of symptomatic episodes of UTI per year was lower in experimental group than in control group (1.6 vs 3.5, $P = .036$).
Darouiche 2001	83972	Open-label, compared *E. coli* colonizers to noncolonizers and historic control	44	Bladder inoculation	Yes	A lower mean rate of symptomatic UTI in patients colonized with *E. coli* 83972 vs patients who could not be colonized (0.06 vs 1.80 episodes of UTI/patient-year, $P < .001$).
Hull 2000	83972	Open-label, compared *E. coli* colonizers to noncolonizers and historic control	21	Bladder inoculation	Yes	Mean rates of symptomatic UTI per patient-year were 0 in patients colonized with *E. coli* 83972 vs 3.1 in the same patients before colonization. Statistical comparison not provided.

RO Darrouiche CID 2012

Escherichia coli 83972 Bacteriuria Protects Against Recurrent Lower Urinary Tract Infections in Patients With Incomplete Bladder Emptying

Fredrik Sundén, Lars Håkansson, Eva Ljunggren and Björn Wullt*





The journal of urology 2010

Lactobacillus

Author/Year	Lactobacillus Strain	Study Design	Enrolled Patients	Intervention	Reported Safety[a]	Reported Efficacy[b]
Stapleton 2011	*L. crispatus* CTV05	Randomized, placebo-controlled, double-blind	100	Vaginal suppository	Yes	Recurrent symptomatic UTI during a 10-week treatment period occurred in 16% of patients in the experimental group vs 27% in the control group (RR = 0.5; 95% CI: .2–1.2).
Uehara 2006	*L. crispatus*[c]	Open-label, compared to historic control	9	Vaginal suppository	Yes	Average number of recurrent episodes of symptomatic UTI per year was 1.3 in the experimental group vs 5.0 in historic control group ($P = .0007$).
Kontiokari 2001	*L. casei* var *rhamnosus* GG	Randomized, controlled, compared to cranberry-lingonberry drink or no drink	150	Oral drink	Yes	At 6 mo, the likelihood of recurrent symptomatic UTI was lower ($P = .023$) in cranberry-lingonberry group (16%) than in *Lactobacillus* group (38%) or control group (36%).
Reid 1995	*L. casei* var *rhamnosus* GR1 & *L. fermentum* B54	Randomized, controlled, compared to *Lactobacillus* growth factor and historic control	55	Vaginal suppository	Yes	Rates of symptomatic UTI were comparable among recipients of *Lactobacillus* and recipients of *Lactobacillus* growth factor (1.6 vs 1.3 episodes per patient-year); in comparison, the historic control group had a 6.0 rate of symptomatic UTIs per patient-year ($P < .0011$)
Baerheim 1994	*L. casei* var *rhamnosus*[c]	Randomized, placebo-controlled, double-blind	47	Vaginal suppository	Yes	A 1.41 ratio of the rate of symptomatic UTI in the placebo group vs the experimental group (95% CI: .88–1.98).
Reid 1992	*L. casei* var *rhamnosus* GR1 & *L. fermentum* B54	Randomized, placebo-controlled, blinded	41	Vaginal suppository	Yes	Recurrent symptomatic UTI occurred in 21% of patients treated with *Lactobacillus* suppository vs 47% in those who received skim-milk suppository ($P = .27$).

RO Darrouiche CID 2012

Conclusions

Avantages

- Efficace
- Peu d'EI (pas de réversion de la pathogénicité)
- Pas d'émergence de résistance bactérienne

Inconvénients

- Peu efficace (vs ATB ?)
- Difficultés à la mise en pratique
- Coût

Vaccination

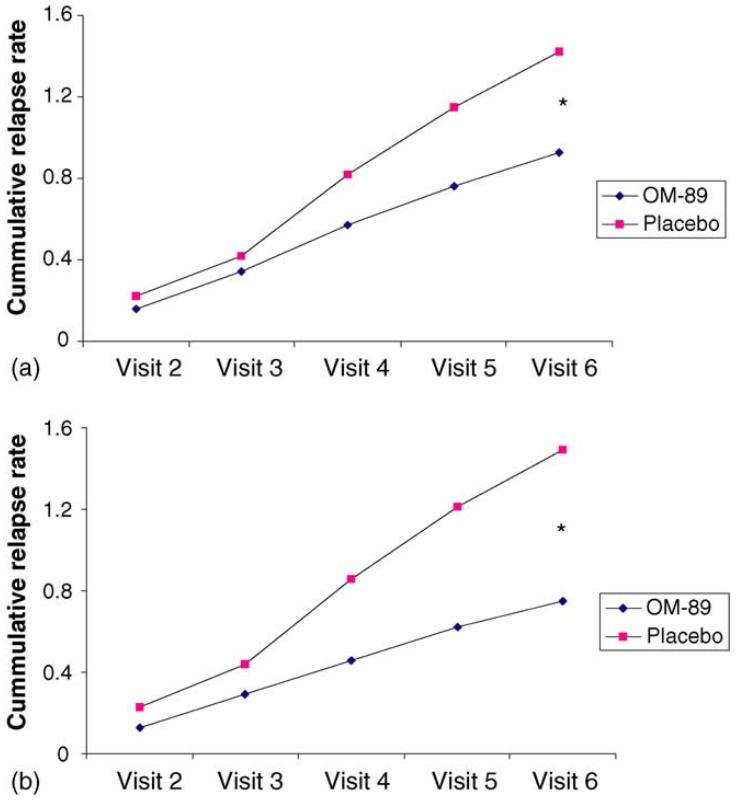
European Urology

European Urology 47 (2005) 542–548

A Long-Term, Multicenter, Double-Blind Study of an Escherichia Coli Extract (OM-89) in Female Patients with Recurrent Urinary Tract Infections

Hartwig W. Bauer[a], Schanaz Alloussi[b], Günther Egger[c], Hans-Martin Blümlein[d], Gabriel Cozma[e,*], Claude C. Schulman[f]
on behalf of the Multicenter UTI Study Group[1]

Essai randomisé double aveugle vs placbo
453 patientes adultes
IU à l'inclusion avec ECBU +
OM-89 : 1 capsule/j pdt 90j
3 mois sans traitement
Puis les 10ers j de M7, M8, M9
Suivi 1 an
Taux d'IU total : 0,84 vs 1,28
Réduction de 34% (p<0,003)



European urology 2005

J Korean Med Sci 2010; 25: 435-9

ISSN 1011-8934
DOI: 10.3346/jkms.2010.25.3.435

A Prospective Multi-center Trial of *Escherichia coli* Extract for the Prophylactic Treatment of Patients with Chronically Recurrent Cystitis

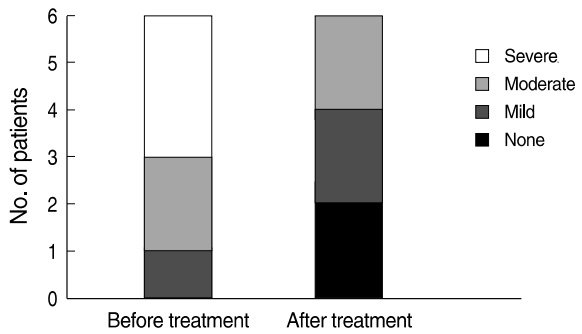


Fig. 1. Changes of urgency in recurred patients (n=6).

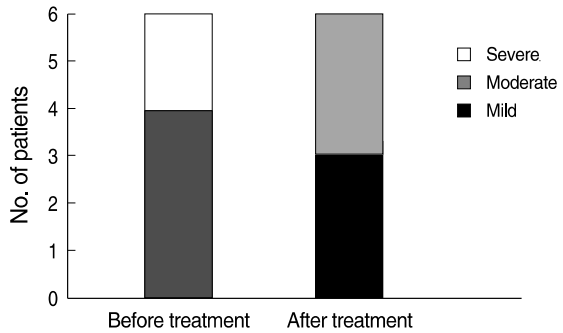


Fig. 2. Changes of painful voiding symptom in recurred patients (n=6).

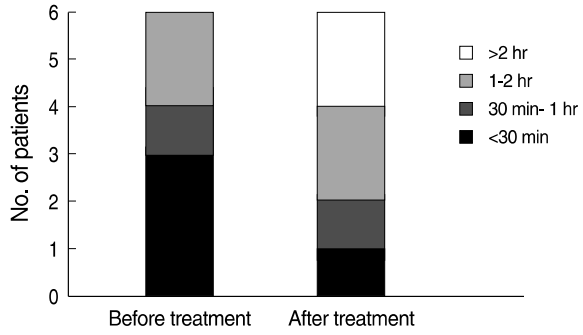


Fig. 3. Changes of frequency in recurred patients (n=6).

Essai avant après

42 patientes au moins 2 lu dans les 6 derniers mois

Traitement capsule 1/j pdt 3 mois

Suivi 6 mois

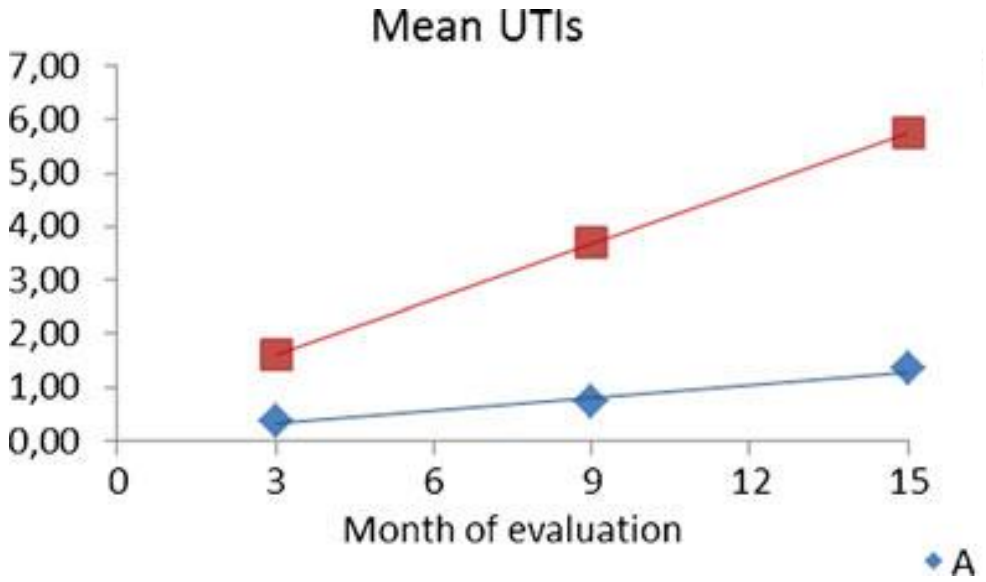
IU : 0.35 vs. 4.26, *P* <0.001

Int Urogynecol J (2013) 24:127–134
DOI 10.1007/s00192-012-1853-5

ORIGINAL ARTICLE

Evaluation of a therapeutic vaccine for the prevention of recurrent urinary tract infections versus prophylactic treatment with antibiotics

M. F. Lorenzo-Gómez · B. Padilla-Fernández · F. J. García-Criado · J. A. Mirón-Canelo · A. Gil-Vicente · A. Nieto-Huertos · J. M. Silva-Abuin



Essai multicentrique
319 patientes >1 IU dans les 6 derniers mois
Bras A : Uromune® (1/j pdt 3 mois)
Bras B : sulfamethoxazole/trimethoprim 200/40 mg/j pdt 6 mois
Résultats M3 : 0,36 IU vs 1,60 (P < 0,0001), respectively.
Idem M9 et M15 (P < 0.0001).

Options préventives

- **Vitamine C** >> pas d'intérêt démontré
- **Methenamine** >> Non recommandé, pas de preuve suffisante.
- **D Mannose** >> pas de preuves suffisantes
- **Instillations de nitrate d'argent >> Pas** d'efficacité démontré. Ne doit plus être utilisée
- **Herbologie traditionnelle chinoise** >> Pas de données (toxicité ?)

Cas particulier : femme enceinte

- Les 2 seules situations consensuelles pour le dépistage et le traitement des colonisations urinaires sont :
  - avant une procédure urologique invasive programmée
  - grossesse à partir du 4ème mois

Dépistage

- Population générale : Dépistage d'une colonisation urinaire par **BU** recommandé aux consultations des 4ème, 5ème, 6ème, 7ème, 8ème et 9ème mois.
- Femmes à haut risque d'IU (uropathie sous-jacente, diabète, antécédent de cystite aiguë récidivante), le dépistage d'emblée par **ECBU et dés la première cs**

Recommandations

- Le traitement antibiotique des colonisations gravidiques est efficace et évite l'**évolution vers une PNA** (I-A).
- Il est donc recommandé pour toute bactériurie monomicrobienne ≥ **10.5 UFC/mL,** y compris pour le streptocoque B (I-A).
- La présence d'un **streptocoque B** sur un prélèvement urinaire lors de la grossesse est associé à une colonisation vaginale, et requiert un traitement en per-partum,