

BALNEOTHERAPY AND CHRONIC URINARY TRACT INFECTIONS, A BENEFIT OR A DANGER?



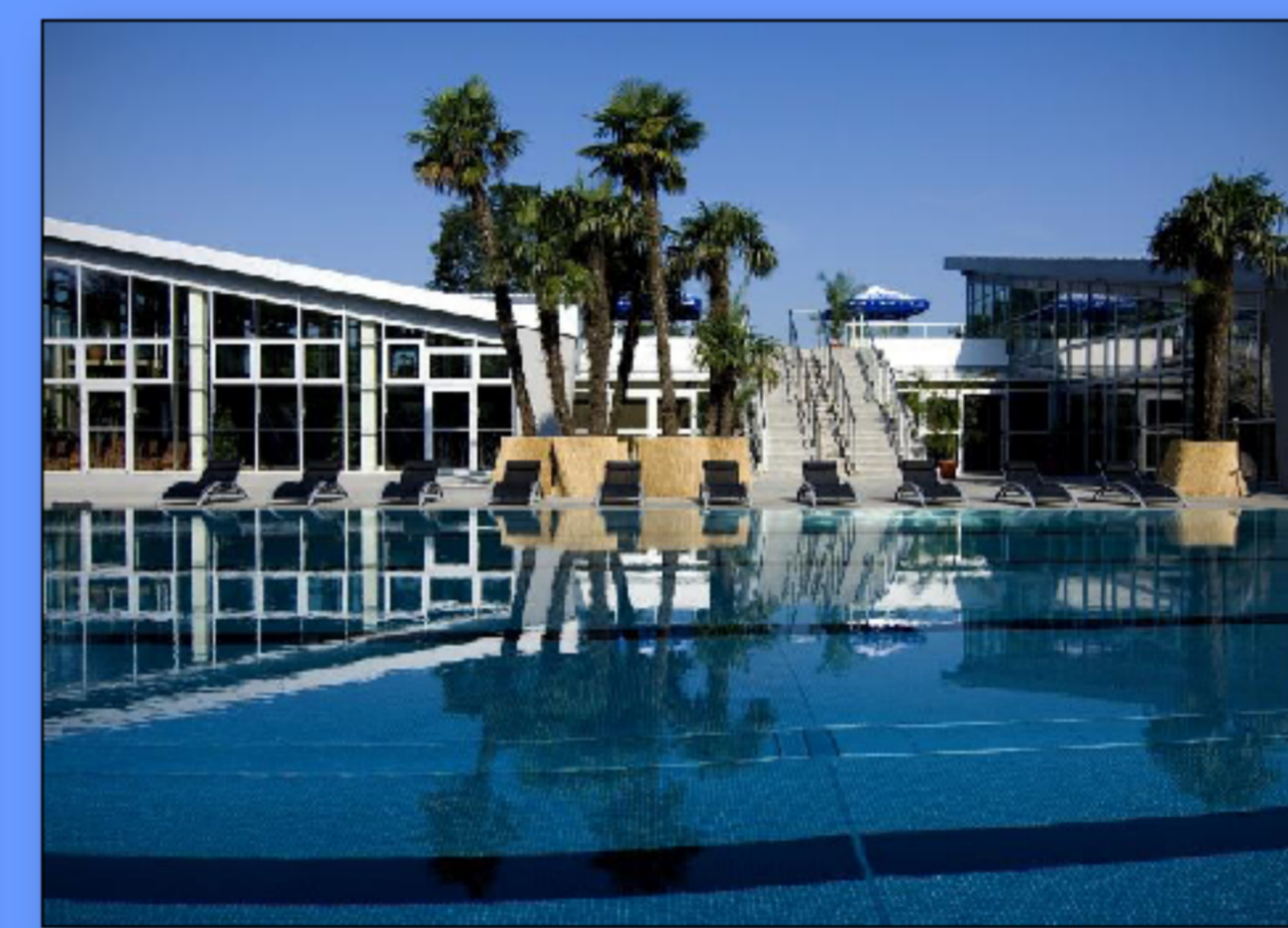
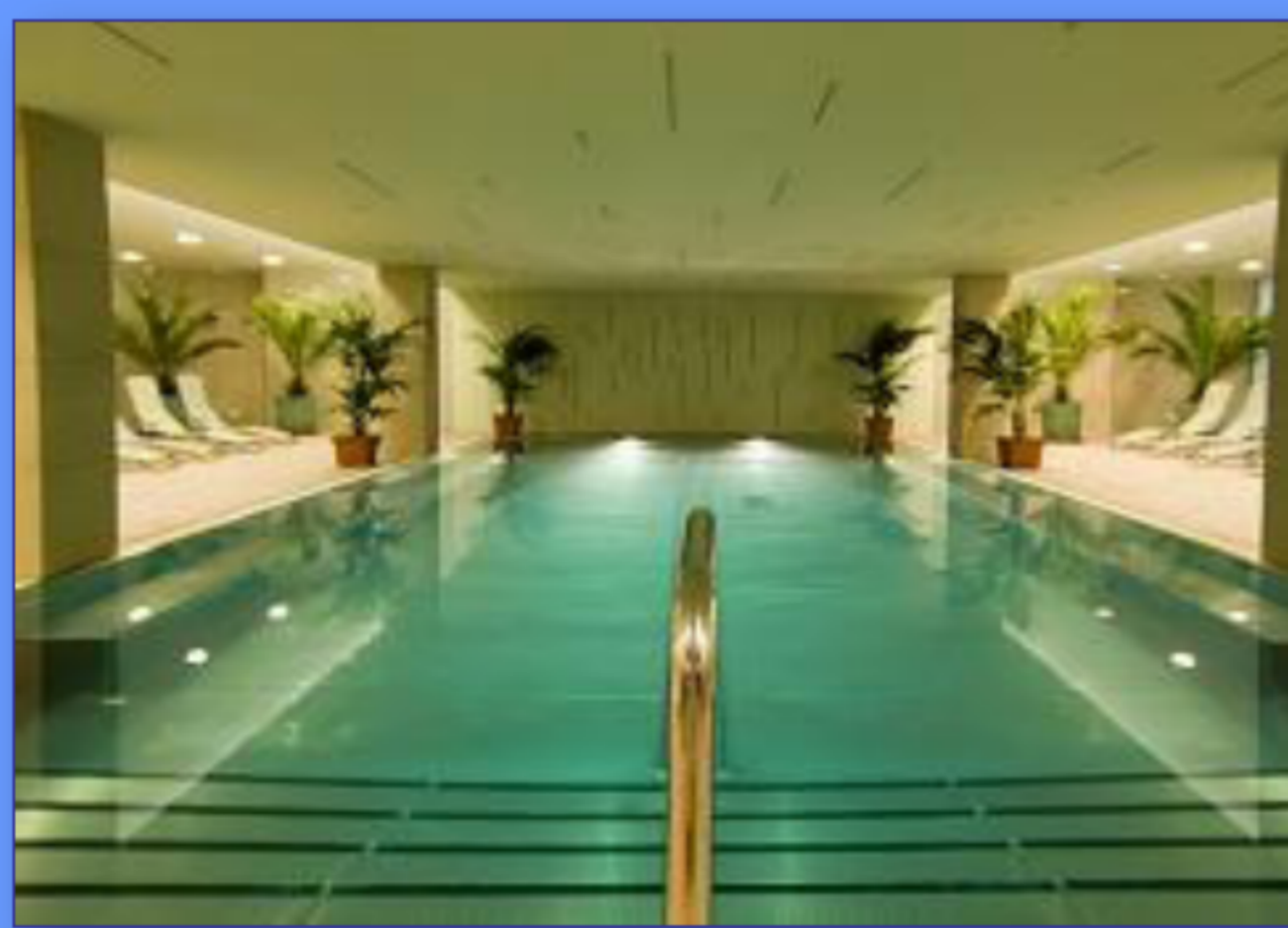
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Objectives:

- In countries rich in thermal waters, balneotherapy is often used as a part of supportive therapy and rehabilitation process for chronic kidney and urinary tract infection
- This appears in a contradiction with our nephrologist's recommendations for patients at risk, to avoid bathtubs and whirlpools as much as possible, not to contract urinary tract infection
- Unfortunately, publications concerning these problems are very scarce
- Aim: to assess the effect of the bathtubs and the whirlpools as a standard part of balneotherapy on the immediate risk of relapse/ recurrence of the urinary tract infection in patients at increased risk**

Methods:

- A retrospective study
- Evaluated group:** 106 patients (87 women), median age 58 years (30-87), with chronic cystitis
- Control group:** 101 patients (87 women), median age 56 years (20-75), p = ns, with back pain
- All patients were treated in bathtubs and whirlpools for 15 minutes daily during 20-22 days of their stay in the spa, number of procedures in both groups was comparable (13.05±1.02 vs 10.76±0.72, p=0.0548)
- Water was thermal and low mineralised, solutes consisted mainly of bicarbonates, sulphates, magnesium, calcium and fluoride
- Bathing was combined with other treatments, such as physical exercise, aquatic exercise in pool with thermal chlorinated water, mud packs, massages and electro- or magnetotherapy



Results:

Acute urinary tract infection	All patients		Women only*	
	Group A Chronic cystitis	Group B Back pain	Group A Chronic cystitis	Group B Back pain
Number of patients (%)	n = 11 (10.4 %)	0 %	n = 10 (11.5%)	0 %
Significance [OR ; 95% CI]	p = 0.0008, [OR 24.45; 95% CI 1.420 to 420.9]		p = 0.0015 [OR 23.71; 95% CI 1.366 to 411.6]	

- Median time to acute cystitis was 8 days (4-20)
- *All but one cases were mild bladder infections responding well to peroral antibiotic therapy. In one patient only, early discharge from spa was necessary

Conclusions:

- Bathtubs and whirlpools increased the risk of the acute cystitis in predisposed patients significantly despite 15 minutes of their duration only**
- Notwithstanding this complication, all patients attended spa for chronic cystitis and completed their stay reported raised well-being at their dismissal**
- The study was not designed to answer long term benefits of balneotherapy on chronic kidney and urinary tract infection

References:

- Kamioka H, Tsutani K, Okuizumi H et al. Effectiveness of aquatic exercise and balneotherapy: a summary of systematic reviews based on randomized controlled trials of water immersion therapies. J Epidemiol 2010;20:2-12.
- Nasermoaddeli A, Kagamimori S. Balneotherapy in medicine: a review. Environ Health Prev Med 2005;10:171-179.

