

Pilot study demonstrates effectiveness of homeopathy in treating symptomatic urinary tract infections in patients with spinal cord injury

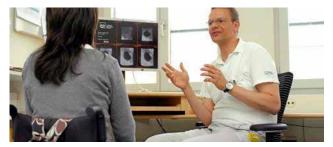
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In a recent publication, our group presented a case series demonstrating the feasibility of adjunctive classical homeopathic treatment in patients with spinal cord injury suffering from recurrent urinary tract infections¹. The results were achieved by a close collaboration between a specialized rehabilitation centre and a homeopathic practice^{*}.

Introduction

Spinal cord injury (SCI) does not only lead to the loss of sensation and motoric function of the affected muscles, but also to a dysfunction of the affected inner organs. Therefore, virtually all SCI patients suffer from neurogenic bladder dysfunction. As a result of impaired storage and voiding function, urinary tract infections (UTIs) occur frequently in this group of patients. UTIs are the leading cause of fever in patients with spinal cord lesions, and are associated with a significantly increased mortality.² Furthermore, symptomatic UTIs are often bothersome for the patients and are therefore related to a decreased quality of life. As UTIs are often recurrent and the bacterial strains are increasingly resistant to antibiotic treatment.³ UTIs present a relevant clinical challenge for both patients and caregivers.



Prof. Jürgen Pannek, Swiss Paraplegic Foundation

Unfortunately, as the underlying dysfunction which leads to an elevated risk of UTI cannot be cured, there are very few options available to prevent recurrent UTI in this group of patients. For example, many patients empty their bladder by repetitive insertion of a catheter (socalled self-catheterization), which increases the risk for UTI. A recent meta-analysis demonstrated that antibiotic prophylaxis, which is commonly used, does not lead to a significant reduction in UTIs, but causes an increase in resistant bacterial strains.⁴ As there are no evidencebased prophylactic measures, centres providing urologic care for SCI patients use a plethora of different treatments, with varying success.⁵ The idea of this study was to evaluate the effects of additional homeopathic treatment for the prevention of recurrent UTI in SCI patients.

Patients and methods

Between April 2011 and June 2012, all SCI patients presenting at the outpatient clinic of a Swiss spinal cord injury rehabilitation centre with recurrent UTIs (>3 UTI/ year) due to a neurogenic bladder dysfunction were asked whether they were interested in homeopathic treatment for the prevention of recurrent UTIs. As bladder stones or inadequate bladder management (e.g. inadequate self-catheterization technique) would counteract successful prevention of UTI, these factors were assessed by urologic examination and corrected as necessary. Eight of the ten patients who were offered adjunctive homeopathic treatment opted for it.

All participants primarily underwent homeopathic case taking by experienced homeopaths. They received constitutional treatment with single substances in high potencies. If required, inter-current homeopathic medication was given. In cases of febrile UTI not responsive to homeopathic treatment, antibiotic treatment was applied.

Testing prior to treatment

Urine culture revealed significant bacterial growth in the urine in all patients. All patients were male. Three patients had a tetraplegia, five suffered from paraplegia. Four lesions were complete, four lesions were incomplete. All patients continued their standard urologic prophylaxis, which consisted of long-term antibiotic treatment, urine acidification and/or cranberry tablets.

Results

All patients received a constitutional treatment with a single substance in high potencies (LM1), combined with acute homeopathic treatment of an acute UTI if required. For constitutional treatment, *Lycopodium clavatum* and

Staphysagria were prescribed in three patients each, whilst the remaining two patients received Sulphur and Nux vomica, respectively. For acute UTI treatment, Staphysagria, Benzoicum acidum and Terebinthinae oleum were used.

After a follow-up period of 14 months, five patients remained free of UTI and UTI frequency was reduced in three patients. The median UTI rate decreased from 7.2 UTI/year to 1.3 UTI/year. In four patients, standard prophylactic treatment could be reduced. No side effects or adverse drug reactions were encountered. Bladder management and standard prophylactic measures remained unchanged in all patients.

Conclusion

Symptomatic UTIs occur in nearly 60% of persons with SCI after discharge of primary rehabilitation.² They severely impair quality of life and they are associated with an increased mortality.⁶⁷ The effects of homeopathic treatment in this case series were impressive and exceeded the effects of other prophylactic measures. The published case series is the largest study evaluating homeopathic prophylaxis of UTI reported in the literature.

As neither the mode of bladder management nor the medical standard prophylactic treatment were altered in any of the patients in the course of the study, it is plausible that the positive effects are due to the adjunctive homeopathic treatment.

Although treatment was constitutional, remedies with a tropism related to the lower urinary tract and catheterisation, like *Staphysagria* and *Lycopodium*, were chosen most frequently. In all patients, high potencies were used.

In conclusion, homeopathy in addition to conventional prophylactic measures seems to be an effective, promising method for the prevention of recurrent UTI in patients with SCI. Especially in this group of patients, suffering from chronic disease and receiving long-term medical treatment for many secondary dysfunctions, reduction of drug intake and freedom from infection contribute to an improved quality of life. A co-operation between urologists and homeopaths is the key to improve not merely the situation of the lower urinary tract, but also the well-being of those affected by this condition.

Limitations and implications for further research

The number of participants in this case series was small and there was no control group. Therefore, to confirm the results of this publication, a prospective, randomized study is required. Such a study has been designed and is currently recruiting patients (registered at ClinicalTrials.gov: NCT01477502: Clinical Value of Homeopathic Prophylaxis of Recurrent Urinary Tract Infections in Persons With Spinal Cord Injury). In addition, two patients spontaneously described that their general well-being has improved with homeopathic treatment. Therefore, future studies of homeopathic treatment should not focus on a single outcome parameter (e.g. UTI frequency) alone, but quality of life and the totality of symptoms should be systematically assessed.

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