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Treatment of Complicated Urinary Tract Infections in Individuals with Chronic Neurogenic Lower Urinary Tract Dysfunction: Are Antibiotics Mandatory?

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Abstract

INTRODUCTION:

Urinary tract infections (UTI) in patients with neurogenic lower urinary tract dysfunction (NLUTD) are defined as complicated UTI requiring antibiotic treatment. As the emergence of multiresistant strains is a serious problem, we assessed the feasibility of nonantibiotic treatment of UTI in patients with NLUTD.

MATERIALS AND METHODS:

In a prospective study evaluating the usefulness of UTI prophylaxis, participants could opt for either antibiotic or nonantibiotic treatment of breakthrough UTI. If either symptoms persisted for 48 h or a febrile UTI occurred, antibiotic treatment based on microbiological testing was mandatory. Treatment efficacy, complications, and emergency hospital visits were assessed.

RESULTS:

Within the observation period (1 year), the 25 participants developed 206 UTI. Seven febrile UTI required immediate antibiotic treatment. Of the remaining 199 UTI, patients chose antibiotic treatment in 104 events, whereas in 95 events, patients chose either nonantibiotic interventions (n = 80) or no treatment at all (n = 15). Success rates were 78.8% for antibiotic treatment, 67.5% with nonantibiotic treatments, and 26% without therapy. Of the 7 patients with initially febrile UTI, 2 required hospitalization due to septicemia.

CONCLUSIONS:

Nonantibiotic treatment seems to be a feasible alternative to antibiotic therapy in patients with complicated UTI as well, provided there is no fever.

KEYWORDS:

Antibiotics; Multiresistant bacteria; Neurogenic lower urinary tract dysfunction; Urinary tract infections.