

APPROPRIATE MANAGEMENT OF ASSYMPTOMATIC BACTERIURIA IN THE ELDERLY

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Abstract: Asymptomatic bacteriuria is a common condition in the elderly, characterized by the presence of bacteria in the urine without the occurrence of clinical symptoms. Proper management of this condition is extremely important as it can help prevent complications, requiring an individualized and evidence-based approach. A literature review was conducted with the aim of evaluating and understanding findings in the literature regarding the treatment and management of elderly patients with asymptomatic bacteriuria. The study is an integrative review of the literature, in which a data search was carried out in the PubMed and Google Scholar databases, using the following descriptors: management of asymptomatic bacteriuria; elderly, with the Boolean operator “and”. The selection considered the interval between 2013 and 2023. The exclusion criteria were works that were not freely available and that did not present the descriptors in the title or abstract. 3 and 1 articles were chosen, respectively, with the greatest thematic relevance from the respective databases. Treating asymptomatic bacteriuria in the elderly indiscriminately is not recommended, as a reduction in morbidity and mortality has not been demonstrated. Treatment is recommended only in situations of pregnancy, urological interventions and recent kidney transplantation and for patients with co-infection or immunocompromised. Therefore, it was observed that antibiotic therapy management in asymptomatic elderly patients does not have benefits that outweigh its harms, in addition to bringing additional costs to health institutions. However, in some specific situations, as described in the literature, there may be an effective result in the treatment of asymptomatic patients.

Keywords: Asymptomatic bacteriuria; Elderly; Urinary infections.

INTRODUCTION

Asymptomatic bacteriuria (ASB) is a common condition in the elderly, characterized by the presence of bacteria in urine in the absence of clinical signs or symptoms suggestive of urinary tract infection (UTI). In laboratory criteria, this condition is defined as the presence of bacteria in urine in quantities equal to or greater than 10⁵ colony-forming units per milliliter (cfu/mL) in two consecutive urine samples in women or in one urine sample in men. It has been shown that the incidence of asymptomatic bacteriuria increases with age and is more prominent in women than in men, in addition to being more frequent in individuals residing in long-term care facilities, such as nursing homes. Furthermore, as it is a common clinical condition, unnecessary treatments that do not bring any obvious benefit to the patient are often applied. Therefore, adequate management of asymptomatic bacteriuria in the elderly requires an individualized and evidence-based approach, and is extremely important, as it can help prevent serious complications, such as urinary tract infections and sepsis.

OBJECTIVE

Evaluate and understand the findings in the literature regarding the treatment and management of elderly patients with asymptomatic bacteriuria.

METHODOLOGY

The study is an integrative review of the literature, in which a data search was carried out in the PubMed and Google Scholar databases, using the following descriptors: management of asymptomatic bacteriuria; elderly, with the Boolean operator “and”. The selection considered the interval between 2013 and 2023. The exclusion criteria were works that were not freely available and that did not

present the descriptors in the title or abstract. 3 and 1 articles were chosen, respectively, with the greatest thematic relevance from the respective databases.

RESULTS AND DISCUSSION

The literature search revealed that advanced age and common conditions in the elderly, such as cognitive impairment, incontinence, chronic kidney disease, use of an indwelling urinary catheter and residence in long-term care institutions, increase the prevalence of asymptomatic bacteriuria in this population.

Its treatment indiscriminately is not recommended, as no reduction in morbidity and mortality has been demonstrated. Antibiotic therapy increases the risk of reinfection, bacterial resistance, side effects caused by antibiotics and *Clostridium difficile* infection, in addition to increasing costs for the healthcare system and prolonging hospitalizations.

The treatment recommendation only occurs in situations of pregnancy, urological interventions and recent kidney transplantation and for patients with co-infection or immunocompromised. For these populations, benefits were identified that outweigh the potential risks, justifying drug intervention.

Furthermore, it is not recommended to perform a urine culture in patients who do not present urinary symptoms, except in the special populations mentioned. For patients with clear signs and symptoms of another infectious focus, urine culture is not recommended in the absence of urinary tract symptoms, due to the lack of recommendation for specific treatment, the already use of antibiotics for the previously identified focus and the risks of use. of bladder catheterization to obtain a sterile sample.

The diagnosis of urinary tract infection varies according to the source and definition

adopted, but requires the presence of signs and symptoms associated with urine culture results. These include dysuria, urinary frequency, suprapubic pain, urinary urgency and fever. In the elderly, the presence of atypical symptoms is possible, such as mental confusion, incontinence, lethargy and falls, which must be considered in the diagnosis and investigation.

Asymptomatic bacteriuria, in most cases, does not lead to urinary tract infection, and therefore has a benign evolution and must be managed prudently in order to avoid iatrogenic events.

CONCLUSION

Therefore, it was observed that antibiotic therapy management in asymptomatic elderly patients does not have benefits that exceed its already documented harms, since there were no significant changes in morbidity and mortality within these groups, in addition to bringing additional costs to health institutions.

However, in some specific situations, as described in the literature - such as pregnancy, urological interventions, recent kidney transplantation and immunocompromised patients - there may be an effective result in treating asymptomatic patients. Furthermore, diagnosis by urine culture in elderly patients with asymptomatic urinary tract symptoms must be reserved for patients falling into the risk groups mentioned above, as there was only a reduction in morbidity and mortality in these individuals.

Finally, asymptomatic bacteriuria must be adequately managed and treated in rare cases, in order to avoid possible harmful interventions for the patient, which do not reduce morbidity and mortality in the elderly population.

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