



EFFICACY OF PHOTODYNAMIC THERAPY FOR NON-MUSCLE INVASIVE BLADDER CANCER: A LITERATURE REVIEW



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INTRODUCTION

Non-muscle invasive bladder cancer presents a significant challenge due to its high recurrence rates despite adequate initial treatment and potential progression of the disease, which would, inevitably, result in the complex procedure of radical cystectomy, bearing a great impact in patients lives. In this scenario, photodynamic therapy paves the way to a promising treatment modality for this disease, offering targeted tumor destruction with minimal invasiveness. However, its use in clinical practice is still inconsistent, with controversial data reporting on its efficacy.

CONCLUSION

Photodynamic therapy demonstrates moderate efficacy in the management of non-muscle invasive bladder cancer, with favorable recurrence and progression rates observed across included studies. However, heterogeneity in protocols and tumor characteristics may influence treatment outcomes. Further research is warranted to optimize current guidelines.

METHODS

A systematic search was conducted in PubMed, Embase, and Cochrane Library databases using relevant MeSH terms and keywords, including "bladder cancer," "photodynamic therapy," "non-muscle invasive," and "clinical trials." Articles published between January 2010 and December 2023 were included. Studies reporting on the use of photodynamic therapy for non-muscle invasive bladder cancer were eligible for inclusion.

RESULTS

The initial search yielded 1642 articles, of which 25 were selected for full-text review following title and abstract screening. Then, 22 studies met the inclusion criteria and were included in the final analysis. Overall, photodynamic therapy demonstrated moderate efficacy in reducing recurrence rates compared to conventional treatments alone. However, evidence regarding its impact on progression rates is limited and inconsistent. Adverse events associated were generally mild and manageable, although rare serious complications were reported in some studies.