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# DOES OBESITY CAUSE RECURRENT URINARY TRACT INFECTIONS- A SYSTEMATIC REVIEW

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### Introduction:

An established correlation exists between a raised Body Mass Index (BMI) and urinary incontinence (1). This correlation is not so widely seen or investigated in the context of recurrent urinary tract infections (UTIs). This systematic review investigated the correlation between raised BMI and UTI.

# Methods:

Searches were performed using Medline, Embase, Emcare, CINAHL, and Cochrane using appropriate MeSH terms. Two independent reviewers selected the eligible articles and performed the data extraction. The risk of bias was assessed using the ROBINS-I tool. Odds ratios (OR) and 95% confidence intervals (CI) were used to examine the association between rUTIs and a raised BMI.

### Results:

Only cohort studies were included. Of 1039 papers identified, two were suitable for inclusion. One study showed a correlation between rUTI and BMI greater than 30 kg/m $^2$  (p=0.001, OR 4.0 (3.2-4.61). The other paper looked specifically at women who had a mid-urethral tape. There was no correlation between rUTI and BMI above 30 kg/m $^2$  in this study, but they found a strong correlation between age and rUTI; age 20–39 OR 1.11 (0.79–1.55), 60–79 OR 1.55 (1.29–1.87), 80 or older OR 2.53 (1.64–3.91).

## **Conclusions:**

Limited data exists to establish a correlation between raised BMI and recurrent urinary infections. Further research needs to be conducted in this area.

### Reference:

Purwar B, Cartwright R, Cavalcanti G, Digesu GA, Fernando R, Khullar V. The impact of bariatric surgery on urinary incontinence: a systematic review and meta-analysis. International Urogynecology Journal. 2019 Aug 1;30:1225-37.