

# Efficacy and outcome of the polyacrylamide urethral bulking agent (Bulkamid®) in the treatment of Urinary Stress Incontinence in an Australian population.

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## Introduction:

Bulkamid®, a urethral bulking agent, is used in the management of women with urinary stress incontinence (USI) who are refractory or are unsuitable for more invasive and efficacious measures such as the mid urethral sling (MUS).

## Aims:

Following a Bulkamid® injection:

1. Evaluate the improvement in symptoms at 1, 6 and 12 months post injection. 2. Determine the number that required further Bulkamid® injection or alternative USI management.

## Methods:

Retrospective analysis on prospectively collected data on patients from three centres from 2007 to 2017. Paper and electronic records. Ethics approval was granted from all three centres.

Complete response was defined as no incontinence episodes at the 1 month review. Partial response was defined as a reduction in the number of pads by 50% at this review.

Patients were contacted by telephone and the PGI-I and ICIQ-FLUTS validated questionnaires were administered. With the PGI-I, patients would rank their satisfaction with their urinary symptoms post Bulkamid® from 1 to 7.

Statistical analysis: SPSS (Statistical Package for Social Sciences, version 22). Comparisons were made using the Wilcoxon test. P value <0.05 was considered significant.

## Conclusion:

Bulkamid® can be used in those who prefer or are unsuitable for more invasive procedures, with a sustained response and few complications.

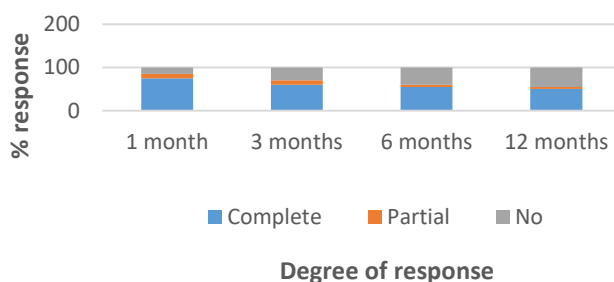
## References:

1. Lose G, Sorensen HC, Axelsen SM, et al., An open multicentre study of polyacrylamide hydrogel (Bulkamid®) for female stress and mixed urinary incontinence. J Int Urogynaecol 2010; 21 (12): 1471-1477.
2. Yalcin I, Bump R. Validation of two global impression questionnaires for incontinence. Am J Obstet Gynecol 2003;189:98-101.

## Results:

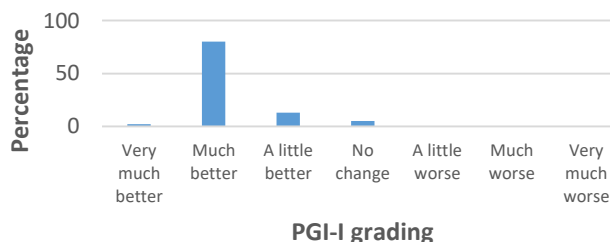
Total no. of patients	100
Mean follow up time (months)	22
Median age (years)	79
Mean BMI (kg/m <sup>2</sup> )	28
More than 2 pregnancies	76
More than 2 vaginal deliveries	75
Mean no. of pads	8
Mean flow rate (ml/sec)	15
Mean Pdet at Qmax (cmH <sub>2</sub> O)	28
Mean ALPP (cmH <sub>2</sub> O)	57

### Response to Bulkamid® injection over time



80% had a subjective improvement to their urinary symptoms with a mean score of 2 on the PGI-I at the 1 month mark.

### PGI-I response



Complications: One patient developed a urinary tract infection, 5 patients had a short period (<3 weeks) of urinary retention.

Of those whose symptoms recurred, 5 proceeded to further surgery:  
2 - further Bulkamid® injection,  
3 - underwent a MUS.

A sub-analysis of women with adverse urodynamic parameters defined as detrusor overactivity and poor compliance, demonstrated that all these women had minimal response to Bulkamid®. Therefore, these women should be considered for alternative therapy or counselled that they may expect a poorer response.