

Challenging the role of routine pre-operative group and screen before transurethral resection of the prostate gland

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Introduction

Background

- Transurethral resection of the prostate gland (TURP) is a common, elective surgical procedure
- Around 500 TURP procedures are performed annually in this Trust alone
- Obtaining a group and screen (G&S) is currently a routine element of pre-operative assessment
- Each G&S has an estimated cost of £23.93 within the Trust

Project aims

1. Identify the incidence of blood transfusion following TURP
2. Assess the cost effectiveness of routine G&S in this group

Method

- Retrospective electronic case note review
- July 2019 – December 2019
- 200 patients who underwent TURP in this period
- Cross referenced with transfusion database
- Variables measured included:
 - Patient age
 - Number of G&S samples obtained
 - Pre-operative haemoglobin (Hb)
 - Post-operative Hb
 - Episodes of blood transfusion

Results

Patient demographics

- Average age was 71.5
- Mean pre-operative Hb 139 g/l
- Post-operative Hb was measured in 53% of patients. In these cases average drop in Hb was 8 g/l

Group and screen performed

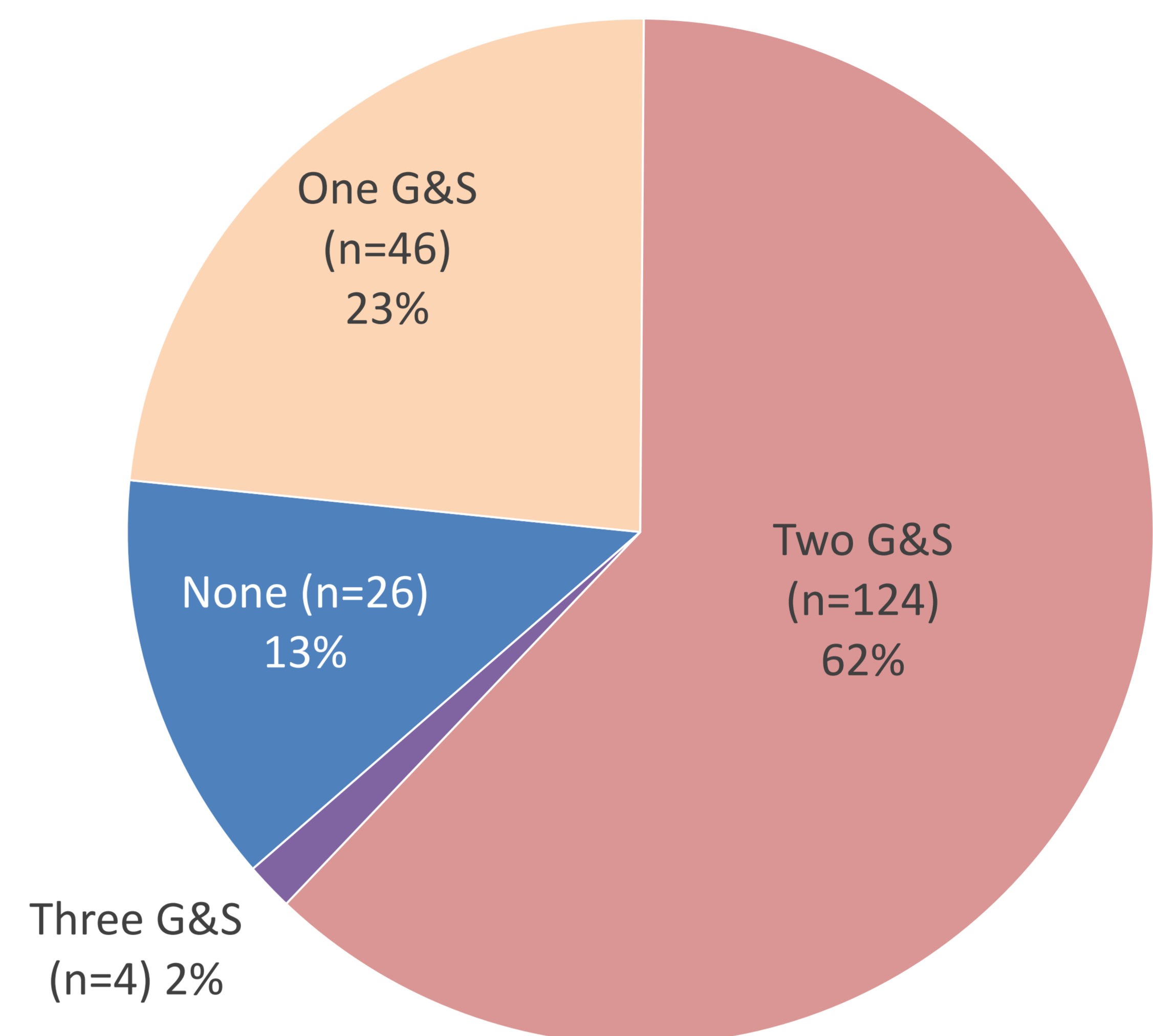
- 64% of patients had at least two G&S samples taken pre-operatively
- The average cost was £36.40 per patient
- Total of 304 G&S performed in this cohort

Post-operative transfusion

- Only 2 patients (1%) required a blood transfusion post-operatively
- In both cases this was due to significant haematuria, without haemodynamic compromise
- In both situations, there would have been enough time to arrange de novo sample collection to allow the transfusion of group-specific blood

Results

Pre-operative group and screen samples per patient



Key points

What is the incidence of transfusion following TURP?

In this study, **incidence of blood transfusion was 1%**

What is the potential cost saving to the Trust?

The cessation of routine G&S pre-TURP would have an **annual cost saving to this Trust of around £18,200** (calculated by average cost per patient in this study multiplied by number of TURP annually performed)



What are the safety implications for patients?

The low incidence (1%) of peri-op transfusion in TURP, and non-emergency settings where transfusion was required, suggests **patients would be unlikely to come to harm with this approach**

Conclusion

This study supports stopping routine pre-operative group and screen testing for patients scheduled for transurethral resection of the prostate

Contact

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