An audit of positive findings in flexible and rigid check cystoscopy

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SUMMARY: Both flexible and rigid cysto-urethroscopy are routinely used in the surveillance of transitional cell bladder tumours. This study addressed the issue of patient selection for either rigid or flexible cystoscopy. What proportion of positive findings at flexible cystoscopy and negative findings at rigid cystoscopy are acceptable? Standards were set of 10% for the former and 50% for the latter and our practice was then audited. A retrospective analysis of 800 patients undergoing check cystoscopy revealed a positive finding rate of 8.3% using the flexible instrument and 48.1% using the rigid instrument.

Introduction

Tsuchida and Sugawara (1) first used a flexible endoscope to examine the bladder in 1973, and some nine years later Burchardt (2) described his experience with over 100 cystourethroscopies.

Webb et al (3) described a small series of 23 patients who all underwent both flexible and rigid cystoscopy. In two male patients, multiple small papillary tumours were missed on flexible cystoscopy.

Clayman et al (4) performed both rigid and flexible cystoscopy in 80 patients under topical anaesthesia with or without intravenous sedation reporting no difference between rigid and flexible cystoscopy in the number of bladder tumours missed. Walker et al (5) in the setting of a blind study, carried out both flexible and thorough rigid cystoscopy in 53 patients and found that 9% of tumours were missed by either method. More recently, Wedderburn et al (6) have advocated treatment of recurrent papillary tumours using flexible cystodiathermy. A total of 171 flexible cystodiathermies were performed on 103 patients, only one needing to be abandoned due to pain. However no information was given as to how many patients required a rigid procedure after the initial flexible examination.

Overall, we were unable to identify ‘ideal’ positive finding rates using either flexible or rigid endoscopes from a review of the literature.

Methods

A combined meeting of Gloucestershire urologists set the standards prior to this retrospective audit. A positive finding rate of 10% during check flexible cystoscopy and 50% during check rigid cystoscopy was considered acceptable practice. The time period studied was 1 Oct 95 until 30 Sep 96. Flexible cystoscopy was carried out in a dedicated consultant led day surgery unit using an Olympus CYF-2 flexible cystoscope. Rigid check cystoscopy was carried out as both an inpatient and day case procedure under general anaesthesia. A total of 171 flexible cystodiathermies were performed on 103 patients, only one needing to be abandoned due to pain. However no information was given as to how many patients required a rigid procedure after the initial flexible examination.

Overall, we were unable to identify ‘ideal’ positive finding rates using either flexible or rigid endoscopes from a review of the literature.

Table 1

<table>
<thead>
<tr>
<th>ASA1</th>
<th>ASA2</th>
<th>ASA3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rigid</td>
<td>n=109 (27%)</td>
<td>n=234 (58%)</td>
</tr>
<tr>
<td>Flexible</td>
<td>n=160 (40%)</td>
<td>n=188 (47%)</td>
</tr>
</tbody>
</table>

Table 2

<table>
<thead>
<tr>
<th>Consultant</th>
<th>Registrar</th>
<th>Senior House Officer</th>
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<tbody>
<tr>
<td>Rigid</td>
<td>n=181 (45%)</td>
<td>n=169 (42%)</td>
</tr>
<tr>
<td>Flexible</td>
<td>n=227 (57%)</td>
<td>n=100 (25%)</td>
</tr>
</tbody>
</table>

Discussion

The choice of flexible or rigid cystoscopy and the intervals between examinations in the follow up of bladder tumours is subject to enormous variation. The obvious goal would be a 100% correlation between rigid and flexible cystoscopies. However, some urologists would argue for routine flexible cystoscopy in every case - there must obviously be a trade-off between logistical burden and the risk of morbidity from...
Flexible and rigid check cystoscopy

Rigid cystoscopy may be necessary where multiple biopsies are required for example following previous diagnosis of a potentially aggressive tumour, and a general or regional anaesthetic does facilitate staging with full pelvic examination, and biopsy of the base of a previously resected unfavourable tumour.

In this audit, the difference in grade of surgeon between rigid and flexible cystoscopy illustrates the fact that the majority of the flexible cystoscopies were performed in a consultant led, dedicated day case surgery unit. The number of rigid examinations was more equally split between consultant and junior staff reflecting a higher number of in-patient examinations.

The standards set in this retrospective audit were deemed not unreasonable although it must be emphasised that they were personal opinions of ‘good practice’.

REFERENCES

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SR Keoghane, AWS Ritchie and DJ Jones

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