Incidence of inguinal hernia after radical retropubic, perineal and laparoscopic prostatectomy

We would like to add our experience of inguinal hernia (IH) after radical prostatectomy (RP). Sekita et al. found a high incidence of IH of 23.9% after prostate surgery.1 I commend them on a study with a good comparison group of those patients having a transurethral resection of prostate (TURP). We also looked at IH rates after RP in a retrospective study of 579 patients having radical retropubic prostatectomy (RRP) (n = 107), radical perineal prostatectomy (RPP) (n = 40) and laparoscopic radical prostatectomy (LRP) (n = 432). The results of this study are shown in Table 1.

Inguinal hernia is consistently found as a postoperative complication of radical prostatectomy.2–4 Comparison with the TURP group in the Sekita et al. data shows a hernia rate of only 2%. This is dramatically different to the RP patients. In their discussion the authors correctly state that there is no conclusive theory as to why this high postoperative risk of IH exists. Disruption of the transversalis fascia and retraction injury is very likely, but this does not explain the high incidence in the LRP group or the low incidence in the perineal group. This suggests that the incision of the endopelvic fascia, which occurs in most RRP and LRP techniques, but not in the perineal approach or in TURP, may be the potential causative factor. We may be underestimating the disruption to the posterior wall of the inguinal canal either directly in opening the endopelvic fascia or in the denervation that may also occur.

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Table 1 Postoperative inguinal hernia rates

<table>
<thead>
<tr>
<th>Operation</th>
<th>Number of patients</th>
<th>Number of hernias</th>
<th>Hernia rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPP</td>
<td>40</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>RRP</td>
<td>107</td>
<td>16</td>
<td>14.9%</td>
</tr>
<tr>
<td>LRP</td>
<td>432</td>
<td>50</td>
<td>11.6%</td>
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</tbody>
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LRP, laparoscopic radical prostatectomy; RPP, radical retropubic prostatectomy.

Author’s Reply

Author’s Reply to incidence of inguinal hernia after radical retropubic, perineal and laparoscopic prostatectomy

Several articles have reported and discussed the mechanism of postoperative inguinal hernia (IH) after radical retropubic prostatectomy (RRP) through the comparison of surgical procedures. However, the specific procedures during RRP that weaken the abdominal wall have not been found. We have evaluated the incidence of postoperative IH after open prostatectomy and RRP with the same sized incision.1 In both procedures, the incidence of IH was likely to be high. Therefore, we concluded that the incision of the endopelvic fascia, which is a unique process to RRP, does not cause postoperative IH. In the present issue of the Journal, James et al. report their experience of IH after radical prostatectomy by way of retropubic, perineal, and laparoscopic approaches. Their study revealed a low hernia rate in perineal cases. Combined with our data, we hypothesize that postoperative IH may be caused by excess extension of the retroperitoneal space.

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Reference