“No Touch” Technique Decreases Risk of Infection in Inflatable Penile Prosthesis Implantation

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Introduction
Inflatable penile prosthesis (IPP) is a well-established treatment for medically refractory erectile dysfunction. Infection is the most dreaded complication. Infection retardant coatings on modern implants have lowered the infection rate drastically. This retrospective but prospectively followed single center study explores whether a “no touch” enhancement to the surgical technique of IPP will further decrease infection rates. The “no touch” technique ensures that neither the surgeon, the instruments, nor the implant touch the patient’s skin.

Brief Description
After making the scrotal incision, the procedure is halted and all of the surgical instruments used thus far, including the electrosurgical pencil are discarded and considered contaminated. All surgical gloves are changed. The 3M 1012 drape is used to loosely drape the operative field and a sterile Scott retractor is employed. A small fenestration is made in the drape and blunt hooks are used to attach the fenestration to the scrotal incision and retract the cut edges of the skin and drape. Implantation of the device is conducted with the usual steps including making corporotomies, dilating the corpora, placing the components including the reservoir in the retropubic space and the pump in the scrotum.

Materials and Methods
- N=1,927 IPP on virgin and revision patients between 2002 and 2010
- Both manufacture’s 3-piece IPP were used – approximately 2:1 Coloplast Titan:AMS
- Patients were similar in age and comorbidities
- In 2002, non-coated implants were used and the remaining years infection retardant coated IPP were implanted
  - The last four years the “no touch” technique was performed
  - Infection rates in the three groups were examined and subjected to statistical analysis

Results

<table>
<thead>
<tr>
<th></th>
<th>Implants</th>
<th>Infections</th>
<th>Infection %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-coated implants (2002)</td>
<td>132</td>
<td>7</td>
<td>5.3%</td>
</tr>
<tr>
<td>Coated implants (2003-2006)</td>
<td>720</td>
<td>13</td>
<td>1.8%</td>
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<td>Coated implants plus “no touch” technique (2006-2010)</td>
<td>1,075</td>
<td>8</td>
<td>0.7%</td>
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There was no difference in infection free survival between the two manufacturers.

Conclusion
Infection retardant coatings lower risk of infection from 5.3% to 1.8%. The “no touch” enhancement to the surgical procedure results in additional improvement to 0.7%.