DIMETHYL SULFOXIDE IRRIGATION SOLUTION

There is currently only one supplier of dimethyl sulfoxide (DMSO) 50 % irrigation solution in Canada.\(^1\) The Sandoz product has been discontinued.\(^2\)

<table>
<thead>
<tr>
<th>DIN</th>
<th>Manufacturer</th>
<th>Brand Name</th>
<th>Ingredient</th>
<th>Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>00493392</td>
<td>MYLAN PHARMACEUTICALS ULC</td>
<td>RIMSO-50</td>
<td>DIMETHYL SULFOXIDE</td>
<td>500 MG / G</td>
</tr>
</tbody>
</table>

Labelled Indication:

- Interstitial cystitis\(^3\)
  - Second line option after physical therapy\(^4\)
  - An option to second line oral medication (amitriptyline, pentosan polysulfate sodium, cimetidine, hydroxyzine)\(^4,5\)

SHORTAGE MANAGEMENT:

Extemporaneous compounding:

- Concentrate (99.7% DMSO) is available from bulk chemical vendors (e.g. Galenova).\(^6,7\)
- DMSO is incompatible with plastics such as polysulfone, flexible and rigid PVC tubing and polycarbonate; it should be stored in glass containers.\(^8\)
- Dilute with water to prepare a 50 % DMSO solution and sterilize according to USP sterile compounding guidelines.\(^9\)
- DMSO is absorbed into plastic; therefore irrigation solution must be prepared on the day it is administered.\(^9\)

Therapeutic options for intravesicular administration:

- Bladder hydrodistention\(^4,5\)
- Lidocaine (e.g. daily bladder instillations for 5 days with alkalinized lidocaine (200 mg)/sodium bicarbonate 8.4% solution (final volume of 10 mL), instilled into an empty bladder and allowed to dwell for 1 hour before drainage)\(^10\)
- Heparin (e.g. 10,000 units with 10 ml of sterile water three times weekly)\(^11\)
- Lidocaine and heparin (e.g. 40,000 U heparin, 8 mL 1% or 2% lidocaine, and 3 mL 8.4% sodium bicarbonate three times weekly for 2 weeks)\(^12\)

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medSask
References:

10. Lidocaine, Alkalinized (Intravesical): Interstitial Cystitis (Bladder Pain Syndrome) (Facts and Comparisons Off-Label). In Lexi-Comp online. Available at [www.lexi.com](http://www.lexi.com)