VAGINAL SPERMICIDES

**DEFINITION**

Vaginal spermicides are female barrier contraceptives which coat the cervix and inactivate sperm by dissolving the lipid components in their cell walls. Many different vaginal spermicidal agents are available, including foams, jellies, creams, suppositories, sponges and films. In the US, all spermicides use Nonoxynol-9 (N-9) as their active ingredient. The typical use first year failure rate with spermicides is quoted to be about 29% but recent studies suggest that the first year typical use failure rate may be as high as 40%. The failure rate with correct and consistent use is 18%. Spermicides with lower concentrations of N-9 have higher failure rates. Spermicides are often used in conjunction with other barrier methods, such as diaphragms, cervical caps and male condoms. Spermicides do not reduce the risk of STIs. In fact, multiple uses daily of nonoxynol-9 spermicides may increase the risk of HIV infection acquisition or transmission in at-risk women. Newer compounds are being tested for use as spermicides.

**SUBJECTIVE**

Must include: LMP and PMP.

Must exclude: Allergy to any component of the vaginal spermicide. It has been estimated that 1-5% of adults have allergies to N-9.

May exclude:
1. Inability or unwillingness to touch genitals.
2. Intent to use for multiple acts of intercourse on a daily basis (N-9 could increase risk of HIV transmission in at risk couples) unless male condoms are consistently used.
3. Patient who is at high risk for HIV infection.

**OBJECTIVE**

Pelvic exam should be encouraged to rule out abnormalities which would interfere with the use or effectiveness of spermicide (e.g., vaginal septa). However, if the patient declines pelvic exam, she may still use spermicides.

**LABORATORY**

Not applicable.

**ASSESSMENT**

Candidate for vaginal spermicide.

**PLAN**

1. Prescribe appropriate form of vaginal spermicide for patient and teach her how to use it.
2. Offer emergency contraception in advance of need (see Emergency Contraception [EC] protocol).
3. Suggest that partner use male condoms to increase contraceptive efficacy and reduce STI risk.

**PATIENT EDUCATION**

1. Advise patient that vaginal spermicides are available OTC as a suppository, jelly, cream, foam, film and sponge.
2. Counsel patient to place spermicide prior to genital contact and allow appropriate time for onset of action prior to intercourse.

<table>
<thead>
<tr>
<th>Type of Spermicide</th>
<th>Onset of Action</th>
<th>Duration of Action</th>
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</thead>
<tbody>
<tr>
<td>Foam in aerosol container</td>
<td>Immediate</td>
<td>Up to 8 hours</td>
</tr>
<tr>
<td>Creams and Jellies</td>
<td>Immediate</td>
<td>Up to 8 hours</td>
</tr>
<tr>
<td>Sponge</td>
<td>Immediate after wetting</td>
<td>Up to 30 hours</td>
</tr>
<tr>
<td>Suppositories / Tablets</td>
<td>10-15 minutes</td>
<td>Up to 60 minutes</td>
</tr>
<tr>
<td>Film</td>
<td>15 minutes</td>
<td>Up to 60 minutes</td>
</tr>
</tbody>
</table>

3. **For contraceptive sponge users**, there are special instructions for sponge preparation, placement and removal:
   a. **Use**: Tell the patient to remove the sponge from its package. She should moisten it with about 2 tablespoons of clean water, and squeeze it once to see the foam develop, then place the sponge into her vagina and slide it along the back wall of the vagina until it covers her cervix. The dimpled side of the sponge should face her cervix, with the loop away from her cervix. Instruct
the patient to check with her finger to be sure that her cervix is covered by the sponge. The sponge can be left in place for up to 24 to 30 hours and can be used for multiple acts of intercourse.

b. **Removal**: The sponge should be left in place for at least 6 hours following the last act of intercourse to allow adequate time for spermicidal action. Before removal, have the patient check the position of the sponge. If the sponge has been dislodged, or seems to be out of place, have her consider using emergency contraception as soon as possible (see Emergency Contraception [EC] protocol). To remove the sponge, have the woman grasp the loop on the sponge with one finger and gently pull it out of her vagina. It is important to check to be sure the sponge is intact before it is thrown away. If it is torn, remove all the pieces from the vagina.

4. Advise that spermicides have limited time of action. If the patient has intercourse after the duration of action listed in the above table, another dose of spermicide must be placed and given time to activate prior to coitus. The manufacturer of Advantage 24 claims it may be used for up to 24 hours; however, supporting data are questionable for its efficacy beyond 60 minutes.

5. Remind patient to use an additional application of spermicide with each act of intercourse. However, encourage use of another method if the woman expects to use spermicides more than once a day, especially if she is at risk for STIs.

6. Advise patient to avoid douching for 8 hours after intercourse.

7. Instruct patient that some men and women are allergic to spermicide. Advise her that if symptoms of bothersome irritation of her vulva or vagina or partner’s genitals occur, she should stop using that particular type of spermicide. If genital irritation is severe, she/he should seek medical care promptly.

8. If patients ask, counsel them that spermicide use does not cause any cervical dysplasia and may provide lubrication for condom users.

9. Advise sponge users that vaginal dryness may develop with sponge use. Other forms of spermicide may cause an increase in vaginal secretions.

**REFERENCES**


