One of the best-kept secrets in women’s health is the availability of effective emergency contraceptives that have few side effects and are inexpensive. Who are candidates for emergency contraception? They include women in whom another method of contraception recently failed; those who recently had unprotected intercourse; and those who have been sexually assaulted.

What are the three most commonly used emergency contraceptive options? They are:
- levonorgestrel, 1.5 mg
- insertion of a copper intrauterine device (IUD)
- ulipristal, 30 mg.

You are likely familiar with protocols for emergency contraceptives using levonorgestrel (Plan B One-Step) (see the FIGURE, panel A) and the copper IUD (ParaGard). You may not be as familiar with ulipristal (sold under the name Ella) (FIGURE, panel B), approved recently by the Food and Drug Administration for use as long as 120 hours after intercourse.

Ulipristal is a selective progestrone-receptor modulator that has predominantly antiprogestin activity. The drug blocks or delays ovulation and suppresses endometrial growth. If administered after the onset of the luteinizing hormone (LH) surge, it’s difficult to conclude, with confidence, that any one of the options for emergency contraception is “best” in every circumstance. For example, although generic levonorgestrel is the least expensive of the three options, a copper IUD provides the most cost-effective “emergency” contraception, viewed across a multi-year time frame.

A copper IUD is seldom inserted as emergency contraception, however. 

Chemical structure of two emergency contraceptives

CONTINUED ON PAGE 10
In one report, from England, only 3% of 158,000 women who requested emergency contraception received a copper IUD.3

Because levonorgestrel and ulipristal are the most commonly used options for emergency contraception, how do we select which agent to recommend?

Levonorgestrel vs. ulipristal

Fortunately, ulipristal and levonorgestrel have been tested, head to head, in two superbly designed and executed large clinical trials.4,5 In both trials, investigators reported that ulipristal, when used for emergency contraception, resulted in fewer pregnancies than levonorgestrel.4

By combining the results from both studies, crude pregnancy rates for ulipristal and levonorgestrel users were, respectively, 1.28% and 2.19%. Formal meta-analysis of the two studies concluded that ulipristal was, to a degree of statistical significance, more effective than levonorgestrel when taken at 24 hours, 72 hours, or 120 hours after sexual intercourse.5

Ulipristal and levonorgestrel had similar side effect profiles in the two trials. The most commonly reported side effects were headache, nausea, fatigue, and abdominal pain.

The matter of cost-effectiveness

One dose of ulipristal is more expensive than generic levonorgestrel. In the health system in which I work, the cost to the patient of one dose of ulipristal is approximately $45; one dose of brand-name levonorgestrel, 1.5 mg (Plan B One-Step), is priced similarly. A generic prescription for two 0.75-mg levonorgestrel pills (sold under the name Next Choice), however, costs the patient approximately $30.

In an era of cost-conscious health care, some authorities have questioned whether ulipristal is cost-effective because it is more expensive than generic levonorgestrel.6 Investigators who conducted a formal cost-benefit analysis in the United Kingdom, reported that ulipristal was more cost-effective than levonorgestrel.7 In their analysis, one dose of ulipristal was assumed to be 3 times more expensive than generic levonorgestrel. But because ulipristal was more effective than levonorgestrel at reducing the rate of unintended pregnancy, it was more cost effective because it reduced the burden of the costly care associated with unintended pregnancy.

Availability of levonorgestrel and ulipristal

For women who are 17 years or older, levonorgestrel is widely available without a prescription. Such access avoids the cost and delay inherent in a visit to a clinician to obtain a prescription.

Ulipristal is available only with a prescription. The FDA recommends that...

Availability of levonorgestrel and ulipristal

For women who are 17 years or older, levonorgestrel is widely available without a prescription. Such access avoids the cost and delay inherent in a visit to a clinician to obtain a prescription.

Ulipristal is available only with a prescription (TABLE 2). The FDA recommends that...

Availability of levonorgestrel and ulipristal

For women who are 17 years or older, levonorgestrel is widely available without a prescription. Such access avoids the cost and delay inherent in a visit to a clinician to obtain a prescription.

Ulipristal is available only with a prescription.
TABLE 2  What FDA says about emergency contraception with levonorgestrel and ulipristal

<table>
<thead>
<tr>
<th>Labeling</th>
<th>Levonorgestrel</th>
<th>Ulipristal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved indication</td>
<td>Emergency contraception, as long as 72 h after intercourse</td>
<td>Emergency contraception, as long as 120 h after intercourse</td>
</tr>
<tr>
<td>Women 17 y and older</td>
<td>Available without a prescription</td>
<td>Prescription required</td>
</tr>
<tr>
<td>Women younger than 17 y</td>
<td>Prescription required</td>
<td></td>
</tr>
</tbody>
</table>

regular health care, levonorgestrel is clearly the best option for emergency contraception. Years of clinical data show that levonorgestrel, if taken accidentally by a pregnant woman, is unlikely to harm the pregnancy.

Unlike what we know about levonorgestrel, few data exist about the safety of a 30-mg dose of ulipristal in a woman who is pregnant. Some clinicians clearly view safety data as favoring continued use of levonorgestrel for emergency contraception.

A swift and reliable agent of change for women

The stunningly sudden and irrevocable failure of a barrier contraceptive is quickly followed by dismay and fear. A woman who both knows how to use an emergency contraceptive and has access to highly effective medication can transform a nightmare into calm and successful rescue from the possibility of unintended pregnancy.

References

NOW AVAILABLE FOR VIEWING!

Vaginal uterine morcellation

This video is presented courtesy of the International Academy of Pelvic Surgery

4 ways to watch this video:
1) go to “Video Library” at obgmanagement.com
2) visit www.OBGmobile.com/vum
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4) text “VUM” to 25827 from your mobile phone.

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