ACOG Develops Guidelines for Induction of Labor
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The report reviews the current methods of cervical ripening and induction of labor and summarizes the effectiveness of each method on the basis of outcomes research. It also contains a question-and-answer section that covers the following information: the indications for and contraindications to induction of labor; the relative effectiveness of pharmacologic agents for cervical ripening; administration of prostaglandin; the potential complications associated with each method of cervical ripening and labor induction; guidelines for fetal monitoring; the dosage of oxytocin and precautions to take when this agent is used; the management of complications from the use of oxytocin; the applicability of the various methods of labor induction in patients with intact or ruptured membranes; labor induction in cases of intrauterine fetal demise in the late second or third trimester; and the cost-effectiveness of misoprostol (synthetic prostaglandin E₁ analog) and dinoprostone (prostaglandin E₂[PGE₂]).

Summary of Recommendations

The following excerpt represents the summary of recommendations at the end of
the 10-page ACOG report:

**Recommendations based on good and consistent scientific evidence (level A):**

- Prostaglandin E (PGE) analogs are effective in promoting cervical ripening and inducing labor.
- Women in whom induction of labor is indicated may be appropriately managed with either a low- or high-dose oxytocin regimen.
- Fetal heart rate and uterine activity should be continuously monitored from the time a PGE$_2$ vaginal insert is placed until at least 15 minutes after it is removed.
- High-dose PGE$_2$ vaginal suppositories may be used in the management of intrauterine fetal demise in the second trimester of pregnancy.
- Although the optimal dosage and timing interval of misoprostol are unknown, lower dosages (25 µg every three to six hours) are effective for cervical ripening and induction of labor.
- With term premature rupture of membranes, labor may be induced with prostaglandins.

**Recommendations based on evidence that may be limited or inconsistent (level B):**

- Use of misoprostol in women with previous cesarean delivery should be avoided because of the possibility of uterine rupture.
- The use of higher dosages of misoprostol (50 µg every six hours) to induce labor may be appropriate in some situations, although increased risk of complications, including uterine hyperstimulation, has been reported.

**Recommendations based primarily on consensus and expert opinion (level C):**

- For women with third-trimester intrauterine fetal demise, intravaginal misoprostol can be used to induce labor.
- Fetal heart rate and uterine activity should be continuously monitored from 30 minutes to two hours after administration of PGE$_2$ gel.

**Cost**

According to the ACOG committee, there is a significant cost difference between misoprostol and dinoprostone for induction of labor. The price of a 100-µg tablet of misoprostol may range from $0.36 to $1.20, compared with a dinoprostone gel kit that ranges from $65 to $75 and the dinoprostone vaginal insert that costs approximately $165. The ACOG committee notes that the cost would increase if oxytocin augmentation were needed. In addition, dinoprostone is an unstable compound that requires refrigeration to maintain its potency, whereas misoprostol is stable at room temperature.