Dysmenorrhea, pain during or shortly before menstruation, is one of the most common gynecologic problems in women of all ages. Approximately 75% of women report some level of discomfort associated with menses, and approximately 15% report severe dysmenorrhea that interferes with work or school (Lentz, 2012). Dysmenorrhea is associated with menarche prior to 12 years old, nulliparity, heavy menses, pelvic inflammatory disease (PID), body mass index (BMI) greater than 20, smoking, and depression (Roberts, Hodgkiss, DiBenedetto, et al, 2012). Symptoms usually begin with menstruation, although some women may have discomfort several hours before onset of flow. The range and severity of symptoms are different from woman to woman and from cycle to cycle in the same woman. Symptoms of dysmenorrhea may last several hours to several days. Pain is usually located in the suprapubic area or lower abdomen. Women describe the pain as sharp, cramping, or a steady, dull ache.

Dysmenorrhea is differentiated as primary or secondary. Primary dysmenorrhea is a condition associated with ovulatory cycles. Primary dysmenorrhea has a biochemical basis and arises from the release of prostaglandins with menses. The pain begins with the onset of menstruation and lasts 8 to 48 hours (Lentz, 2012). Primary dysmenorrhea usually appears 6 to 12 months after menarche when ovulation is established.

Secondary dysmenorrhea is defined as painful menses associated with a pathologic condition, such as adenomyosis, endometriosis, PID, endometrial polyps, or fibroids. In contrast to primary dysmenorrhea, the pain of secondary dysmenorrhea is often characterized by dull, lower abdominal aching that radiates to the back or thighs, and is often associated with feelings of bloating or pelvic fullness. In addition to a history and physical examination, diagnosis may be assisted by ultrasound examination, dilation and curettage (D&C), endometrial biopsy, or laparoscopy.

## **Therapeutic Management**

Management of dysmenorrhea depends on the severity of the problem and the individual woman's response to various treatments. Heat and exercise minimizes cramping by increasing vasodilation and muscle relaxation and minimizing uterine ischemia. Massaging the lower back can reduce pain by relaxing