Yanai, Wani, Notohara, Takada, and Yoshino (2010) reported that, despite the fact that the majority of uterine LMS tumors develop independently of preexisting abnormalities, documented cases exist of uterine LMS arising from established uterine leiomyomas. Interestingly, LMS tumor cells have been found to be within a LMS tumor. Several cellular and mitotical variations of uterine leiomyomas exist, some of which are histologically and microscopically similar to uterine LMS. For example, some benign leiomyomas exhibit microscopic characteristics that closely resemble uterine LMS, including the presence of a high mitotic index (as many as 19 mitoses per 10 high-power fields) and cellular atypia (Al-Nafussi, 2004).

Yanai et al. (2010) performed a retrospective study and found 6 of 10 cases of uterine LMS arising from leiomyomas of the broad ligament and uterus. The malignant transformation of uterine leiomyomas is more likely to occur in women ranging in age from 40–73 years. However, the prognosis for patients diagnosed with uterine LMS arising from preexisting leiomyomas is better than for patients diagnosed with primary uterine LMS (Yanai et al., 2010).

**Uterine Leiomyosarcoma**

**Presentation**

The typical symptoms of uterine LMS include pain, vaginal bleeding, and the presence of a pelvic mass (Giuntoli & Bristow, 2004). In addition, an increased incidence is noted in women aged 40–60 years (Lin & Slomovitz, 2008). Although rare, uterine LMS may develop within a leiomyoma (Berek & Hacker, 2005). Leiomyomas are noncancerous, smooth muscle tumors that develop within the female genital tract and occur in about 40% of women older than age 40 (Al-Nafussi, 2004). Unlike uterine LMS, leiomyomas are relatively easy to diagnose pathologically and clinically (Watanabe & Suzuki, 2006). In some cases, uterine leiomyomas may transform into LMS. Yanai, Wani, Notohara, Takada, and Yoshino (2010) reported that, despite the fact that the majority of uterine LMS tumors develop independently of preexisting abnormalities, documented cases exist of uterine LMS arising from established uterine leiomyomas. Interestingly, LMS tumor cells have been found to be within a LMS tumor. Several cellular and mitotical variations of uterine leiomyomas exist, some of which are histologically and microscopically similar to uterine LMS. For example, some benign leiomyomas exhibit microscopic characteristics that closely resemble uterine LMS, including the presence of a high mitotic index (as many as 19 mitoses per 10 high-power fields) and cellular atypia (Al-Nafussi, 2004).

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**Uterine Leiomyosarcoma**

**Diagnosis, Treatment, and Nursing Management**

Tareai Smith, RN, BSN, OCN®, and Patricia McLaughlin, RN, MSN, AOCN®