## **CORE** DIAGNOSTICS<sup>™</sup>

tumor of the endometrium. Microscopically, the tumor consists of small, hollow tubules, anastomosing cords and trabeculae and tightly packed nests. The retiform spaces show mitosis and nuclear atypia. Endometrioid carcinomas are diffusely immunoreactive for epithelial membrane antigen and estrogen receptor, whereas calretinin and WT1 are usually negative. These tumors, however, usually display areas with architecture and morphology typical of endometrioid carcinoma and behave like the parent tumor in a malignant fashion.<sup>23</sup> Vascular plexiform leiomyoma is a vascular, uterine, smooth muscle tumor with a plexiform growth pattern. On microscopy, vascular plexiform leiomyoma shows a well-circumscribed, intramural nodule with anastomosing cords and trabeculae of 2 to 3 cell layers predominant in a perivascular location. The cord lumens often contain red blood cells. The neoplastic cells are invariably positive for smooth muscle actin, caldesmon, and CD99 in a more diffuse fashion, which may be observed in UTROSCT but to a lesser extent. Moreover, unlike UTROSCT, vascular plexiform leiomyoma is negative for sex-cord markers.<sup>24</sup> However, that distinction is less important because both these entities behave in a benign fashion. Plexiform tumorlet are rare tumors affecting patients with an average age of 48 to 60 years. They are solitary or multiple (in about one-quarter of the cases), minute, well-circumscribed nodular collections. The lesions are usually seen in association with leiomyomas. On histologic examination, the individual cells are arranged in cords or rows in a branching pattern separated by hyalinized stroma. The cells may merge with foam cells similar to luteinized ovarian stromal cells. Mitotic activity is sparse. The neoplastic cells coexpress myoid, epithelial, and sex-cord markers. However, calretinin, inhibin, cytokeratin 7, and epithelial membrane antigen are negative, in contrast to UTROSCT. This tumor also has a benign behavior.<sup>25</sup> Metastatic ovarian sex-cord stromal tumor may pose difficulty in differentiation. However, the complete clinical picture and imaging studies reveal the primary ovarian tumor to solve the dilemma.<sup>11</sup>

A UTROSCT is generally discovered only after hysterectomy, and most of the patients reported so far were managed with hysterectomy with or without bilateral salpingo-oophorectomy. The UTROSCTs are generally considered tumors of low malignant potential, although most of them behave in a benign fashion. These tumors recur in very few cases; however, no deaths have been reported, to our knowledge. Infiltrative border, vascular invasion, frequent mitotic figures, serosal rupture, stromal predominance, and cytologic atypia are associated with recurrence. Patients treated with hysterectomy for well circumscribed tumors with bland features typically have a benign course.

In conclusion, the UTROSCTs are a unique group of uterine neoplasms that exhibit diverse morphologic and immunophenotypic characteristics, often coexpressing sex cord, epithelial, and smooth muscle markers. Also, because UTROSCT has no specific imaging findings, preoperative differential diagnosis from other tumors can be difficult. Similarly, intraoperative frozen sections have limited value in making a correct diagnosis of UTROSCT because many benign and malignant lesions show similar histopathologic patterns. Therefore, it is important for