

trophoblasts are polygonal mononuclear cells that have abundant cytoplasm and produce human placental lactogen. PSTT presents as a uterine mass, accompanied by either abnormal uterine bleeding or amenorrhea and moderately elevated HCG. Histologically, PSTT is composed of malignant trophoblastic cells diffusely infiltrating the endomyometrium. It may follow a normal pregnancy (half of the cases), spontaneous abortion, or hydatidiform mole. Patients with localized disease have an excellent prognosis, however about 10% to 15% of women die of disseminated disease.

SUGGESTED READINGS

Infectious Diseases of Lower Genital Tract

Lee AJ, Ashkar AA: Herpes simplex virus-2 in the genital mucosa: insights into the mucosal host response and vaccine development. *Curr Opin Infect Dis* 25:92, 2012. [Overview of HSV immunopathology.]

Vulva

de Koning MN, Quint WGV, Pirog EC, et al: Prevalence of mucosal and cutaneous human papillomaviruses in different histologic subtypes of vulvar carcinoma. *Mod Pathol* 21:334, 2008. [Comprehensive study of HPV in vulvar cancer.]

Vagina

Schrager S, Potter BE: Diethylstilbestrol exposure. *Am Fam Physician* 69:2395, 2004. [Review of clinical outcomes in patient with intrauterine DES exposure.]

Cervix

Cutts FT, Francheschi S, Goldie S, et al: Human papillomavirus and HPV vaccines: a review. *Bull World Health Organ* 85:719, 2007. [Review of HPV vaccines development.]

Munoz N, Bosch FX, de Sanjose S, et al: Epidemiologic classification of human papillomavirus types associated with cervical cancer. *N Engl J Med* 348:518, 2003. [Seminal study of HPV detection in cervical carcinoma.]

Ostor AG: Natural history of cervical intraepithelial neoplasia: a critical review. *Int J Gynecol Pathol* 12:186, 1993. [Comprehensive literature review of natural history of cervical intraepithelial neoplasia.]

Saslow D, Runowicz CD, Solomon D, et al: American Cancer Society guideline for the early detection of cervical neoplasia and cancer. *J Low Genit Tract Dis* 7:67, 2003. [Current recommendations for Pap screening.]

Schiffman M, Castle PE, Jeronimo J, et al: Human papillomavirus and cervical cancer. *Lancet* 370:890, 2007. [Review of HPV-related cervical carcinogenesis.]

Wright TC Jr, Schiffman M, Solomon D, et al: Interim guidance for the use of human papillomavirus DNA testing as an adjunct to cervical cytology for screening. *Obstet Gynecol* 103:304, 2004. [Current recommendations for HPV testing.]

Uterus and Endometrium

Bulun SE: Endometriosis. *N Engl J Med* 360(3):268–79, 2009. [Seminal review of endometriosis pathogenesis.]

Gargett CE, Nguyen HP, Ye L: Endometrial regeneration and endometrial stem/progenitor cells. *Rev Endocr Metab Disord* 13:235–51, 2012. [Review of endometrial regeneration.]

Giudice LC: Endometriosis. *N Engl J Med* 362(25):2389–98, 2010. [Review of pathophysiology of endometriosis.]

Kuhn E, Wu RC, Guan B, et al: Identification of Molecular Pathway Aberrations in Uterine Serous Carcinoma by Genome-wide Analyses. *J Natl Cancer Inst* 104(19):1503–13, 2012. [First manuscript to describe novel mutations in serous carcinoma.]

Le Gallo M, O'Hara AJ, Rudd ML, et al: Exome sequencing of serous endometrial tumors identifies recurrent somatic mutations in chromatin-remodeling and ubiquitin ligase complex genes. *Nat Genet* 44:1310–5, 2012. [Comprehensive sequence analysis of serous endometrial carcinoma.]

Makinen N, Mehine M, Tolvanen J, et al: MED12, the mediator complex subunit 12 gene is mutated at high frequency in uterine leiomyomas. *Science* 334:252–5, 2011. [Landmark finding of a common intragenic mutation in leiomyomas.]

Yeramian A, Moreno-Bueno G, Dolcet X, et al: Endometrial carcinoma: molecular alterations involved in tumor development and progression. *Oncogene* 32:403–13, 2013. [Recent overview of the molecular biology of endometrial carcinoma.]

Ovary

Cheng L, Roth M, Zhang S, et al: KIT gene mutation and amplification in dysgerminoma of the ovary. *Cancer* 117:2096–103, 2011. [Clinicopathologic study of KIT alterations in dysgerminomas.]

Cho KR, Shih IeM: Ovarian cancer. *Annu Rev Pathol* 4:287–313, 2009. [Comprehensive review of the molecular genetics of ovarian carcinoma.]

Diaz-Padilla I, Malpica AL, Minig L, et al: Ovarian low-grade serous carcinoma: a comprehensive update. *Gynecol Oncol* 126:279–85, 2012. [Review of pathogenesis of low grade serous carcinoma of the ovary.]

Goodarzi MO, Dumesic DA, Chazenbalk G, et al: Polycystic ovary syndrome: etiology, pathogenesis and diagnosis. *Nat Rev Endocrinol* 7:219–31, 2011. [Overview of polycystic ovarian syndrome.]

Heravand-Moussavi A, Anglesio MS, Cheng SW, et al: Recurrent somatic dicer mutations in non-epithelial ovarian cancers. *N Engl J Med* 366:234–42, 2012. [Landmark study of mutations in non-epithelial ovarian tumors.]

Weigand KC, Shah SP, Al-Agha OM, et al: ARID1A Mutations in Endometriosis-Associated Ovarian Carcinomas. *N Engl J Med* 363:1532–43, 2010. [Discovery of ARID1A mutation in ovarian cancer].

Placenta

Baumwell S, Karumanchi SA: Pre-eclampsia: clinical manifestations and molecular mechanisms. *Nephron Clin Pract* 106:72, 2007. [Review of clinical and molecular correlates in pre-eclampsia pathophysiology.]

Lurain JR: Gestational trophoblastic disease I: epidemiology, pathology, clinical presentation and diagnosis of gestational trophoblastic disease, and management of hydatidiform mole. *Am J Obstet Gynecol* 203:531, 2010. [Review of clinicopathologic characteristics of molar pregnancies.]

Maynard S, Epstein FH, Karumanchi SA: Preeclampsia and angiogenic imbalance. *Ann Rev Med* 59:61, 2008. [Review of angiogenic alterations pre-eclampsia.]

Wilcox AJ, Weinberg CR, O'Connor JF, et al: Incidence of early loss of pregnancy. *N Engl J Med* 319:189, 1988. [Older but still useful paper on early pregnancy loss.]