Q. Can endometrial hyperplasia be diagnosed in secretory phase endometrium? Are there criteria for diagnosing endometrial hyperplasia in secretory phase endometrium?

A. The diagnosis of endometrial hyperplasia in secretory endometrium should be made with caution and after consultation, as it is an uncommon occurrence. A study presented in abstract form reported endometrial hyperplasia or carcinoma arising in a functional, secretory phase background at a frequency of less than two percent.1 Medical/hormonal therapies for endometrial hyperplasia may induce secretory-like changes, confusing the histological picture; therefore, knowledge of the clinical history is essential. How-ever, in a secretory background, markedly crowded glands with little stroma and proliferative-type epithelium should fulfill the criteria for endometrial hyperplasia (complex or complex atypical). This is an instance in which the endometrial intraepithelial neoplasia criteria may be particularly helpful, as the lesional glands will display a different cytology than that of the background endometrium.2

References


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Q. When performing body fluid cell counts on a hemocytometer, what are acceptable limits of agreement between the two sides? Our laboratory uses a percentage, which works for the higher cell counts; however, when a cell count is low, such as one RBC counted on one side and zero on the other, this is a 50% percent discrepancy. Any advice?

A. In general, most body fluids should have cell counts performed using an automated method rather than a hemocytometer. The automated method has improved precision since many more cells can be counted compared with a manual method.1-2 However, both methods are imprecise when the cell count is low. One must do a manual count when the total cell count is below the analytic range of the instrument, or if the specimen contains clots or debris are present, then a statement should be made noting that the count may be less accurate in this setting. When the counts are very low, such as in normal cervical mucus, the precision of the measurement obtained when using the hemocytometer is high. The following example is given by Gregory P. Smith, MD, and Carl R. Kjaeldsberg, MD, in their chapter “Cervicospinal Fluids” in Henry’s 20th edition.3 This example concerns normal cervicospinal fluid from an adult, which would have a white count of 0–5 cells/µL:

“…using 18 large squares (1 mm² each) in a Fuchs-Rosenthal type chamber with a depth of 0.2 mm, a total volume of 3.6 µL (18 x 0.2 µL per square) is examined. With 5 cells/µL, a total of 18 cells is counted. The coefficient of variation (CV) defined as 100 divided by the square root of the number of cells counted, is 100/square root of 18, or 24%. Therefore, ± 2 CV is about ± 48%. A Neubauer hemocytometer with nine 1 mm² squares with a depth of 0.1 mm has a CV of 45% (± 90% for 2 CV) with the same cell concentration.”

It is clear from this example that

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