Retroperitoneal schwannoma during pregnancy: case-report and practice-based overview

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Objective. Schwannomas are benign slow-growing tumors of the peripheral nerve sheaths arising from Schwann cells. During pregnancy, the routine use of ultrasound for fetal assessment has resulted in increased detection of maternal asymptomatic masses, including retroperitoneal ones. Although most of these masses are benign, the possibility of cancer must be considered.

Materials and Methods. In this report, we describe the rare case of a young woman with bilateral adnexal cysts and a presacral retroperitoneal mass diagnosed during the first trimester of pregnancy.

Results. At the 12th gestational week, she received surgery to remove ovarian tumors and to obtain a biopsy of the non-adnexal tumor. The histological examination revealed a bilateral borderline seromucinous tumor of the ovaries; the presacral mass was identified as a schwannoma. Although the dimensions of the sacral mass severely affected the quality of life of the patient, it was possible to achieve a near term pregnancy with the delivery of a healthy baby. To successfully remove the voluminous presacral schwannoma, the patient underwent neurosurgical treatment seven months after delivery.

Conclusions. Concerns regarding risk of malignancy, acceleration of tumor growth and fetal wellness may arise in healthcare practitioners after finding a schwannoma during pregnancy. Nevertheless, benign pelvic tumors do not hamper a regular pregnancy even when of great dimensions: in particular, as in our case, pelvic schwannomas are slow-growing benign tumors and do not seem to enlarge during pregnancy.

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