

**Poster 8: The Clinical Course of Atypical Polypoid Adenomyoma: A Rare Lesion of Ovulatory Dysfunction****Presenting Author:** Susan Lang, MD – Stanford University

Topic: Endometrial

**Objectives**

Atypical polypoid adenomyoma (APA) is a rare and poorly understood precursor lesion for endometrial adenocarcinomas. Prior data suggests both infertility and prolonged estrogen exposure may predispose pre-menopausal women to APA. Polycystic ovarian syndrome (PCOS), a heterogenous syndrome characterized by ovulatory dysfunction, shares some of these risk factors. PCOS has an estimated prevalence of about 5-10% in the United States. We sought to understand the clinical course of patients with APA, especially in those with concurrent diagnoses of PCOS.

**Methods**

We performed a single-center retrospective analysis of patients with biopsy-proven APA following approval from our institutional review board. Sociodemographic factors, including age, BMI, parity, race/ethnicity, and menopausal status were abstracted from the chart. Clinical variables relevant to PCOS, including clinical signs of hyperandrogenism, cycle derangements, or diagnosis of infertility were also collected. Outcomes including live birth, endometrial hyperplasia, or endometrial carcinoma were assessed. Data were evaluated via SAS using chi-square and T-tests.

**Results**

70 patients were included with pathologic diagnosis of APA. Mean age was 37.7 years (range 31-42) and BMI 32.8 (25-39). The majority were white/Caucasian (54.3%), non-Hispanic (81.4%) and nulliparous (76.9%). 82.9% of patients were pre-menopausal. 22.8 % (n= 16) had a diagnosis of PCOS by Rotterdam Criteria, with 38% reporting cycle derangements and 11.4% reporting clinical/biochemical hyperandrogenism. 35.7% (n= 25) reported infertility. 11.4% (n=8) of patients reported live birth following APA diagnosis. Additionally, in this cohort, 30.4% (n=21) patients had pathology-proven hyperplasia and 25.7% (n=18) had FIGO grade 1 endometrioid adenocarcinoma. Of these, 11 cases were concurrent APA with complex hyperplasia and 14 concurrent APA with endometrioid carcinoma.

**Conclusions**

Little is known about the clinical course of APA. In our sample of patients with pathology proven APA, one in five patients had PCOS, more than expected given the national prevalence. Additionally, though women with PCOS are known to have an elevated risk of endometrial cancer (9% lifetime risk), one in four patients in this cohort had biopsy-proven endometrial cancer. Further research is needed to understand these associations.