PROSPECTIVE BLINDED STUDY OF 1000 CONSECUTIVE PATIENTS WITH PROBABLE POLYPS SEEN ON TRANSVAGINAL ULTRASOUND (US). HOW ACCURATE IS US?

AUTHORS (LAST NAME, FIRST NAME): Hartman, Alex [1]; Hartman, Brian [1]

INSTITUTIONS (ALL): 1. True North Imaging, Thornhill, , ON, Canada.

ABSTRACT BODY:

OBJECTIVE : The purpose of this study was to assess the accuracy of a diagnosis of probable endometrial polyp on transvaginal ultrasound (US) compared to subsequent sonohysterography (SHG).

METHODS: This prospective blinded study selected 1000 consecutive patients diagnosed with endometrial polyps on transvaginal US who within 48 hours had a SHG. Multiple factors assessed included patient age, size of polyp, number of polyps, submucosal fibroids, intramural fibroids, adenomyosis, location of the polyp, blood flow, abnormal bleeding and endometrial thickness. Pearson's chi-square test for independence and independent samples T-tests were performed.

RESULTS: 28.1% patients with polyps on transvaginal US did not have polyps on SHG. In addition, 18.3% had 2nd polyps not seen on US. Only size of the polyp, multiple polyps, submucosal fibroids, adenomyosis, location of the polyp and blood flow to the polyp were significantly associated with detection of a polyp on US ($p < 0.05$). There was a significant difference in the mean age and endometrial thickness between the two groups ($df = 998$, $p < 0.01$).

CONCLUSIONS: The "false positive" rate for endometrial polyps on US compared to SHG was 28% with a further 18% having 2nd polyps missed on US. Factors associated with improper detection, included age, endometrial thickness, polyp size, multiplicity, submucosal fibroids, location of polyps, adenomyosis and blood flow. Intramural fibroids and abnormal bleeding did not prove to be significant.