Mullerian Duct Anomalies. A prospective study of general characteristics of patients with uterine malformations.

Introduction: The use of 3D sonohysterography has increased our detection of MDAs. Using strict criteria patients were assessed for MDAs. Multiple factors were used to compare these groups.

Methods: A prospective analysis was performed from October 2010 to March 2011 involving 2626 consecutive patients receiving complete initial infertility imaging investigations at an academically-oriented private practice. Patients were grouped into having no MDA, arcuate, septate, or unicornuate/didelphys/bicornuate. Multiple factors were assessed including mean age at investigation, BMI, tubal patency and the presence of PCO. Chi Square Tests of Independence and one-way ANOVA were performed to determine significant differences.

Results: Of the 2626 patients, 1745 (66.5%) had no MDA, 806 (30.7%) had an arcuate deformity, 53 (2.0%) septate and 22 (0.8%) unicornuate/didelphys/bicornuate. There was no statistical difference between the groups with regards to BMI and the presence of PCO. Significant differences were found with respect to age and tubal patency [F(3,2622y=2.84, P = 0.037].

	No MDA	Arcuate	Septate	Uni/Didelph/Bi	Significance
# of patients	1745	806	53	22	
% of patients	66.5%	30.7%	2.0%	0.8%	
Age at investig	34.4	34.1	33.2	32.2	$P < 0.05$
BMI	24.9	24.8	24.6	25.2	NS
% with PCO	39.2%	41.9%	43.4%	45.5%	NS
Patent Rt tube	81.9%	86.7%	90.6%	68.2%	$P < 0.05$
Patent Lt tube	84.4%	88.8%	81.1%	31.8%	$P < 0.05$

Conclusions: In this prospective study, 97% of infertility patients assessed with 3D sonohysterography had either an arcuate, or no MDA. 3% had septate, or unicornuate/didelphys/bicornuate. The unicornuate/didelphys/bicornuate group was younger at the time of investigation and had significantly lower tubal patency rates. With regards to BMI and the presence of PCO, there was no statistical difference between the groups.