Congenital Anomalies of the Uterus, and Ultrasound Diagnostics

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1. INTRODUCTION

In 1997 Kupesic and Kurjak were evaluated sonographic aspects of congenital anomalies of the uterus (1). The study involved 420 patients in whom the previous diagnostic procedures done hysteroscopy. The final diagnosis was given at hysteroscopy when presented inside the uterus. Uterus septus is diagnosed in 278 patients. Transvaginal sensitivity of ultrasound in diagnosis was 95.21%, a specificity of 92.21%. For transvaginal colored Doppler sensitivity was 99.29%, a specificity of 97.93% (2). In case of hysterosonography sensitivity was 98.18%, a specificity of 100%. Hysterosonography was done in 76 patients, and only in one patient failed to diagnose the barrier, although it existed. Hysterosonography and three-dimensional ultrasound is the best method for non-invasive diagnosis of uterine barrier (3, 4, 5, 6, 7).

2. PATIENTS AND METHODOLOGY

This study included 78 patients (patients with established intrauterine abnormality and healthy patients) that are in the research divided into two groups. Group A were patients with congenital and acquired intrauterine abnormality by 2D sonography. Group diagnosed as B patient with intrauterine abnormalities verified by the method of 3D sonography. The control group consists of the same number of patients, which is done at the diagnostic, therapeutic (operational) and hysteroscopy findings obtained pathohistological thereafter. The techniques used in the work are: anamnesis information (personal history, family history, etiology of congenital or acquired intrauterine abnormalities). In addition used is the following information: age, parity and clinical treatment (2D sonography, 3D sonography, gynecological findings, colposcopic findings, PAPA test, HPV typing, laboratory findings). Obtained results are statistically processed.

3. RESULTS

Table 1 shows the number and type of intrauterine abnormalities. So the total number of intrauterine abnormalities (N = 78): Miomas were 24 (30.76%),

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Congenital malformations of the uterus may be of structural nature, that may be a genetic and chromosome irregularities, when a rule is more affected by genital organs, and close (renal and urinary tract), or other systems. One known as the associated anomalies or syndromes, often called by some author so in this case is proper to speak of anomalies. Dominated are fusion anomalies in embryogenesis development (8, 9, 10).

In our paper: 2D verified changes in relation to tested group (n = 78) diagnosed modified = 62 (79.5%), undiagnosed changes 16 (20.5%), 3D verified changes in relation to tested group (n = 78); diagnosed modified = 75 (96.1%), undiagnosed modified 3 (3.9%). The difference is significant (p = 0.003), 3D US is significantly better compared with the 2D US.

5. CONCLUSION

Two-dimensional technique has serious drawbacks in view of sub septum, bicornis, and localization of polyps. All volumes measured by this technique are not precise (11, 12, 13).

Transvaginal technique becomes a "gold standard" with gynecological diagnosis of intrauterine abnormalities. Its positive and negative predictions and the rate of specificity and sensitivity rates for virtually all variables that we explored are very high and favorable (14, 15).

Multidimensional ultrasonic technique, which according to the principle of two-dimensional display with support for the program creates a multidimensional experience of space which provides a complete diagnostic evaluation of intrauterine abnormalities. Three dimensional transvaginal color Doppler ultrasound technique is the "gold standard" in diagnosing all intrauterine abnormalities.

REFERENCES