

Case Report

A CASE OF BICORNUATE UTERUS

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Abstract:

28 years old primary infertile female, came to the obstetrician. Ultra Sound (US) was requested, showed that there is abnormal shape of the uterus.

Key words: US, HSG.

Introduction:

The uterus is a dynamic female reproductive organ that is responsible for several reproductive functions, including menses, implantation, gestation, labor, and delivery. It is responsive to the hormonal milieu within the body, which allows adaptation to the different stages of a woman's reproductive life. The uterus adjusts to reflect changes in ovarian steroid production during the menstrual cycle and displays rapid growth and specialized contractile activity during pregnancy and childbirth. It can also remain in a relatively quiescent state during the prepubertal and postmenopausal years [1, 2].

Bicornuate Uterus: is a type of uterine duplication anomaly **Fig. 1**. Overall, congenital uterine anomalies occur in ~1.5% of females (range 0.1-3%). Bicornuate uteri are thought to

represent ~25% (range 10-39%) of Mullerian duct anomalies [3, 6]. In most cases, a bicornuate uterus is incidentally discovered when the pelvis is imaged. The most common symptomatic presentation is with early pregnancy loss and cervical incompetence [3].

Infertility is not usually a problem with this type of malformation because implantation of the embryo is not impaired.

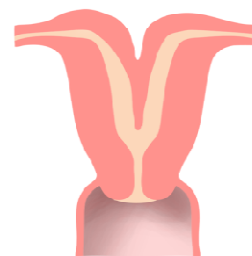


Fig. 1: Diagram shown the bicornuate uterus.

Ultrasound (US): is an oscillating sound pressure wave with a frequency greater than the upper limit of the human hearing range. Ultrasound is thus not separated from 'normal' (audible) sound by differences in physical properties, only by the fact that humans cannot hear it. Although this limit varies from person to person, it is approximately 20 kilohertz (20,000 hertz) in healthy, young adults. Ultrasound devices operate with frequencies from 20 kHz up to several gigahertz [7].

Hystrosalpinggography (HSG): is a radiologic procedure to investigate the shape of the uterine cavity and the shape and patency of the fallopian tubes. It entails the injection of a radio-opaque material into the cervical canal and usually fluoroscopy with image intensification. A normal result shows the filling of the uterine cavity and the bilateral filling of the fallopian tube with the injection material. To demonstrate tubal rupture, spillage of the material into the peritoneal cavity needs to be observed. A synonym to hysterosalpingography is uterosalpingography [8].

Case report:

28 years old primary infertile female, came to the obstetrician. Pelvic US was requested, showed that there is abnormal shape of the uterus Fig2. After that HSG was done, revealed that there is a congenital abnormality. The uterus has two horns in the fundus and the body was partially divided, which was bicornuate uterus fig 3.



Fig2: Pelvic US showed bicornuate uterus.



Fig3: HSG showed bicornuate uterus.

Discussion:

The incidence of bicornuate uterus has historically been the most frequent, although, as stated before, uterine septi and arcuate uteri appear to be the most common [9]. Again, the current literature is limited on the reproductive outcome of bicornuate uterus. One observational study with 56 pregnancies in 26 subjects was found. Preterm deliveries and miscarriage rates are slightly elevated compared with historical controls, 25% and 25%, respectively. This is likely directly correlated with the severity of the fundal indentation of the bicornuate uterus [9].

Embryogenesis The uterus is developed from the fused caudal vertical parts of the paramesonephric ducts, and the site of angular junction becomes the cervix dome and forms the fundus of the uterus [10, 11, 12].

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