PREGNANCY OUTCOME AT 20 WEEKS AFTER INTRAUTERINE CONTRACEPTION IDENTIFIED ON FIRST TRIMESTER ULTRASOUND: A RETROSPECTIVE COHORT STUDY

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Intrauterine contraception (IUC) is a highly effective form of contraception, but pregnancies do occur with IUCs in place. Current guidelines recommend removal of intrauterine contraception (IUC) in pregnancy, because prior studies estimated risk of miscarriage to be as high as 50%. However, these studies included only pregnancies with copper intrauterine device (Cu-IUD), and were conducted decades ago. Many patients elect the progesterone IUC (levonorgestrel intrauterine system, or LNG-IUS) and there is scant data on pregnancy outcomes in failure of this type of IUC. The objective of this study was to compare rate of miscarriage in women who conceived with and without IUC in place, including both Cu-IUD and LNG-IUS.

Our study population included adult women who had a pregnancy ultrasound at 12 weeks or less at the University of North Carolina Women’s Hospital. Gestational age, presence and type of IUC and demographics were recorded for each pregnancy. The outcome of each pregnancy at 20 weeks (ongoing pregnancy, miscarriage, or other) was abstracted from the medical record.

To date, 703 pregnancies between January and December 2013 have been included in our cohort. The median age was 31 years (range 18-47), and most women had one prior pregnancy. We identified four of 703 (0.6 %) pregnancies with an IUC at the time of first ultrasound. There were three Cu-IUDs and one LNG-IUS. All four women initially identified with IUC in situ had ongoing pregnancy at 20 weeks. This compares to a miscarriage rate of 24% and ongoing pregnancy rate of 63% in pregnancies without IUC.

In conclusion, our population of women seeking ultrasounds in early pregnancy is very unlikely to have an IUC in place. When our data collection is complete, we plan to describe pregnancy outcomes in a modern, diverse population so that practitioners and patients can make evidence based decisions after pregnancy occurs with IUC.