INCIDENCE OF INTRAUTERINE SYNECHIAE IN WOMEN WITH A HISTORY OF DILATION AND CURETTAGE

Authors: Sally Chen (1), Zahra Samiezade-Yazd (2), Cynthia Triplett (3), Vaishnavi Purusothaman (1), Nikhil Joshi (1)

Affiliations: (1) Department of Obstetrics and Gynecology, Kaiser Permanente Santa Clara, Santa Clara, CA (2) Kaiser Permanente Division of Research, Oakland, CA (3) Department of Graduate Medical Education, Kaiser Permanente Santa Clara, Santa Clara, CA

Background

The risk of developing intrauterine synechiae after uterine instrumentation is believed to be low, but there are relatively few studies estimating incidence. Most report that incidence after dilation and curettage (D&C) may be as high as 20% to 40% [1, 2]. Such estimates typically only include the population of patients who are referred to a fertility clinic, and likely do not reflect the incidence of clinically significant disease [3]. Furthermore, there is a lack of understanding of what factors may predispose to the development of disease in some but not others. Overestimation of disease incidence could lead to over-intervention and other harms; therefore, a better understanding of clinically significant disease incidence is urgently needed.

Objective

The purpose of this study was to estimate incidence of clinically significant intrauterine synechiae among Kaiser Permanente Northern California (KPNC) women who have ever had a dilation and curettage procedure, and to identify covariates associated with the development of disease.

Material and Methods

This is a retrospective cohort study of all KPNC reproductive aged women from 18-55 years who underwent one or more D&C procedure from January 1, 2010 to December 31, 2020. Data were collected from KPNC electronic medical records. We estimated the incidence of intrauterine synechiae within 18 months of each woman's first D&C procedure in the study period. We also tested for associations with covariates using Student's t-test and race/ethnicity using Chi Square tests between those with and without intrauterine synechiae. Covariates included patient demographic factors, number of D&C procedures, use of sharp instruments, indications for procedure, and personal history of pelvic inflammatory disease.

Results

There were 72,606 women from 18-55 years of age who underwent one or more D&C procedures between January 1, 2010 to December 31, 2020. Of those, 426 (0.59%) were diagnosed with intrauterine synechiae within 18 months of their first D&C. The mean age of women diagnosed with intrauterine synechiae was 36.1±5.6 versus 32.9±8.8 for women not diagnosed ($p<0.0001$). Of women diagnosed with intrauterine synechiae, 16.2% were Hispanic compared to 23.3% of women not diagnosed ($p<0.0001$). Additionally, women diagnosed with intrauterine synechiae were more likely to be Asian (24.4% versus 20.5%) or White (46.2% versus 37.4%) and less likely to be Black (8.4% versus 12.9%) or have another or unknown race (20.9% versus 28.2%) compared to women not diagnosed with intrauterine synechiae ($p<0.0001$).

Conclusions

The incidence of clinically significant intrauterine synechiae after any D&C is much lower (0.59%) than previously reported, which is consistent with clinical experience validating that this is a safe and effective procedure for pregnancy termination, treatment of missed abortion and non-obstetrical indications. An enhanced understanding of covariates which impact the development of this rare condition may lead to better risk stratification and judicious use of D&C procedures when there may be a risk of infertility or other sequelae of disease.

References

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