BACKGROUND AND OBJECTIVES

Uterine rupture is rare, complicating 0.2-1.5 percent of all pregnancies and is most often associated with a history of uterine incision. The risk of uterine rupture after one prior c-section is 0.7%. After a c-section a patient may be offered a trial of labor with her second pregnancy if she desires. During the labor process, an amnioinfusion may be used after rupture of membranes to fill the uterus with saline. Amnioinfusion practices vary from institution to institution, ranging from discrete boluses of a set volume to continuous infusion until delivery. The difference is based on a belief that over-distension of the uterus with saline could contribute to uterine rupture. At our institution, when indicated, continuous amnioinfusion is administered. The purpose of this study was to examine whether uterine rupture during trial of labor after cesarean section (TOLAC) at our institution occurred more frequently in cases where amnioinfusion was administered.

RESULTS/OUTCOMES

A total of twenty-five cases were identified. Two cases were excluded from the study as a uterine rupture did not in fact occur. Of the remaining twenty-three cases, only one received amnioinfusion. Odd ratios of amnioinfusion and uterine rupture was 0.08. RR of amnioinfusion and hysterectomy was 0.8 (95% CI 0.07 – 9.8).

CONCLUSIONS

Uterine rupture is a rare but serious event, with potentially devastating consequences. Based on the 10 years of data of this rare event, there does not appear to be any association with amnioinfusion. Although the practice of amnioinfusion is not standardized into continuous or discrete bolus, this study does not suggest a relationship between occurrence of uterine rupture and amnioinfusion.

METHODS

Data was collected on all intrapartum uterine ruptures occurring at our institution between January 1, 2008 and January 1, 2018 as determined by ICD 9 and 10 codes. Each case was individually reviewed and determined if amnioinfusion occurred during trial of labor. Secondary outcomes, including hysterectomy, post-partum hemorrhage, and post-operative wound complications were also examined.

REFERENCES


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