

## **Placental thickness correlates with placenta accreta spectrum (PAS) disorder in women with placenta previa.**

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### **Purpose**

Placenta previa is a risk factor for PAS disorders. The purpose of the study is to assess placenta thickness among pregnant women with placenta previa with or without PAS disorder.

### **Materials and Methods**

In this IRB approved retrospective study over 3 years duration, all women with placenta previa were included. Patients who delivered elsewhere were excluded from the cohort. Pathology and operative notes were used as reference standard. 65 patients had the sonographic diagnosis of placental previa between 12/2015 and 12/2018. Of these 65 patients, 36 had clinical and pathologic diagnosis of PAS disorder and 29 had normal placenta upon delivery. Ultrasounds closest to 20 weeks gestational age were reviewed and 3 thickest measurements of the placenta on longitudinal plane in the lower uterine segment were obtained for each patient. The average placenta thickness was compared between the two groups of patients, using paired T-tests.

### **Results**

The average placenta thickness was 3.1 cm (ranging from 0.6 cm to 6.2 cm) for normal group and 4.3 cm (ranging from 1.8 cm to 7.8 cm) for PAS group, which was statistically different with  $P < 0.001$ . The average age was 34.9 years (+/- 5.2) for normal group and 34.1 years (+/- 4.3) for accreta/increta group, which was not statistically different. The average gestational age was 27.0 weeks (+/- 7.3) for normal group and 28.4 weeks (+/- 5.3) for accreta/increta group, which was not statistically different.

### **Conclusion**

Our results demonstrate that among women with placenta previa, placenta accreta spectrum disorder correlates with increased placenta thickness at lower uterine segment. Sonographic measurement of placental thickness can be considered in patients with placental previa, with increased placenta thickness correlating with PAS disorder.

### **Reference:**

Journal: Amarnath Bhide, Arianna Laoreti, Andrea Kaelin Agten, et al. Lower uterine segment placental thickness in women with abnormally invasive placenta. *Acta Obstet Gynecol Scand*, 2019 Jan 98(1): 95-100.

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