



- **Study Report:**
 - **Address of the article:** Can Ultrasonography of The Placenta Previa Predict Antenatal Bleeding?
 - **Name of the Journal:** Journal of Clinical Ultrasound
 - **Name of Authors:** Junichi Hasegawa, Miwa Higashi, Shoko Takahashi, Takashi Mimura, Masamitsu Nakamura, Ryu Matsuoka, Kiyotake Ichizuka, Akihiko Sekizawa, Takashi Okai.
 - **Year of Publication:** 2011
 - **Number of pages:** 5 pages.

- **What Is The Paper About?**
 - In this article the authors aim to find a relation between abnormal or specific ultrasound appearances of placenta previa which can help them to predict antenatal bleeding and whether the patient needs emergency CS or not.
 - In my opinion, the title suits the article and reflects the major aspect which has been discussed in the article.

- **Research Question:**
 - What are the abnormal sonographic (US) findings in patients with placenta previa related to bleeding?
 - The research question was clearly stated.

- **Objectives and Hypothesis:**
 - The Objective is to determine if there is any relation between abnormal sonographic finding in patients with placenta previa and the ability to predict sudden bleeding thus managing these cases by preserving self-blood and timing of cesarean section.
 - The objective is clearly defined and appropriate for the research design.

- **Study Design:**
 - The study design was retrospective which was conducted at the Department of Obstetrics and Gynecology, Showa University School of Medicine, Tokyo, Japan.

- **Data Collection:**
 - Retrospective data collection by reviewing the charts of patients with placenta previa who underwent CS between 2000-2009
 - It is clearly stated.

- **Study Population:**
 - The chart of 182 cases of singleton pregnancies with placenta previa who underwent delivery via CS between 2000-2009 at the university hospital were retrospectively reviewed. The US findings including the type of placenta previa, placental location, presence of placenta lacunae, lack of clear zone, sinus venosus at the margin of placenta, velamentous cord insertion, sponge-like echo in the cervix and cervical length were evaluated in relation to episodes of bleeding that required in-patient treatment during pregnancy and/or emergency CS.



- **Ethical Considerations:**

- The ethical considerations were not mentioned in this article.

- **Data and Statistical Analysis:**

- Data were entered into a statistical software package (SPSS). Categorical variables were reported as percentages and compared using the Fisher's exact test. Continuous variables were compared using the Mann-Whitney U test. Statistical significance was defined as a p-value of less than 0.05
- The data analysis is appropriate for the study design in this research.

- **Results (Data Presentation):**

- The tables in this research were very clear:
 - ✓ Table-1: Maternal and Neonatal Demographics In Patients Who Underwent An Emergency Cesarean Section Due To Uncontrollable Bleeding From The Placenta Previa And In Patients Who Did Not.
 - ✓ Table-2: Comparison Of Ultrasound Finding In Patients Who Required An Emergency Cesarean Section Due To Uncontrollable Antenatal Bleeding And In Patients Who Did Not.
 - ✓ Table-3: Comparison Of Ultrasound Findings Of Placenta Previa Noted At 20 Weeks Of Gestation In Women Who Eventually Bled Versus Those Who Did Not And In Women Who Eventually Required An Emergency Cesarean Section Due To Uncontrollable Bleeding From The Placenta Previa Versus Those Who Did Not.
- Episodes of antenatal bleeding occurred in 102/182 patients with placenta previa. An emergency CS was performed in 66 of these 102 patients. In the 80 patients without episodes of antenatal bleeding, an emergency CS was only performed in 1 (table-1).
- Detection of US findings just prior to a CS was not associated with the need for emergency CS due to uncontrollable bleeding from the placenta previa (table-2).
- Frequencies of each US finding at 20 weeks of gestation were not different between the patients who underwent emergency CS and the others (table-3).

- **Discussion, Interpretation and Conclusion:**

- The authors interpretations and conclusion fit with the presented results.
- The authors concluded that there are no US findings which can predict bleeding episodes and the eventual need for an emergency CS.

- **Your Personal Reflection:**

- This article encouraged and motivated me to look for more cases of placenta previa in the hospital and take history from them. In addition, I was interested in reviewing their ultrasound reports. The article discussed a very important topic since bleeding due to placenta previa put mothers under a great risk and we have to expand our knowledge in how to deal and manage such cases.