Title: Development of Perinatal Emergency Care Systems and Suggestions: A Report from Perinatology Committee of Japan Society of Obstetrics and Gynecology

Running title: Development of Perinatal Emergency Care Systems

Authors: Hideaki Masuzaki1), Nobuya Unno2), Yoshio Matsuda3), Masao Nakabayashi4), Satoru Takeda5), Nobuaki Mitsuda6), Junichi Sugawara7), Toshiyuki Yoshizato8), Atsushi Yoshida1)

1Department of Obstetrics and Gynecology, School of Medicine, Nagasaki University, Nagasaki
2Department of Obstetrics and Gynecology, Kitasato University Hospital, Tokyo
3Department of Obstetrics and Gynecology, International University of Health and Welfare Hospital, Tochigi
4Department of Obstetrics and Gynecology, Aiiku Hospital, Tokyo
5Department of Obstetrics and Gynecology, Juntendo University, Tokyo
6Department of Obstetrics, Osaka Medical Center and Research Institute for Maternal and Child Health, Osaka
7Department of Obstetrics and Gynecology, Tohoku University Graduate School of Medicine, Sendai,
8Center for Maternal, Fetal, and Neonatal Medicine, Fukuoka University Hospital, Fukuoka

Corresponding Author: Hideaki Masuzaki

Department of Obstetrics and Gynecology
Nagasaki University School of Medicine
1-7-1 Sakamoto, Nagasaki, 852-8501, Japan
bunbuku@nagasaki-u.ac.jp
TEL: (+81)-95-819-7363
FAX: (+81)-95-819-7365
Abstract:
Placental abruption is a disease occurring irrespective of the time and location and requiring maternal-fetal emergency care, so early delivery is indispensable, and the time from the occurrence of placental abruption to delivery should be shortened as much as possible.

KEYWORDS:
Placental abruption, blood transfusion
Among cases of placental abruption registered in the Perinatal Care Database developed by the Committee on Perinatal Care of the Japan Society of Obstetrics and Gynecology, those in which consent for secondary research was obtained, and the diagnosis of cerebral palsy was established based on the results of examination covered by the obstetrical care payment system, have recently been studied, and the results suggest the following:

1. When placental abruption occurs outside the hospital, it frequently becomes severe, involving intrauterine fetal death and requiring maternal blood transfusion. However, as it is a disease occurring irrespective of the time and location and requiring maternal-fetal emergency care, early delivery is indispensable even when it occurs in hospital.

2. Special attention should be paid to decreased fetal movements or their loss, in addition to abdominal pain and bleeding as initial symptoms.

3. In previous studies on placental abruption, all those with a poor prognosis (death or sequelae after the neonatal period) were delivered 60 minutes or more after its occurrence. Similarly, on analysis of cerebral palsy, all patients were delivered 60 minutes or more after the occurrence of placental abruption. Based on these results, the time from the occurrence of placental abruption to delivery should be shortened as much as possible, including cases of suspected placental abruption, and, in line with this, it is necessary to develop systems to treat placental abruption in consideration of
medical circumstances in each community. Such systems should be established by prefecture or perinatal care area. In some cases, it may also be necessary to consider delivery before maternal transfer, based on the doctor's judgment.

(4) It is urgently necessary to establish systems to perform emergency surgery through cooperation between neonatologists and anesthetists in communities.

(5) Nearly 20% of all medical facilities are concerned over insufficient blood supply systems in Japan. This tendency is particularly marked in areas other than large cities. Considering such a situation, the prompt establishment of systems to supply necessary blood products within 1 hour after request on a 24-hour and nationwide basis is necessary.
Disclosure Statement

We have nothing to declare.