Bringing Japanese Neonatal Care to the World

Professor of Pediatrics, Chief for Research
Department of Pediatrics, Division of Neonatology
Saitama Medical Center, Saitama Medical University
Fumihiko Namba, MD, PhD

Recently, international interest in Japan's neonatal care has been increasing. Starting with the DELPHI NEONATAL INNOVATION CONFERENCE in Florida, USA, in March 2023, we have become in demand as speakers at many international conferences and seminars, including in Bali and Guangzhou (IPOKRaTES Seminar) in January 2024, Taiwan (Towards a Brighter Future for Neonates), a web conference (North West Neonatal Study Day) in the UK in February, the 99nicu Conference in Portugal in April, and the Neonatal conference in the UK in June. In addition, I have received a request from a NICU in Florida to send the physicians and nurses of our center's NICU next March.

This situation has arisen due to growing international interest in how Japanese health professionals manage infants born at 22-23 weeks' gestation. In many countries, active neonatal resuscitation has been limited to premature infants born after 24 weeks' gestation (Table 1). However, in Japan, a 2021 national survey revealed that in principle, approximately 50% of facilities perform active resuscitation for infants born at 22 weeks' gestation (Figure 1). This center has been actively resuscitating all infants born at 22 weeks' gestation since 2003, and this approach has received much attention. In recent years, an increasing number of facilities in Europe and the United States have been considering active resuscitation for infants born at 22-23 weeks' gestation, and the high survival rate of these infants in Japan is attracting attention (Figure 2). The new coronavirus infection has facilitated international exchanges through online conferencing tools, and information sharing is becoming more active.

In 2021, I published a paper on the results and detailed management of 29 infants born at 22 weeks' gestation experienced by our center (J Perinatol, 2023). After this article was published, I used social networking services to disseminate information, which in turn led to a flood of requests for lectures. SNS, which became mainstream with the spread of smartphones since the 2000s, are widely used overseas to collect and share the latest medical information.

Here, I would like to introduce three accounts that will help promote neonatal care in Japan around the world. The first account is the International Society for Evidence-Based Neonatology (EBNEO) (https://ebneo.org/). I am also participating as a Social Media Editor, and each day of the week has a specific Editor to post on social networking service sites. We provide abstracts of high quality neonatal-related papers on a daily basis via a social networking service, such as X, Facebook, Instagram, etc. In addition, users vote for important papers that they believe will make a difference in neonatal care as "Impact Article of the Month/-Year". Not only will you have access to the latest neonatal papers, but you will also be able to select papers for abstract reading at your institution.

The second account I would like to introduce is The INCUBATOR (https://www.the-incubator.org/). This podcast, which can be easily accessed on your smartphone, not only presents the latest papers on neonatal care, but also provides interviews with a wide range of personalities from international neonatal care professionals to patient families. I am not a native English speaker, so it may be difficult to understand the content accurately, but I listen to it during my commute to work to improve my listening skills. Incidentally, I was invited by The INCUBATOR to speak at the DELPHI NEONATAL INNOVATION CONFERENCE on the performance and management of growth-limited infants in our center and in Japan.

Lastly, I would like to introduce JAPANicu (@JAPANicu), X's account. This is an account I set up to promote Japanese neonatal care to the world, and actively introduce papers and other articles authored by Japanese neonatal pediatricians. As of November 7, 2023, it is followed by 571 people, mostly neonatal pediatricians living abroad.

I belong to and participate in international academic societies and study groups in order to increase opportunities to disseminate Japanese neonatal care overseas. For example, I attend the annual meeting of the Pediatric Academic Societies every year, and I am able to deepen exchanges with neonatal pediatricians from abroad. As an individual, I am a member of the Society for Pediatric Research and the American Pediatric Society, and as an organization, we have joined international research groups on neonatal chronic lung disease and growth-limited infants, such as the BPD Collaborative (https://thebpdcollaborative.org/) and the Tiny Baby Collaborative (https://www.tinybabycollaborative.org/) and are trying to show the world the current state of neonatal care in Japan. Furthermore, as the chairman of International Liaison Officer of the Japan Society for Neonatal Health and Development, I am working to promote international exchange by organizing the 6th Japan-Taiwan-Korea Joint Congress on Neonatology in 2024 and IPOKRaTES Japan in 2025.

"Neonatal care in Japan is the best in the world." This is a cliché I have heard since I chose neonatal care as my pediatric specialty 20 years ago. However, the details of what is actually being done in Japan's neonatal care sector, in particular premature infant care, are not well known overseas. There is a lack of information about severe neonatal chronic lung disease (Wilson-Mikity syndrome) with specific radiographic manifestations due to in utero inflammation/infection in utero and the classification of neonatal chronic lung diseases in terms of etiology and pathogenesis, which many Japanese neonatal pediatricians have addressed but could not resolve. Japanese neonatal care is currently attracting a great deal of attention outside of Japan, and now that digitalization has progressed, an environment that facilitates communication and information exchanges across borders has been created. This situation is the perfect opportunity to present Japanese neonatal care on the international stage. Now is the time to bring Japanese neonatal care to the world!

Guillen U, et al. Pediatrics 2015

Country name (year)	Gestational age		
	22	23	24
USA (2014)	Individual treatment	Individual treatment	Active resuscitation
Canada (2012)	Palliative care	Individual treatment	Individual treatment
UK (2018)	Individual treatment	Individual treatment	Active resuscitation
France (2012)	Palliative care	Palliative care	Parental wish
Germany (2012)	Individual treatment	Individual treatment	Active resuscitation
Italy (2012)	Individual treatment	Individual treatment	Individual treatment
Finland (2014)	Individual treatment	Individual treatment	Active resuscitation
Sweden (2014)	Individual treatment	Active resuscitation	Active resuscitation
Norway (2012)	Individual treatment	Individual treatment	Active resuscitation
Australia (2013)	Palliative care	Palliative care	Active resuscitation
Japan	No recommendations		
Our center (2003 onwards)	Active resuscitation	Active resuscitation	Active resuscitation

Table 1 Recommended treatment strategies for growth-limited infants

Isayama, et al. 40th Perinatal Symposium 2022

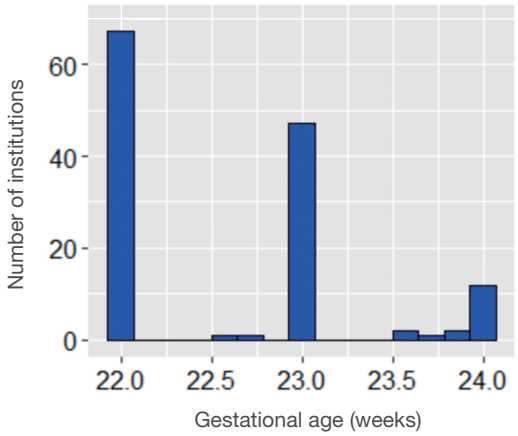

Fig. 1 Minimum gestational period at which all cases are eligible for resuscitation

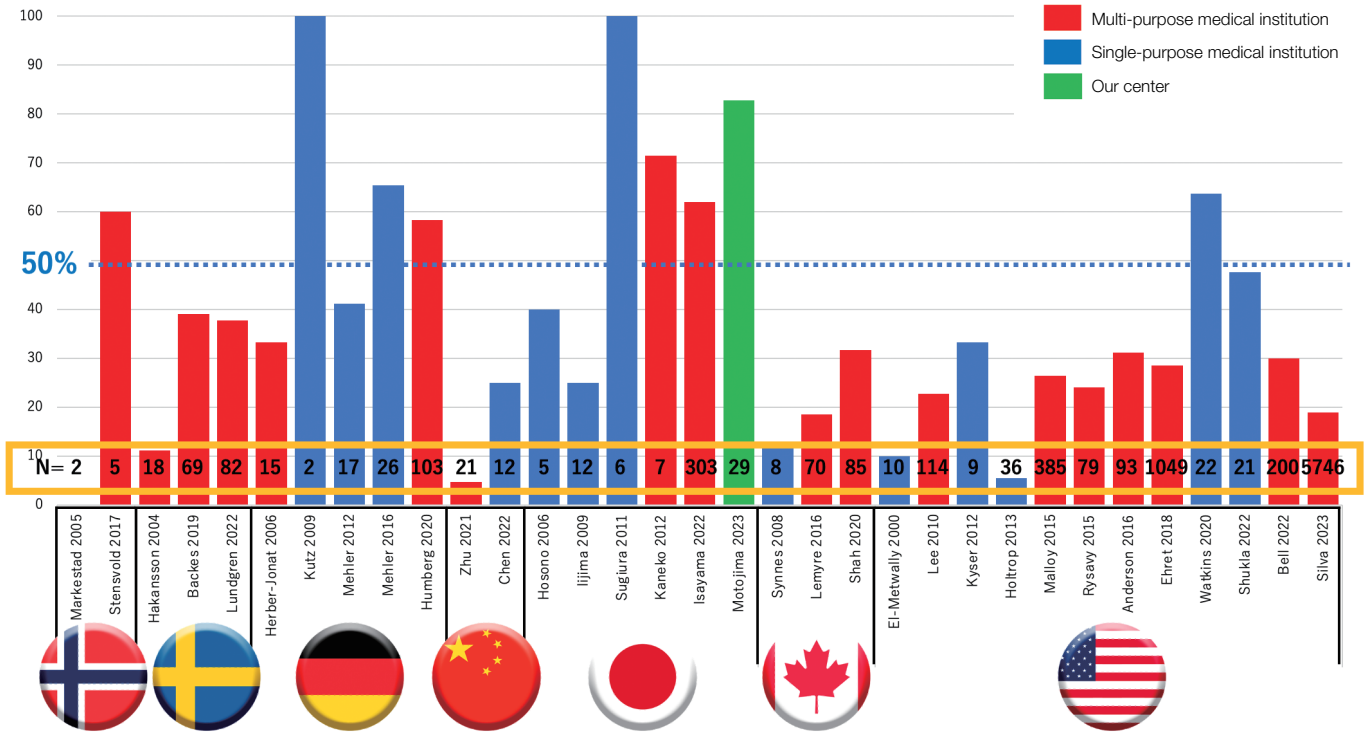

Fig. 2 Survival rate of infants born at 22 weeks' gestation with active resuscitation

*The horizontal (item) axis indicates the name of the first author and year of publication of the article, and the N value indicates the number of cases studied.

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