# CAUL RELATED SUPERSTITIONS IN JAPAN YEDO PERIOD

Hanna Uchino

Centre for the Study of CO-Design, Osaka University, Japan

# Abstract

There are many influential superstitions related to pregnancy and childbirth that exist globally. A pertinent example is the variety of superstitions related to the caul. The caul is a talisman, and within the superstitions, it is believed that a baby born with a caul will lead a happy life. In Japan, people believed that the family crests of men who had had sexual relations with the infant's mother were printed on the caul, and sometimes, it was dedicated to a shrine or was buried with other embryonic adnexa in the mound of afterbirth (which is called *Yena-duka* in Japanese). In the Yedo period (the early-17<sup>th</sup> century to the mid-19<sup>th</sup> century), obstetrical techniques dramatically improved, and the publishing industries and libraries also thrived. Obstetricians and scholars used books to warn people against believing in superstitions. However, superstition was kept alive and appendages of the foetus, including the caul, were treated auspiciously and kept as carefully as ever. A caul was not only the membrane that covers the head and face of an infant, but was also seen something holy. This paper will examine Japanese superstitions related to the caul in the Yedo period.

Keywords: Caul: Obstetrics: Superstitions: the Yedo Period

# INTRODUCTION

Pregnancy and childbirth are one of the important life events along with death. That is why people are fascinated by the mystery of pregnancy and childbirth and have a reverential awe toward its mystique; some people venerate women, some people avoid people and things that relate to pregnancy and childbirth, and some people believe in superstitions related to these events.

A foetus is suspended in the amnion that is filled with amniotic fluid in the womb, and prior to delivery, a woman's water breaks (the "water" being the amniotic fluid as the amnion ruptures in preparation for birth). Occasionally, when the rupture of the amnion is delayed, the baby can be delivered wearing a part of amnion (also called the "caul") or covered in the whole membrane. A baby born this way is referred to as "a baby born with a caul"<sup>i</sup> and there are different superstitions about this baby and the caul that exist globally. The reverence for the events of pregnancy and childbirth, as well as fears that surround high perinatal mortality and maternal mortality rates drive superstitions.

There are some preceding studies on cultural history and superstitions about the caul and a baby born with a caul. In Europe, they have so many folk tales and novels about a baby born with a caul that there are various precedent studies exist. Dr. L. Kanner, a famous Austrian-American psychiatrist and physician, is well-known that he researched on European culture related to a baby born with a caul and noted many sources. In Japan, however, only Y. Shibano and the author can be listed as researchers who study the cultural history related to a baby born with a caul. The image which was built up of a baby born with a caul in Japan was not positive among people, and there are a few people who know about a baby born with a cau, because a doctor will rupture the amnion artificially as soon as possible when a baby is still in the amnion during childbirth. Also in medicine, there are only a few researches about the cause of death of

a baby born with a caul from the viewpoint of medical jurisprudence.

This paper examines Japanese superstitions related to cauls in the Yedo period<sup>ii</sup> (the early-17th century to the mid-19th century) through a focused discussion of the following four topics: superstitions about the caul, the warnings in books against believing in superstitions, the superstition of family crests printed on a caul, and the holiness of the caul. In the Yedo period, popular culture flourished and people created many superstitions about a caul and a baby born with a caul. It is also during this time when obstetrical techniques used during a difficult delivery were developed, and many obstetrical books which warned people against believing in superstitions were published and widely read among people as a type of educational book. People were at a major turning point in their view of life. This paper discusses the socio-cultural background that people came to terms with fears of the mother and child dying during childbirth too, while touching upon the descriptions in obstetrical books about a baby born with a caul that have been overlooked as sources to study culture.

### **Description of a Caul**

The caul, which is the subject of many superstitions, is defined in Stedman's Medical Dictionary (the 28th edition) as follows:

"caul, cowl: The amnion, either as a piece of capping the baby's head at birth or the whole membrane when delivered unruptured with the baby. SYN galea, veil, velum."

As discussed before, a foetus in the uterus is suspended in the fluid-filled amniotic sac, which is also called a caul. As shown in the cross-section of the uterine body, in the order starting from the side of mother's body to the side of a foetus, is composed with a myometrium, a placenta, a decidua membrane, a chorionic membrane, an amniotic membrane (also called an amnion), and amniotic fluid. Three membranes, a deciduous membrane, a chorionic membrane, an amniotic membrane, a chorionic membrane, an amniotic membrane, these are called a foetal membrane. An amnion, which is also commonly called a caul is constituted by a compact layer, basal layer, and amniotic epithelial cell layer, and appear in this order from the mother's body to the foetus.

"Born with a caul" (*Glückshaube geboren* in German, *il naît coiffé* in French, *partuscum capito gelato* in Latin) is a "delayed rupture of the membrane", and occurs as a result of an overly-thick foetal membrane, insufficient amounts of amniotic fluid (oligohydramnios), or weak contractions during labour (uterine inertia). It is rare for a baby to be born with a caul now, because, upon discovery of the baby still being in the amnion during childbirth, a doctor will rupture the amnion artificially as soon as possible in order to let the baby breathe more easily.

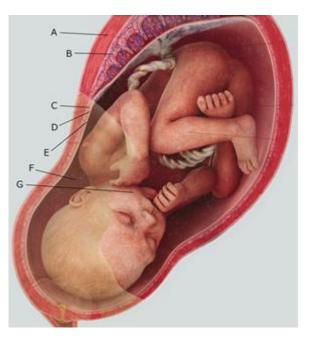


Figure 1. Illustration of a Foetus<sup>iii</sup>

A: a myometrium	E: an amniotic membrane (a caul)
B: a placenta	F: amniotic fluid
C: a decidua membrane	G: a foetus
D: a chorionic membrane	

#### Preserving the Umbilical Cord

"Have you saved your umbilical cord?" When asked this kind of question, most people would say "no". However, if this question presented to a Japanese person, or a person who was born in Japan, more than 50 percent of them would reply with "yes". This is because there are many hospitals, clinics, and midwifery homes in Japan that provide the service that offers parents a part of the umbilical cord of their baby when they leave the hospital. As shown in Figure 2, there are many special small wooden containers for storing umbilical cords.



Figure 2. Wooden Containers Used for Storing Umbilical Cords

The origin of this custom dates to the 11th century, with the public in Japan to embrace this custom in the Yedo period (1603-1868). People believed that when a baby suffered an unknown or a severe illness, like smallpox, measles, cholera, malaria, tuberculosis, and so on, he would be able to recover by ingesting his umbilical cord as a type of medicine. We can assume that people learned about the effectiveness of a blood contained in the umbilical cord from these experiences. Currently, the blood contained in an

umbilical cord is a key subject of research for the treatment for intractable diseases like leukaemia. Although the Japanese customarily use the umbilical cord for medicine any longer, people still keep a part of the umbilical cord to show the bond between the mother and her child<sup>iv</sup>.

# Superstitions about Pregnancy and Childbirth

There are many superstitions regarding pregnancy and childbirth<sup>v</sup> that exist across Japan. Some of these superstitions are still practiced and they remain influential, particularly those that concern the umbilical cord and the afterbirth, as shown in Table 1.

As the table shows, people clearly understand that pregnancy and childbirth do come with risks that may lead to death, and therefore, foetal appendages are seen as part of the selfhood of the child or as a living being. As James George Frazer, a social anthropologist noted in his book, The Golden Bough (1922), "many people have believed that a person's destiny is more or less bound up with that of his navel string or afterbirth"<sup>vi</sup>.

Table 1. Japanese Sup	erstition about	Pregnancy and	Delivery
-----------------------	-----------------	---------------	----------

How to make the program of a	Give the gift of a dog figure to an expectant mother
How to make the pregnancy safe	Wear a maternity belt in the fifth month of pregnancy
How to make the delivery easy and safe	Use things white in colour during delivery
	Deliver a baby in a birthing room
	Smash clay pots
How to let a child lead a happy life	Keep a part of the umbilical cord in a container
	Keep or bury the afterbirth in an appropriate manner (Dedicate to a Shrine or Bury in the Mound of Afterbirth Called <i>Yena-Duka</i> )
	Give a name with a good meaning to a child
	Hold a weaning ceremony on the 120 <sup>th</sup> day after a baby's birth
	Take the newborn baby to a shrine for his/her first visit, mostly within 30 days after his/her birth
	Change the child's name when s/he completes 7 years of age

Records by Pliny	The membrane in which the kid is enclosed in the uterus, dried and taken in wine, acts as an expellant upon the after-birth ( <i>Naturalis Historia</i> , vol. 28, chap.77)
T IIIy	The afterbirth of a bitch, provided it has not touched the ground, will act as an expellant for the foetus ( <i>Naturalis Historia</i> , vol. 30, chap.43)
Germany	A child born with a caul will have the king's daughter for his wife (The Devil with the Three Golden Hairs, Grimm's Fairy Tales - KHM029)
	A child born with a caul will lead a happy life
England	As long as you have the caul from the child born with a caul, you will never drown (among Fishermen)
Eastern Europe	Born with a caul was a sign that the child might become a vampire
Every country	A child born with a caul is a naturally psychic medium
	When <i>Ninigi-no-mikoto</i> came down to earth, he was covered with <i>Matoko-ou-fsma</i> (Matoko-ou-fsma is considered to be a caul) ( <i>Nihon-Shoki</i> : Chronicles of Japan, chap.2)
	If the caul dose not tear until cutting, s/he will be a shaman (among the Ainu Folk)
Japan	If you sew a sack during pregnancy, your baby will be born with a caul
	She brought a child born with a caul, it is sort of a retributive justice (a Buddhist narrative called Nihon-Ryoiki, chap.19)
	The family crests of men with whom the woman had a sexual relationship are printed on the caul (in Kabuki comedies)

Table 2. Superstitions about a Child Born with a Caul across Various Countries

# Superstitions about the Caul and a Child Born with a Caul

People have created various superstitions across the world over many generations. Western superstitions are generally related to the destiny of the child, and a child born with a caul is either seen as a symbol of happiness or bad luck.

In Japan, superstitions of the caul are related to holiness, warnings, taboos, and woman' s personal sexual history. A Japanese legend showed that a caul called *Matoko-ou-fsma* saved Ninigi-no-Mikoto who was the grandson of the sun goddess during the descent to earth. This means that the caul played an important part in providing life-support Ninigi-no-Mikoto. As with Western countries, people in Japan revered pregnancy and childbirth as perinatal and maternal mortality rates were high, and this was due to a lack of progress of medical techniques or availability of medical treatment. These superstitions were believed for more than 1,500 years in Japan, but it was during the Yedo period, particularly when common people began to incorporate these superstitions into their lives. It was also in this period that Japanese obstetrics theoretically and technically developed.

# Japanese Obstetrics in the Yedo Period (1603-1868)

Japanese obstetrics was considered to originate with the treatment of wounds in the *Samurai* period (1336-1590) in Kyoto where the centre Samurais had had a long battle each other over the supremacy. That medicine, especially materia medica, was diverted to be used for abortion first. Kyoto and its neighbouring city Osaka became the centre of medicine, and during the Yedo period Osaka was also the centre of pharmacy. In the Yedo period, the Shogunate government decided to adopt seclusion policy as foreign policy, banning overseas trips from 1633 to 1866, and restrictions on trading partners from 1639 to 1854. The amount of imported foreign books was limited causing traditional Japanese medicine to develop. Therapeutics of those days were *Kampo* (a traditional Japanese materia medica), acupuncture, acupressure, moxa cautery, bone-setting, massage, and surgery. During the first half of the Yedo period, obstetricians mostly used *Kampo* as treatments.

During the 1740s, however, the obstetrician Dr. Kagawa Gen' etsu succeeded in developing a new technique called *Kaisei-jutsu*<sup>vii</sup>, which was used to save a mother' s life when she had a difficult delivery. Following this success, his school further developed techniques to save a child during a difficult delivery. Therefore, the numbers of doctors increased, women were able to give birth more safely with proven therapeutic treatments, and perinatal and maternal mortality rates decreased dramatically. It was also during this time when obstetricians and scholars started to warn people against believing in superstitions through books.

#### Warnings in Books against Superstitions

In the obstetrical books and handbooks about midwifery, there are many descriptions regarding a child born with a caul. Most of these books describe the detailed form of a child born with a caul, and some books have depictions of a child born with a caul with pictures like those shown in Figure 3 and 4. These descriptions are as follows:

> "At Delivery, Some Women Deliver their Children without Water Breaking; these Children Come Down with Embryonic Adnexa and Waters. This is What We Call 'A Child Born with a Caul'." (Kagawa, 1765)

> "Some Say, 'If You Sew a Sack or Something Like Socks During Pregnancy, Your Baby will Be Born with a Caul,' However, This is just only a Superstition." (Sasai, 1775)

> "When that Wife Delivered a Baby, It did not Utter at All. Looking at It, It did not Have the Limbs nor a Face, just It Moved a Little. However, the Midwife Thought It must have been a Monster, She Put It Away in the Field. After I Heard That, I Went and examine It Carefully, Through the Membrane, I saw its

Head, Face, and Limbs, I Found out It was a Child Born with a Caul...The Membrane was like a Mica..." (Katakura, 1822)

"About a Child Born with a Caul; It is Born Covered with a Caul. You can Find a Foetus in the Crouching Form in It. You do not Have to Be Surprised. Cut a Caul with Your Nail around the Baby's Face and Let Him Breathe Immediately. A Knife is Okay. Cutting a Caul, a Caul Contracts and He Utters a Cry. If He dose not Utter a Voice, Perform the Following Operations." (Hirano, 1830)



Figure 3. Illustration of a Child Born with a Caul in Zaba-Hikken

According to the above descriptions, common people did not generally understand why a child was delivered with a caul. At that time, people had their babies with the assistance of a midwife except for the case of a difficult delivery viii . Doctors put clear descriptions in books for midwives and added warnings against holding superstitions about a child born with a caul in order to facilitate excellent midwifery care and practice. Aside from the medical books written in the early stages of Kagawa's school history, most medical books about midwifery were written in plain Japanese. This is because medical personnel and people in the upper classes (even common people) read many medical books as they are a type of educational book, as pregnancy and delivery were closely connected with people's lives.



Figure 4. Illustration of a Child Born with a Caul in Sanka-Shinan

#### Family Crests Printed on the Caul

While medical books included warnings against superstitions, a new superstition was born through the Kabuki comedies, which showed that a family crest was printed on the caul of the baby. Kabuki is traditional Japanese drama and was popular among people regardless of social class or gender in those days.

> "I Doubt the Caul of Our Baby Probably be Splashed with a Lot of Family Crests, You might Have Cheated on Me with Young Men." (Tzruya, 1810)

> "I can Bet the Caul of the Baby whom Your Wife will Bring must be Splashed with Various Family Crests, It must look Like a Printed Textile." (Kawatake, 1860)

Both of these are lines when a character is doubtful of his wife's love, or when a character makes fun of the other. Because of these comedies, people believed that the family crests of men that had sexual relations with a baby's mother would be printed on her baby's caul<sup>ix</sup>. It is assumed that people became very familiar with the caul, because Kabuki's lines reflected contemporary social conditions and there are many mounds of afterbirth (called Yena-duka in Japanese) that can be found across Japan as evidence that the caul was buried, in accordance with the superstition. The superstition went against the advances and advice of medicine, and so conflicts between new and old ideas emerged, and this occurred while patrilineal society was gradually collapsing. It is thought that these superstitions spawned out of a sense of nostalgia.

#### The Holiness of the Caul

At the same time, people found holiness in a caul and this was based on the legend of the grandson of the sun goddess who descended to earth (see Table 2). In this belief, people were acknowledging that an egg was a symbol of life itself, and as a child born with a caul needs the amnion to be taken away (like an eggshell being removed), people thought of a child born with a caul as a survivor who had vital energies that were connect to the manner in which they were born.

When a child is born with a caul, his face is covered in the membrane and often these babies are born in a state of asphyxia. Due to the risks of childbirth and infancy, people developed the concept of *Kegare*, a kind of taboo (but it also means "sacredness" in Japanese) to childbirth and infancy to keep risks away from mothers and infants. The caul was kept as sign of the selfhood of the infant or a living being, and as a symbol of life itself. Typical examples of *Kegare* were people who delivered their child in a birthing hut or a room and changed their child's names when he turned seven years old<sup>x</sup>. The holiness of the caul was also seen as a motivating factor for the creation of further superstitions about the caul.

# CONCLUSION

Even though medical technologies are incredibly advanced and are used globally, there are still many women and infants who lose their lives during delivery. The global neonatal infant mortality rate per 1,000 births in 2015 was 1.92, the global under-five mortality rate per 1,000 live births was 42.5, and the global maternal mortality rate per 100,000 live births was 216 as reported by the World Health Organization (WHO)<sup>xi</sup>. This shows that having children is still a risky process and generated fear. Therefore, people created many superstitions in order to dispel these fears. Additionally, in order to create calm when a baby is born with a caul, people see this as an auspicious sign.

In the Yedo period, doctors developed their techniques to save a mother and her child during a difficult delivery, and many medical books about obstetrics and midwifery that warned people against holding superstitions about a baby born with a caul have been published, which people read as a form of

cultural refinement. In spite of this, people continued to create superstitions about the meaning of a caul. This was not an indication of fear, but rather served as proof that people were generally more familiar with the concept of a caul. We can see that people mentioned the caul with humor in Kabuki scripts. This is nothing but people benefitted from the development of obstetrical techniques. Even though people had a difficult delivery which had been too difficult to survive before the development of techniques, they became able to pull through it safely. People changed their view of life in consequence.

Obstetrical techniques were developed and more people survived during a difficult deliver, though the holiness people placed on a caul endured.

# ACKNOWLEDGEMENTS

This work was supported by JSPS KAKENHI Grant Number JP16K16334.

# REFERENCES

Ikenoue, T., and Maehara, S., 2013, Mieru-Seimei-Tanjo (Visual Birth: Embryo, Pregnancy, and Childbirth). (Tokyo: Nankodo). (in Japanese)

Frazer, J. G., 1922, Chap.3 Sympathetic Magic, Sect.3 Contagious Magic. In: The Golden Bough: A Study in Magic and Religion. (New York: Macmillan).

Missionary of the Society of Jesus, 1603, Vocabulário da Língua do Japão.

Namihira, E., 2009, Chap. Childbirth, Menstruation, and Kegrare. In: Kegare. (Tokyo: Kodansha), pp.104-154. (in Japanese)

Pliny, translated by Bostock, J. and Riley, H.T. 1855. The Natural History of Pliny (Naturalis Historia). vol. I and V. (London)

WHO, 2016, World Health Statistics 2016 Monitoring Health for the SDGs.

Kanner, L., 1931, Born with a Caul. Medical Life. vol.38. (Baltimore, USA.). pp.528-548.

Shibano, Y., 1996, Shamanism and the Mythology about Oviparous People. Seikatsu-Bunka (Design of Life). 30. pp.3-15. (in Japanese)

Uchino, H., 2009, Kaiseijutsu and Obstetrics in Osaka during the Yedo Era: Focusing Mainly on the Development of Surgical Operations in Obstetrics. Journal of Japanese Society for the History of Medicine. 55(1). pp.31-42. (in Japanese)

Uchino, H., 2009, Children Born with a Caul Seen from the Ancient Tales. In doctoral thesis: Historical Studies on East Asian Obstetrics. pp.150-167. (in Japanese)

[Medical books published in the Yedo period]

Kagawa, G., 1765, San-ron (Obstetrics). vol. II. (Kyoto: Saiseikan).

Katakura, K., 1822, Sanka-hatsumou (Enlightening Book on Obsetrics). vol. I. (Yedo: Gyokugando).

Omaki, S., 1826, Sanka-shinan (Guideline of Obstetrics). (Yedo: Okadayakahichi).

Sasai, M., 1775, Ubya-Yashinai-Gusa (A Manual of Childbirth for Midwives). (Osaka: Sekiouho)

Hirano, G., 1830, Zaba-Hikken (Need to Know about Midwifery). (Osaka: Akitaya-taemon)

[Kabuki scripts published in the Yedo period]

Tzuruya, N., Premiered in 1810, Dekiaki-Yawata-no-Matzuri.

Kawatake, M., Premiered in 1860, Kagamiyama-Gonichi-no-Iwafuji.

<sup>i</sup> In Japan, a baby born with a caul is called a *Hi-maku-ji* which means "a baby covered with amnion", and is commonly called Fukuro-ko which means "a baby enveloped in a bag". The term Fukuro-ko (or Fukuro-go) is recorded in Vocabulario da Lingoa de Japon (Japanese-Portuguese dictionary published by a missionary of the Society of Jesus in 1603). Therefore, we can assume that this term became a common word in at least the 17th century. In German, this child is called Kind mit der Glückshaube which means "a child with a happy cap". German medicine was introduced first as the Western medical science in modern Japan, and there is also the word Kou-bou-ji which is direct Japanese translation of the German term into Japanese.

<sup>ii</sup> Yedo is the former name of Tokyo City. In the time division of the history in Japan, we call each period by its capital's name (the name of the city where central administration is conducted), namely, Yedo City was the capital during the Yedo period.

<sup>iii</sup> Source: Mieru-Seimei-Tanjo (Ikenoue and Maehara: 2013). The author revised the colour of some part.

<sup>iv</sup> Matsuo Basho (1644-1692), known as a *Haiku* poet, composed a *Haiku* in 1687, and the subject matter was an umbilical cord that reminded him of the memory of his childhood; "*Furusato-ya, heso-nowo-ni-naku, toshi-no-kure* (At the end of the year, I unintentionally took the part of my umbilical cord. Suddenly, the sweet memory of the good and old days came flooding back to me one and another, I could not help but shed tears.)". <sup>v</sup> People delivered their child in a temporary hut or a temporary room specifically used for birthing. Some of these huts (called *Ubuya*) have been reserved as cultural assets; one of them is in Ohara, in the Kyoto Prefecture, which was used in that community until the beginning of the 1950s.

<sup>vi</sup> See *the Golden Bough* (ch.3. Sympathetic Magic, § 3. Contagious Magic).

vii Kaisei-jutsu means "the treatment to survive" literally. At an early stage, that treatment was used to save a mother during a difficult delivery. That technique required a steel hook being put into the uterus, and cutting the foetus into pieces with it, and then raked the foetus out. Despite the harshness of this visual description, a doctor would not be able to save the foetus even though it was alive. As voices and requests among doctors and bereaved families were raised, doctors, mainly in the Kagawa's school, improved the techniques and finally succeeded in saving both the mother and the baby. With the success of Kaiseijutsu without using a steel hook, the Kagawa's school became the biggest in the world of Japanese obstetrics. In addition, in the early stage of the Kagawa school, Kaiseijutsu was a secret technique that was verbally passed on from teachers to students to prevent this technique from using for abortion without good reason. This revealed that Kaisei-jutsu was a technique with an extremely high success rate.

<sup>viii</sup> Most midwives hated to call a doctor when it became a difficult delivery, because they received a fee for the midwifery care they gave. If it was a difficult delivery and a doctor came to treat the patient, the midwife would not be able to get a fee at all.

<sup>ix</sup> The superstitions regarding chastity are believed and exist all over the world. Pliny (Gaius Plinius Secundus), an ancient Roman scientist, wrote in his book Naturalis Historia about folk custom that were used to check chastity of partners with serpents among Psylii people in Africa. See Naturalis Historia vol. 7, chap. 14.

<sup>x</sup> The custom in which people changed the child's name when he turned seven years old existed because people tended to give the child a strange name at first. This is related to the fact that infant mortality was high and so people believed that a strange name held a mystic power that would protect a child from mortal injury and illnesses. Also, it is said that a child under seven years old belonged to Heaven.

<sup>xi</sup> The worst neonatal infant mortality rate per 1,000 births in the world in 2015 was 48.7 in Angola. The next ones were 45.5 in Pakistan, and 42.6 in Central African Republic. The best one was 0.7 in San Marino, and it was 0.9 in Luxembourg, Iceland, and Japan the best after San Marino.

The worst under-five mortality rate per 1,000 live births was 156.9 in Angola, the next ones were 138.7 in Chad, 136.8 in Somalia. It was 2.7 in Japan, and the best one was 1.9 in Luxembourg.

The worst maternal mortality rate per 100,000 live births in 2015 was 1,360 in Sierra Lrone, the next ones were 882 in Central African Republic, and 856 in Chad. It was 5 in Japan, the best one was 3 in Finland, Greece, Iceland, and Poland.