

# 1. Case examples by the main cause of the cerebral palsy

## Case 29 (Multiple factors- 3)

The Japan Obstetric Compensation System for Cerebral Palsy : Cardiotocograms of Cerebral Palsy Cases  
Case examples by the main cause of the cerebral palsy

### Summary

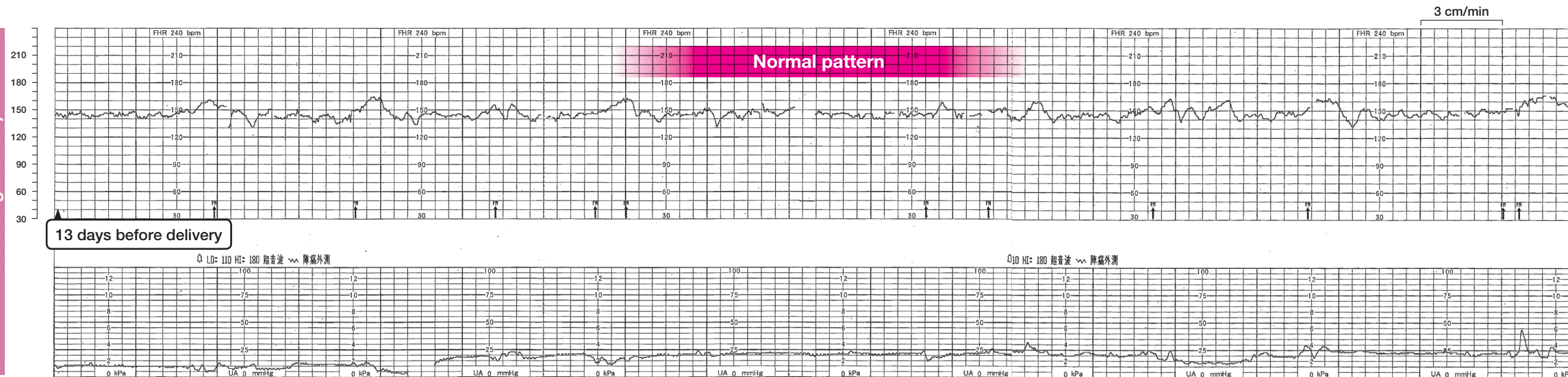
**Gestational weeks** 40 weeks' gestation

**Risk factors** Prior cesarean birth; GBS colonization

**Birth weight** 3000 g level

**Delivery course** The woman was admitted to hospital because of rupture of membranes. ▶ Vacuum extraction was performed based on the diagnosis of non-reassuring fetal status.

At the outpatient prenatal care (38 weeks of gestation)



On admission

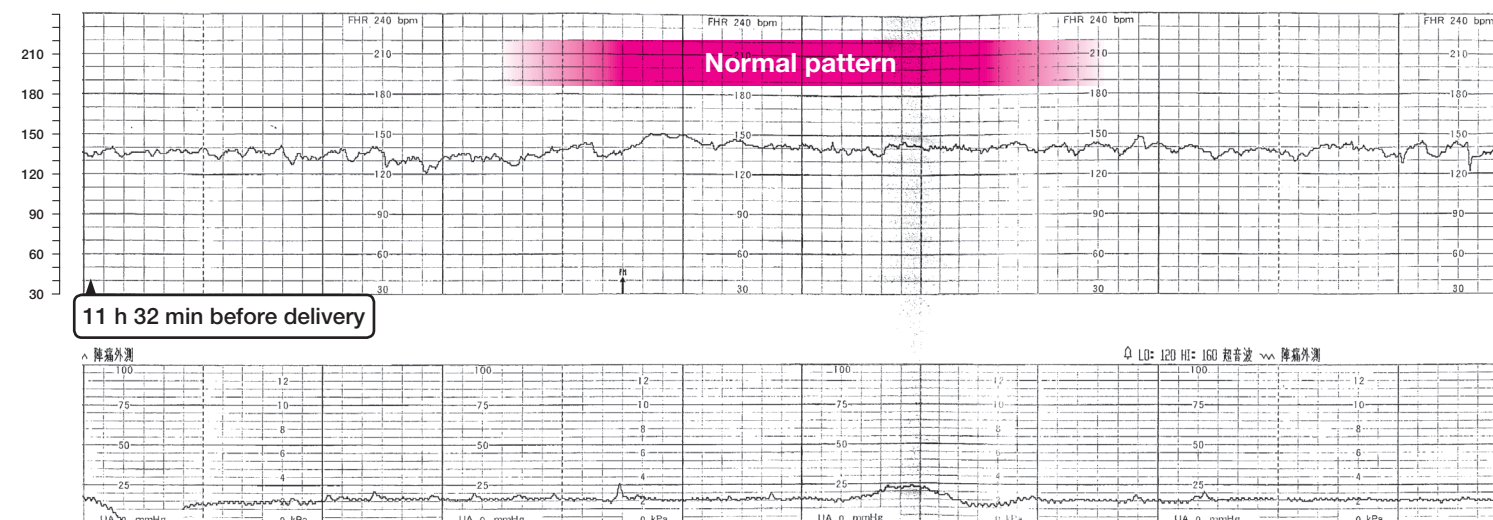
13 h 4 min before delivery

Watery vaginal discharge

12 h 23 min before delivery

Cervical dilatation 3 cm

Irregular uterine contractions



8 h 44 min before delivery

Cervical dilatation 3-4 cm  
She felt an irregular abdominal distention.

Body temperature 37.2 °C

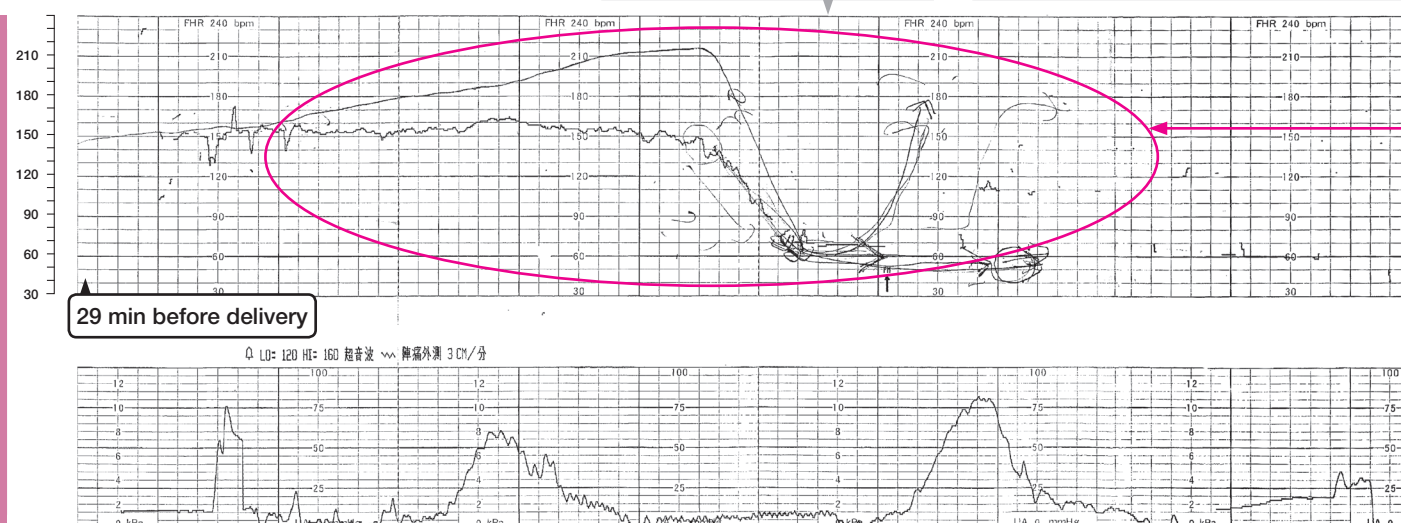
2 h 44 min before delivery

Onset of labor

Maternal repositioning  
Oxygen supplementation begun.

9 min before delivery Fetal bradycardia was confirmed on ultrasonography.

Before delivery



### Cautions in interpretation

CTGs are as important records as medical charts. You can write on CTG copies for explanation to patients, but you should not write on original CTG records.

18 min later, baby was delivered by vacuum extraction.

### Findings associated with delivery

- Umbilical artery pH was 7.0 level
- Newborn course:  
Apgar score; 1 at 1 min  
3 at 5 min
- Findings of the amniotic fluid, umbilical cord, and placenta:  
Calcium deposits  
Histopathological examination ▶ Chorioamnionitis; Funisitis; A slightly enlarged placenta with yellow stains and calcification; Marginal insertion of the cord

- Causes of the development of cerebral palsy in the cause analysis report  
Multiple factors (Umbilical cord complications, excluding cord prolapse, chorioamnionitis)



Summary

Gestational weeks 40 weeks' gestation

Risk factors None

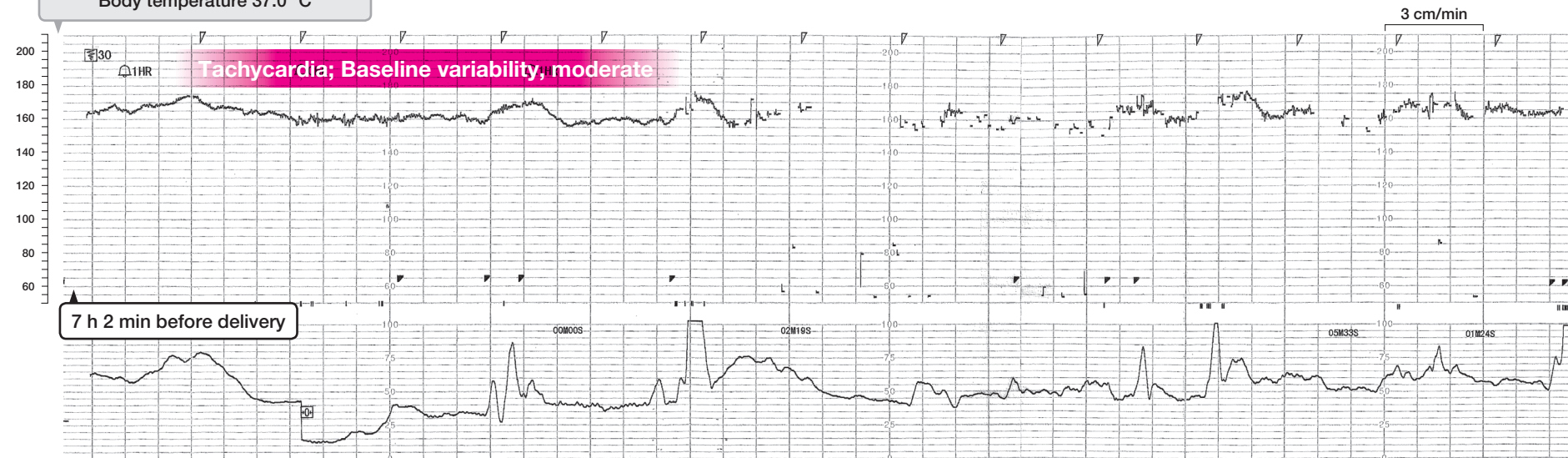
Birth weight 3100 g level

Delivery course The woman was admitted to hospital because of onset of labor. ▶ Vacuum extraction was performed based on the diagnosis of non-reassuring fetal status.

On admission

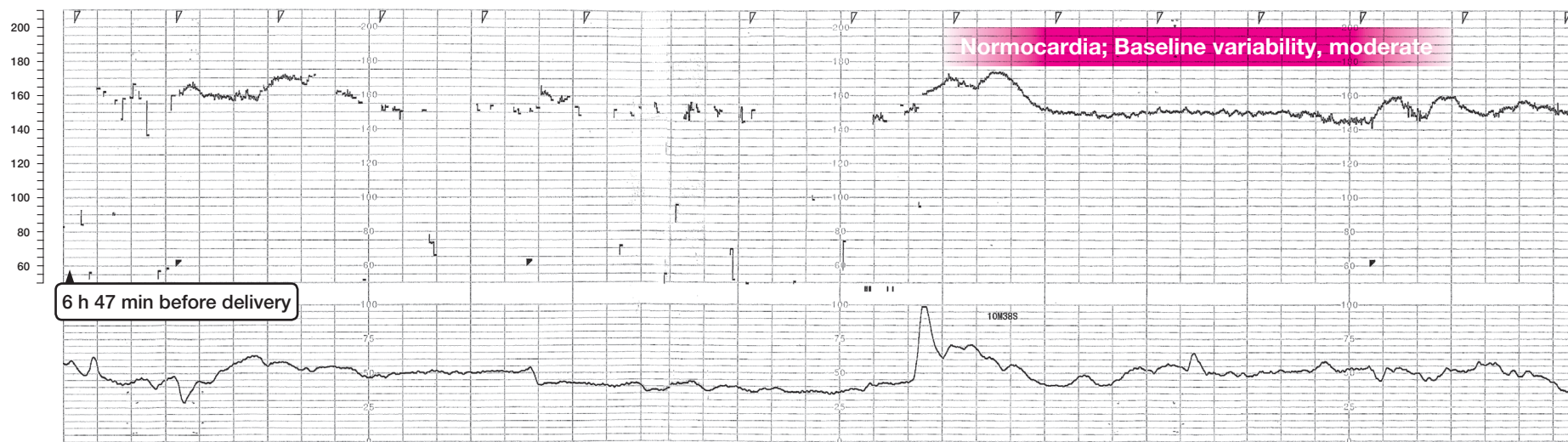
9 h 5 min before delivery  
Onset of labor

Cervical dilatation 2 cm; Bloody show  
Body temperature 37.0 °C



▶ continued in the column below

The FHR monitoring was interrupted.



4 h 5 min before delivery

Rupture of membranes; No meconium staining; Vaginal bleeding  
Cervical dilatation 6 cm; interval of the uterine contractions 3-4 min

1 h 35 min before delivery

Cervical dilatation 8 cm

1 h 5 min before delivery

A relatively large amount of vaginal bleeding

45 min before delivery

The FHR was 130 bpm level on auscultation.

35 min before delivery

Full dilatation of cervix

Findings associated with delivery

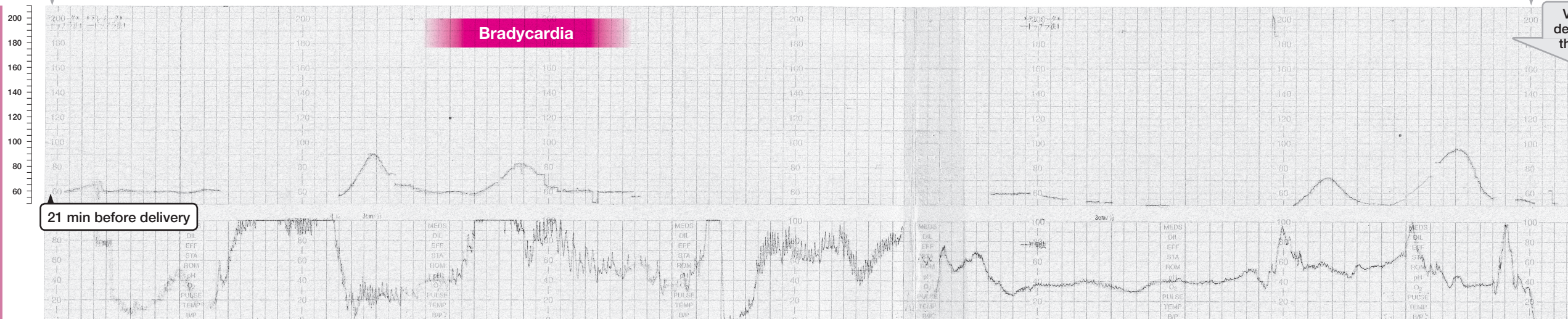
- Umbilical venous pH was 7.1 level.
- Newborn course:  
Apgar score; 1 at 1 min  
3 at 5 min
- Findings of the amniotic fluid, umbilical cord, and placenta:  
Meconium staining; bloody amniotic fluid;  
Entanglement of the umbilical cord (a single loop); Clots  
Histopathological examination ▶ Necrotic region (3 cm × 2.5 cm) in the center of the placenta; Findings suspicious of viral infection in the vascular endothelium of the infarct region.

- Causes of the development of cerebral palsy in the cause analysis report  
Multiple factors (placental abruption, intrauterine infection)

An electronic fetal monitor was placed again.  
Oxygen supplementation begun.

Vacuum extraction  
using Kristeller's maneuver (uterine fundal pressure)

Before delivery



Vaginal  
delivery at  
this time



# 1. Case examples by the main cause of the cerebral palsy

## Case 31 (Multiple factors- 5)

The Japan Obstetric Compensation System for Cerebral Palsy : Cardiotocograms of Cerebral Palsy Cases  
Case examples by the main cause of the cerebral palsy

### Summary

Gestational weeks 41 weeks' gestation

Risk factors Fetal growth restriction

Birth weight 2700 g level

Delivery course The woman was admitted to hospital because of labor pains. ▶ Drip infusion of oxytocin was used for induction of labor. ▶ Baby was delivered vaginally.

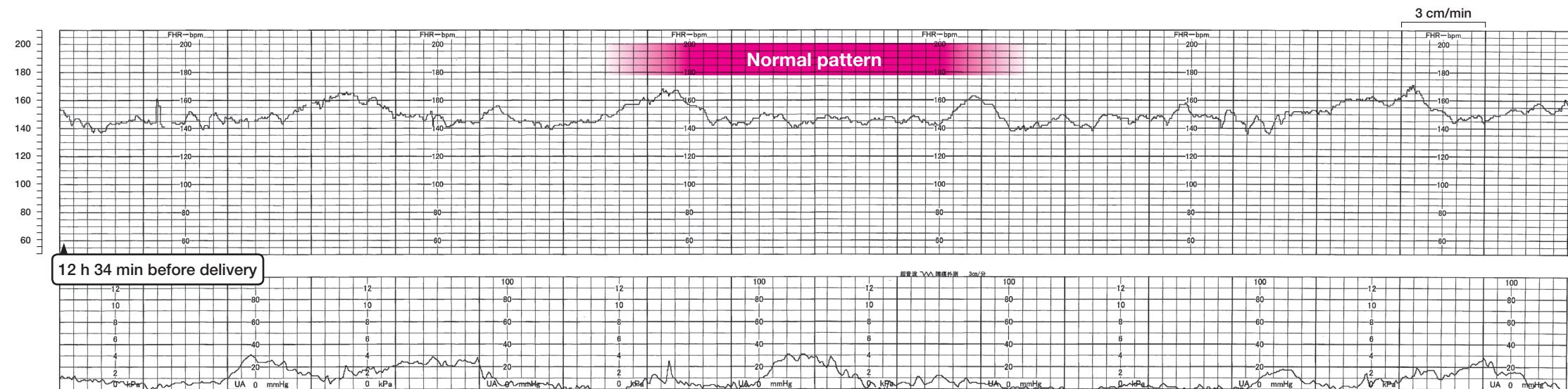
### During hospitalization

42 h 12 min before delivery

She was admitted to hospital because of labor pains.

Approximately 13 h before delivery

Oxytocin drip infusion begun.



### During hospitalization

12 h 12 min before delivery

Onset of labor

10 h 42 min before delivery

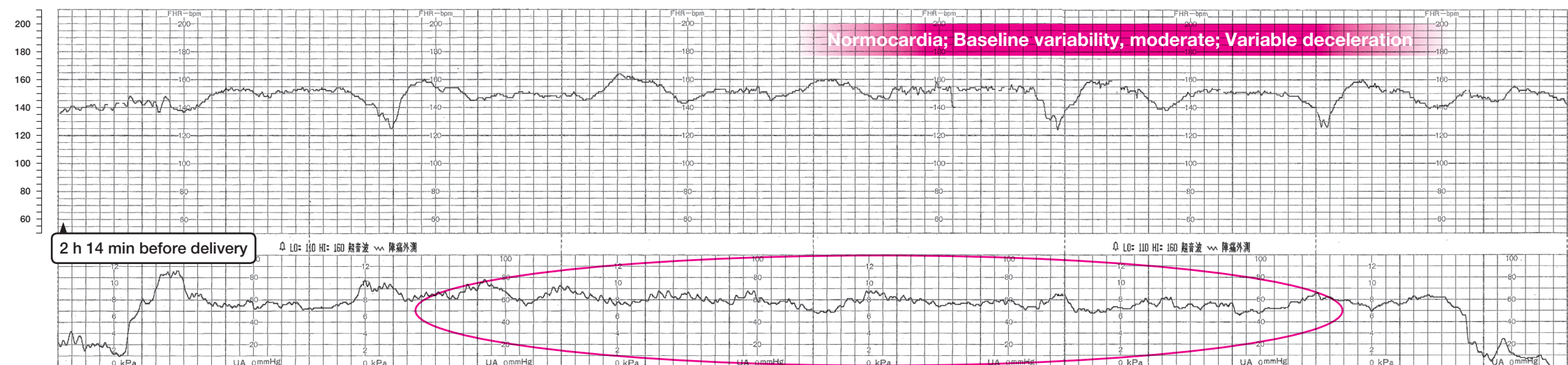
Cervical dilatation 6 cm  
Body temperature 37.5 °C

5 h 42 min before delivery

Cervical dilatation 9 cm

3 h 52 min before delivery

Rupture of membranes; No meconium staining

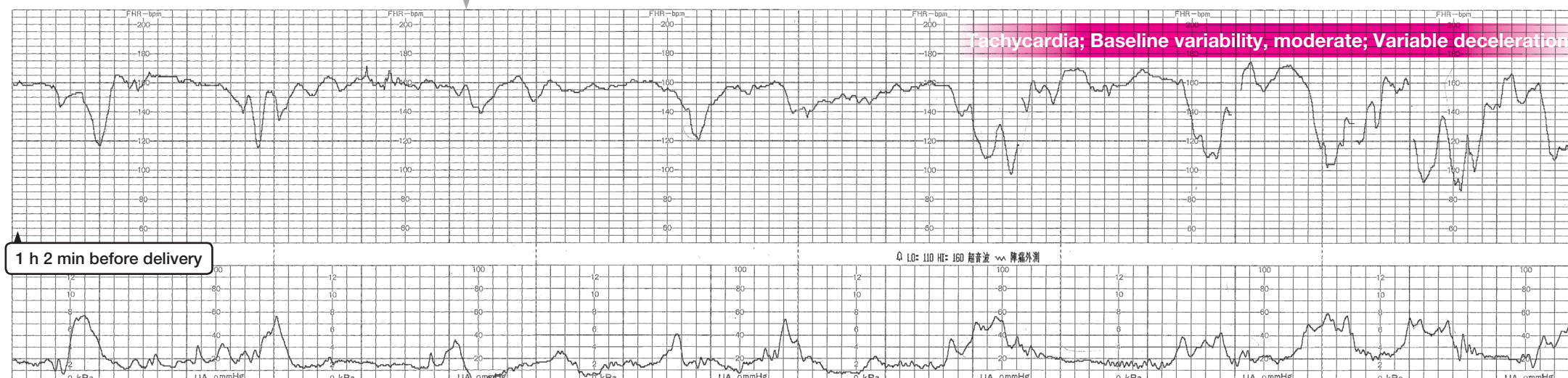


Full dilatation of cervix

### Before delivery

1 h 2 min before delivery

Tachycardia; Baseline variability, moderate; Variable deceleration



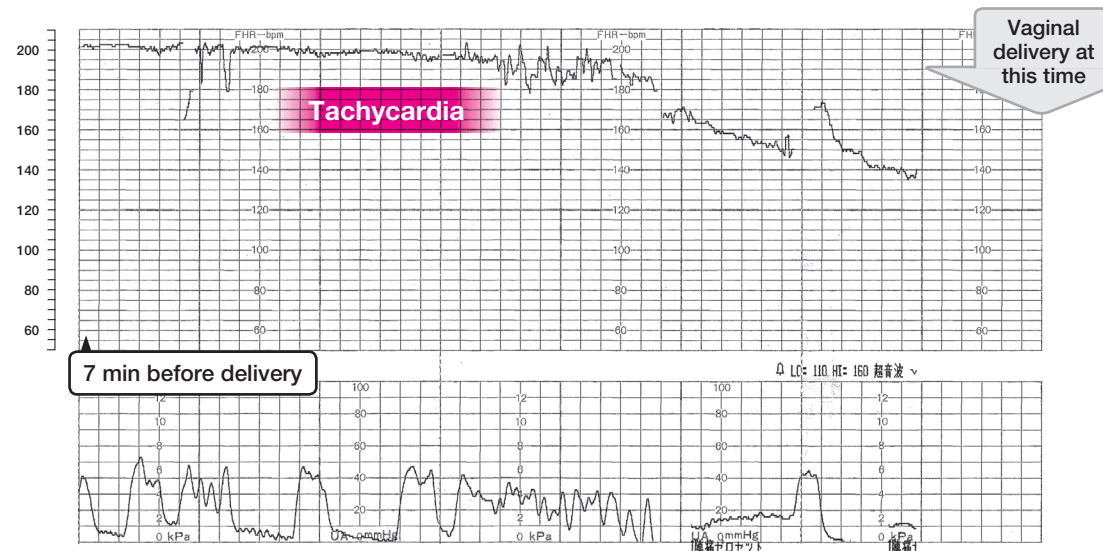
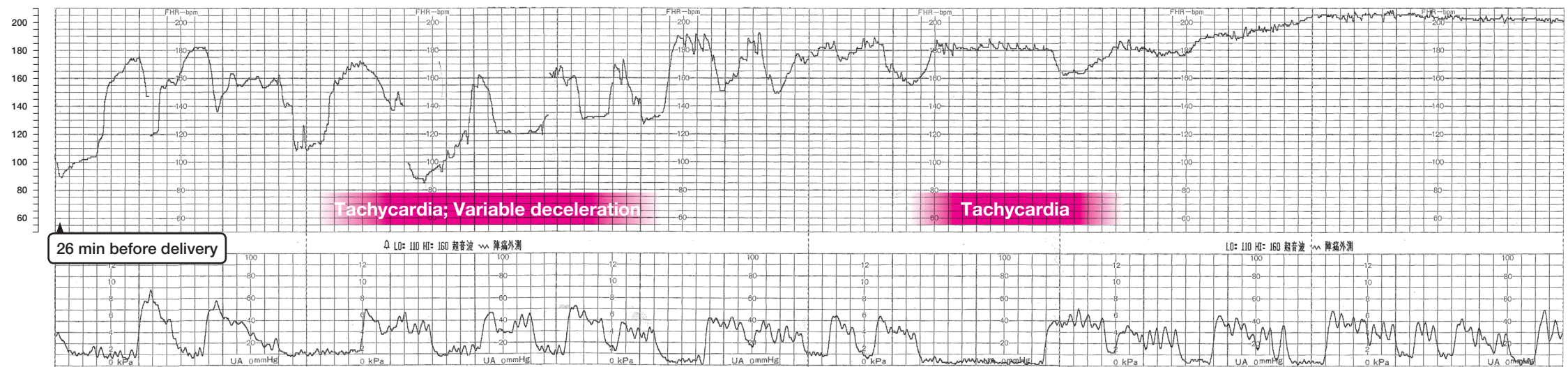
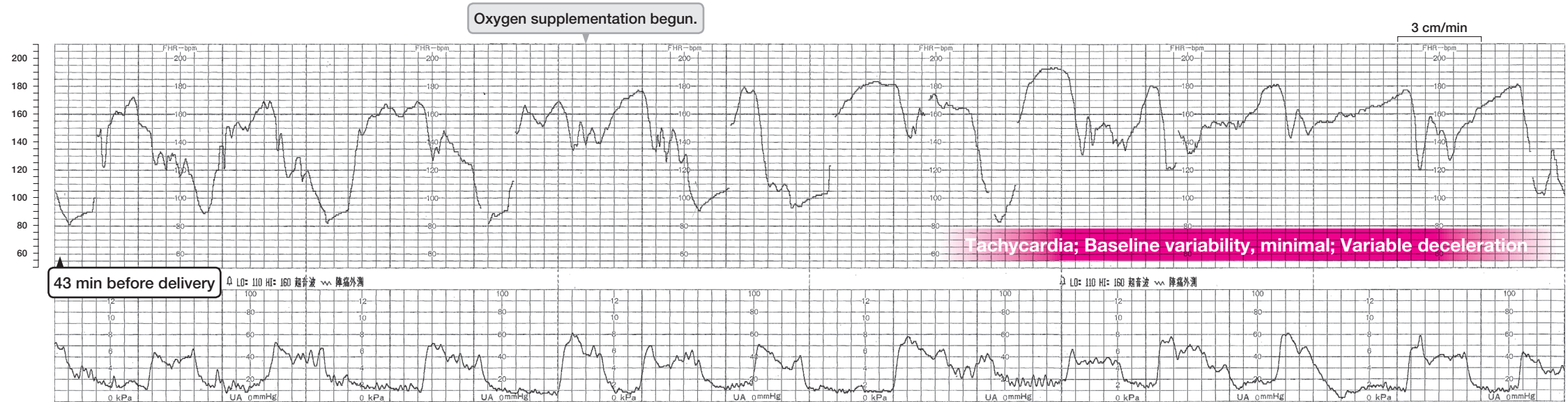
### Cautions in interpretation

Uterine contraction patterns are important to interpret late deceleration patterns.

Tocodynamometers should be placed at the appropriate site to reflect uterine contractions accurately

▶ continued on the next page





#### Findings associated with delivery

- Umbilical artery pH was 7.1 level
- Newborn course:  
Apgar score; 6 at 1 min  
6 at 5 min
- Findings of the amniotic fluid, umbilical cord, and placenta:  
Meconium staining  
Histopathological examination ► Chorioamnionitis;  
Funisitis

- Causes of the development of cerebral palsy in the cause analysis report  
Multiple factors (intrauterine infection and others)



# 1. Case examples by the main cause of the cerebral palsy

## Case 32 (Multiple factors- 6)

The Japan Obstetric Compensation System for Cerebral Palsy : Cardiotocograms of Cerebral Palsy Cases  
Case examples by the main cause of the cerebral palsy

### Summary

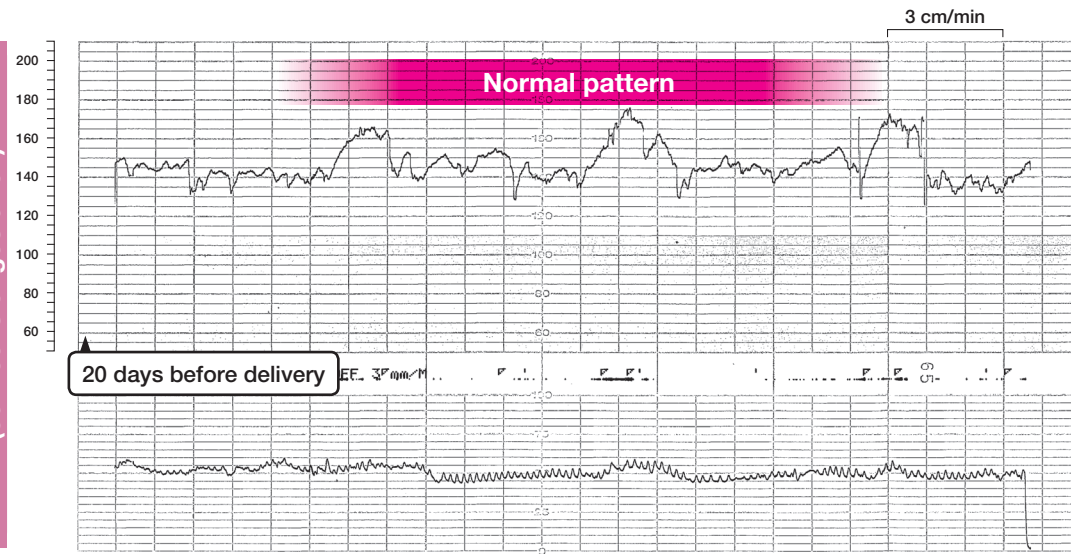
Gestational weeks 39 weeks' gestation

Risk factors Threatened preterm delivery

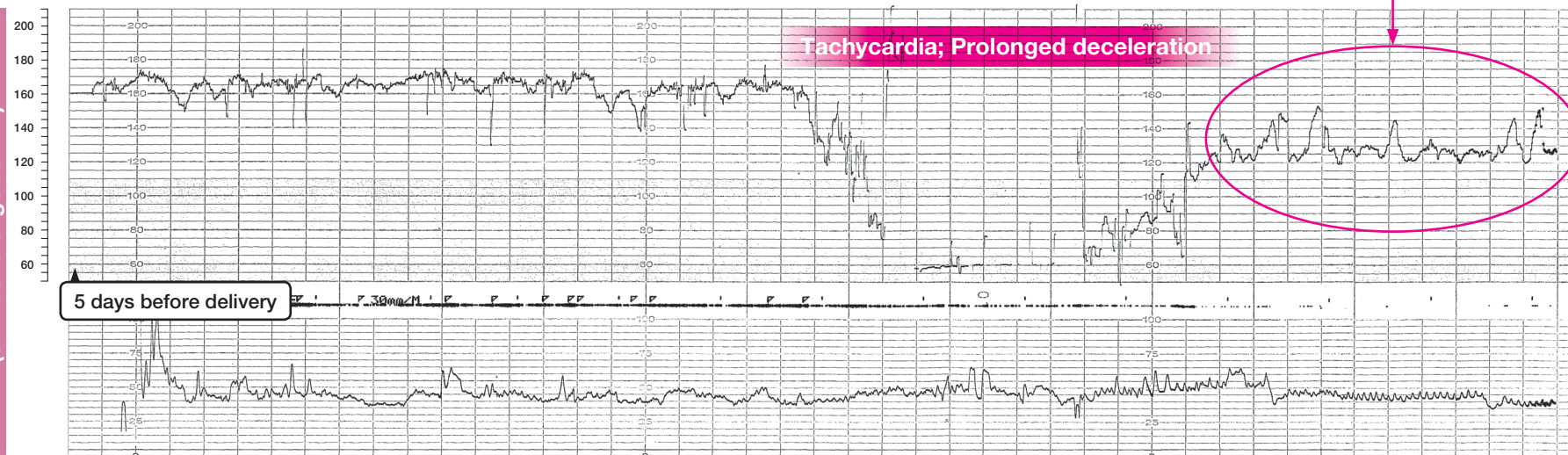
Birth weight 3400 g level

Delivery course The woman was admitted to hospital because of labor pains and decreased fetal movements. ▶ Cesarean section was performed based on the diagnosis of non-reassuring fetal status.

At the outpatient prenatal care  
(36 weeks of gestation)



At the outpatient prenatal care  
(39 weeks of gestation)

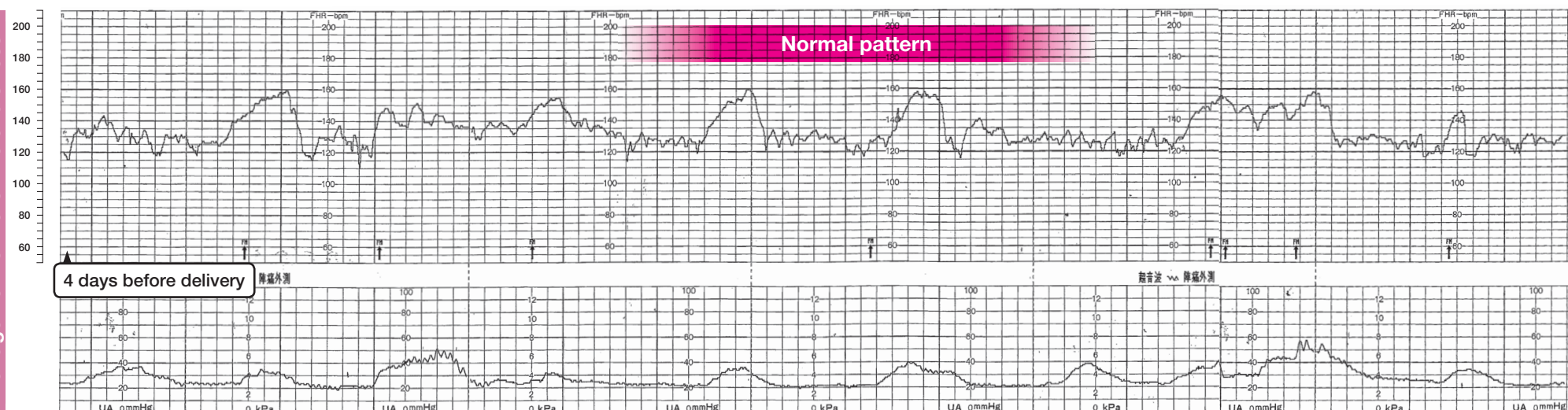


### Cautions in interpretation

The FHR baseline changed from 170 bpm to 120 bpm.

She was admitted to hospital for the management of "latent fetal distress."  
Cervical dilatation 4 cm

During hospitalization for the management of "latent fetal distress"



CTG monitor was placed 5 times after admission and all the tracings showed reassuring patterns. Thus, she was discharged from the hospital.

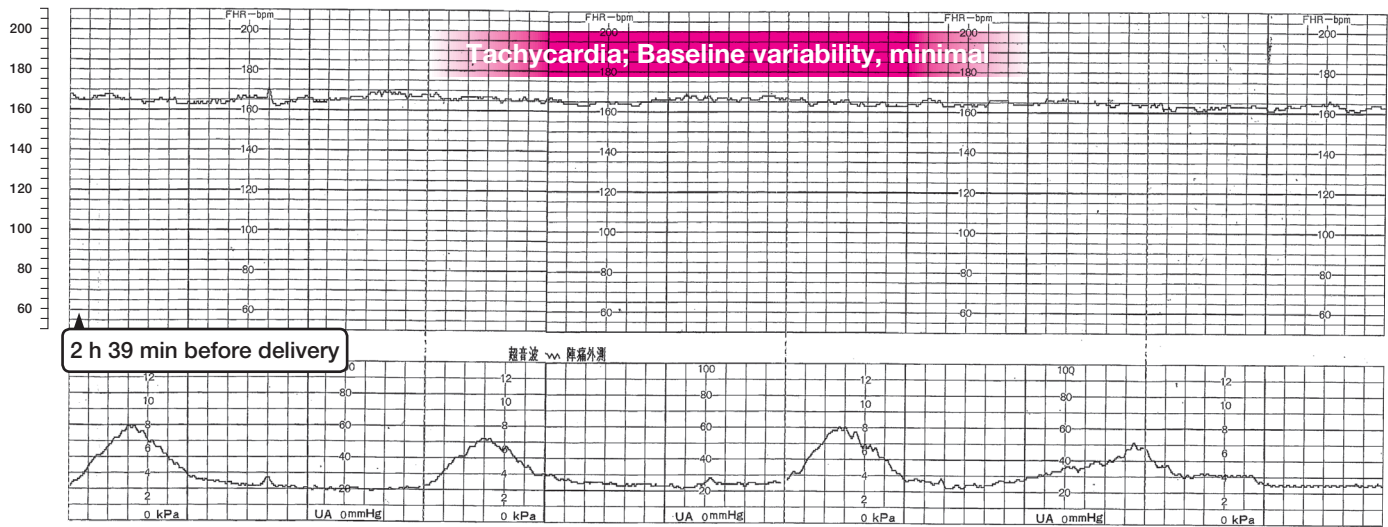


On admission (4 days after the discharge from the hospital for management)

Approximately 6 h 36 min before delivery  
Irregular uterine contractions  
Thereafter, no definite awareness of fetal movements

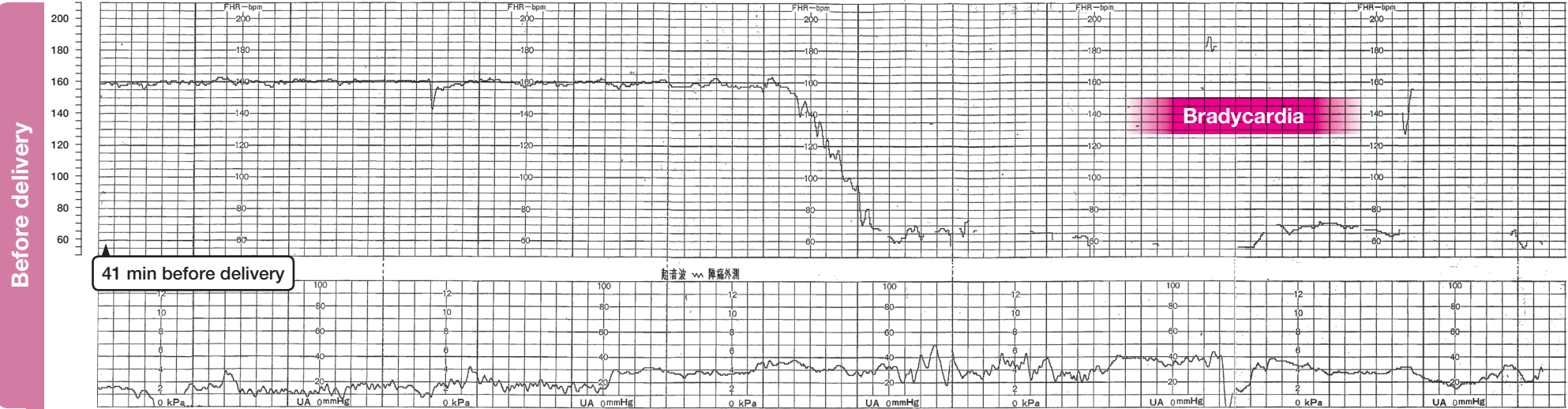


continued in the column below



2 h 11 min before delivery  
Cervical dilatation 4 cm

Oxygen supplementation begun; Maternal repositioning  
Intravenous drip infusion of ritodrine hydrochloride begun.



26 min later, baby was delivered by cesarean section.

### Findings associated with delivery

- Umbilical cord blood gas analysis: No information
- Newborn course:  
Apgar score; 0 at 1 min  
0 at 5 min
- Findings of the amniotic fluid, umbilical cord, and placenta:  
The umbilical cord went down to the level near the ear or the temple of the neonate and the umbilical vessels seemed collapsed due to physical compression.  
Histopathological examination ► A few calcifications;  
Mild fibrin deposition between the layers of the chorion

- Causes of the development of cerebral palsy in the cause analysis report  
Multiple factors (Umbilical cord complications, excluding cord prolapse, and others)



# 1. Case examples by the main cause of the cerebral palsy

## Case 33 (Unknown or unspecified causes- 1)

The Japan Obstetric Compensation System for Cerebral Palsy : Cardiotocograms of Cerebral Palsy Cases  
Case examples by the main cause of the cerebral palsy

### Summary

Gestational weeks 36 weeks' gestation

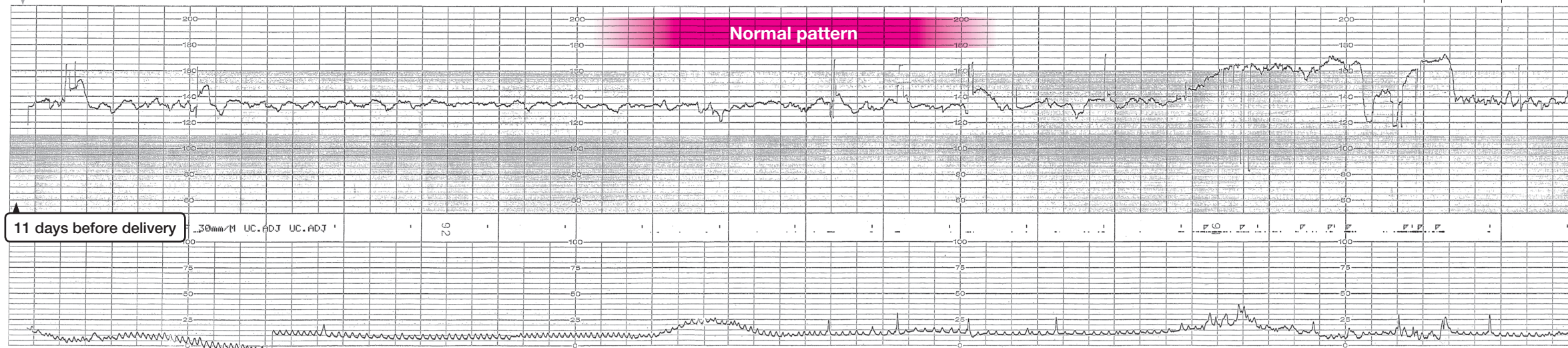
Risk factors Prior cesarean birth

Birth weight 2800 g level

Delivery course The woman visited the hospital as she became aware of decreased fetal movements. ► She visited the hospital for re-examinations 2 days later. ► Cesarean section was performed based on the diagnosis of non-reassuring fetal status.

At the outpatient prenatal care (35 weeks of gestation)

She noted fetal movements.

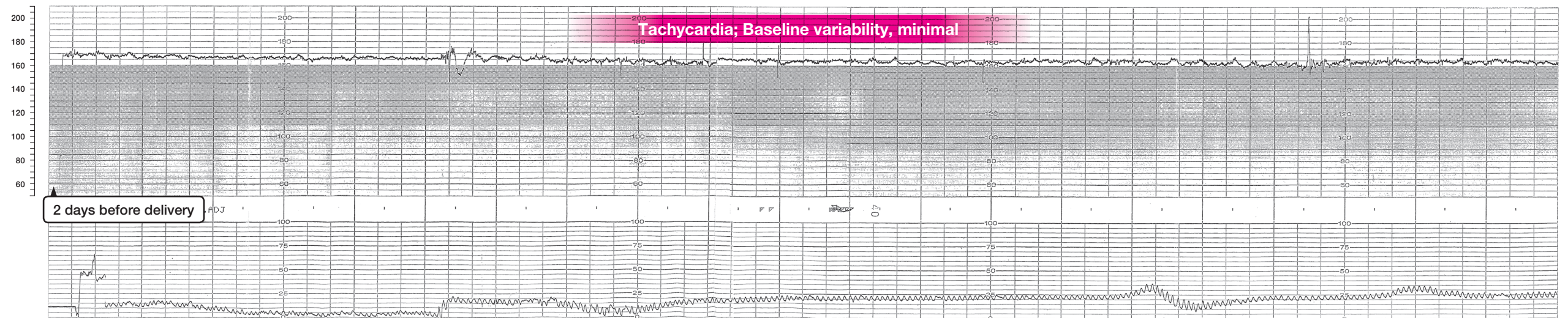


4 days before delivery  
At the outpatient prenatal care  
No abnormal findings

At the outpatient prenatal care (36 weeks of gestation)

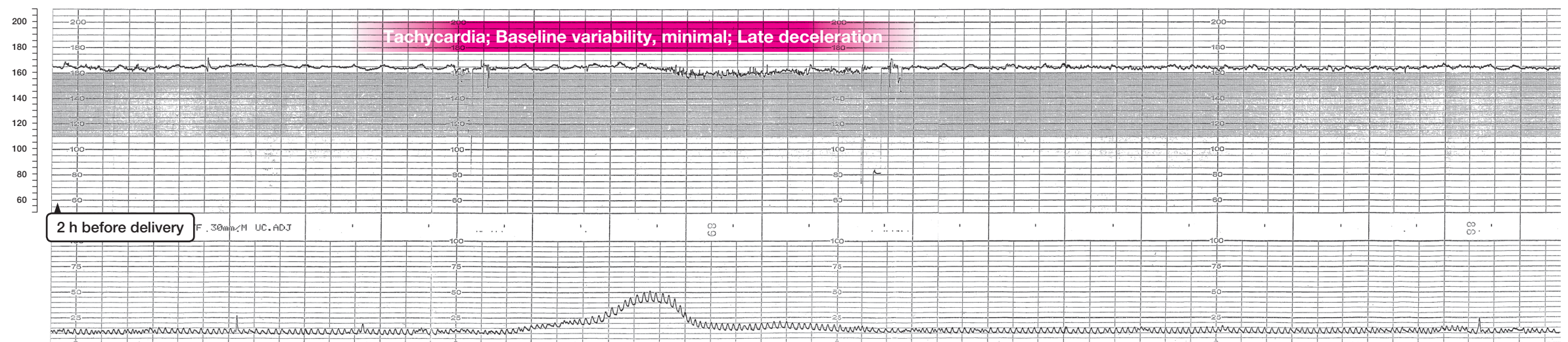
2 days before delivery

She visited the hospital as she became aware of decreased fetal movements. Fetal movements were detected on ultrasonography. Amniotic fluid pocket was about 3 cm



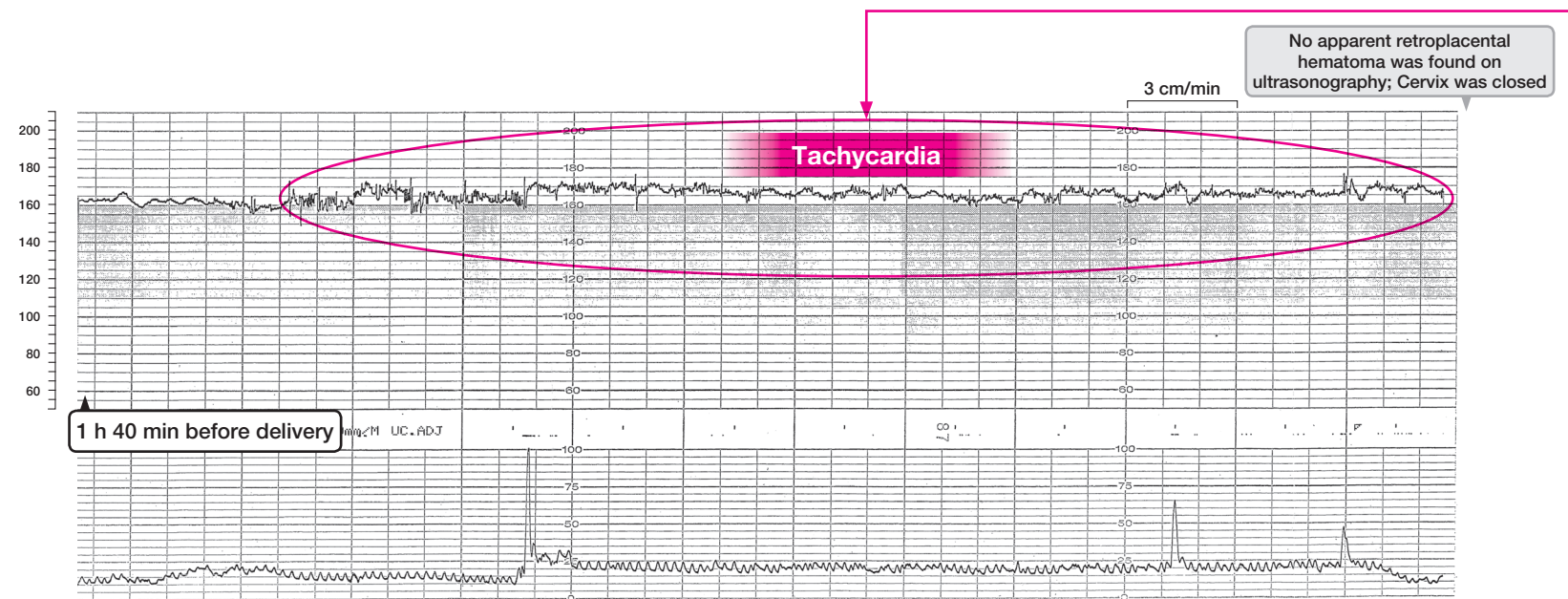
On admission, before delivery

She visited the hospital for a reevaluation of non-stress test (NST).



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**Cautions in interpretation**

Although the baseline variability seemed increased as compared to the former segment, those were noises (jitter) that occurred because of the shift of the Doppler probe. The Doppler probe should be placed at the appropriate site.

1 h 28 min later, baby was delivered by cesarean section.

Findings associated with delivery
<ul style="list-style-type: none"> <li>● Umbilical artery pH was 7.4 level</li> <li>● Newborn course: Apgar score; 1 at 1 min 6 at 5 min</li> <li>● Findings of the amniotic fluid, umbilical cord, and placenta: Histopathological examination ► No abnormal findings</li> </ul>
<ul style="list-style-type: none"> <li>● Causes of the development of cerebral palsy in the cause analysis report Unknown or unspecified causes</li> </ul>



# 1. Case examples by the main cause of the cerebral palsy

## Case 34 (Unknown or unspecified causes- 2)

The Japan Obstetric Compensation System for Cerebral Palsy : Cardiotocograms of Cerebral Palsy Cases  
Case examples by the main cause of the cerebral palsy

### Summary

Gestational weeks 41 weeks' gestation

Risk factors None

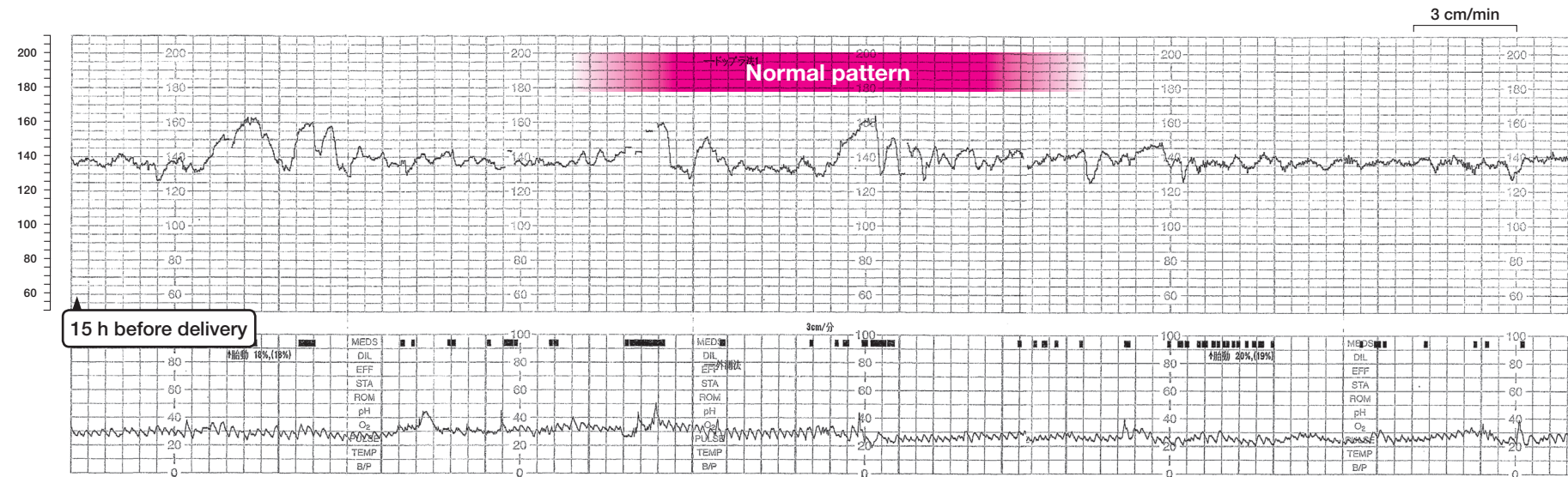
Birth weight 3400 g level

Delivery course Woman admitted to hospital because of rupture of membranes. ▶ Dinoprostion tablets were used for induction of labor. ▶ Oxytocin drip infusion was used for augmentation of labor. ▶ Vacuum extraction was tried because of the diagnosis of non-reassuring fetal status. ▶ Cesarean section was performed.

During hospitalization

Approximately 39 h 34 min before delivery  
Watery vaginal discharge

18 h 19 min before delivery  
The woman was admitted to hospital.  
Cervical dilatation 3 cm  
Meconium staining



14 h 34 min before delivery  
One dinoprostion tablet was administered orally.  
Cervical dilatation 0.5 cm  
Five dinoprostion tablets were administered orally thereafter.

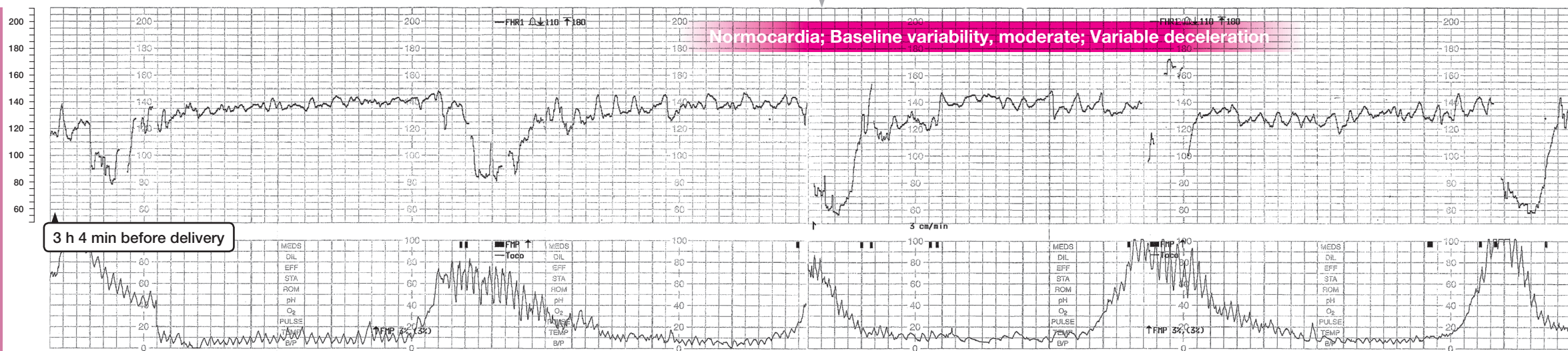
8 h 4 min before delivery  
Onset of labor. A pale pink show was noted.

4 h 4 min before delivery  
Cervical dilatation 8 cm

3 h 49 min before delivery  
Oxygen supplementation begun.

Oxygen supplementation stopped because of hyperventilation.

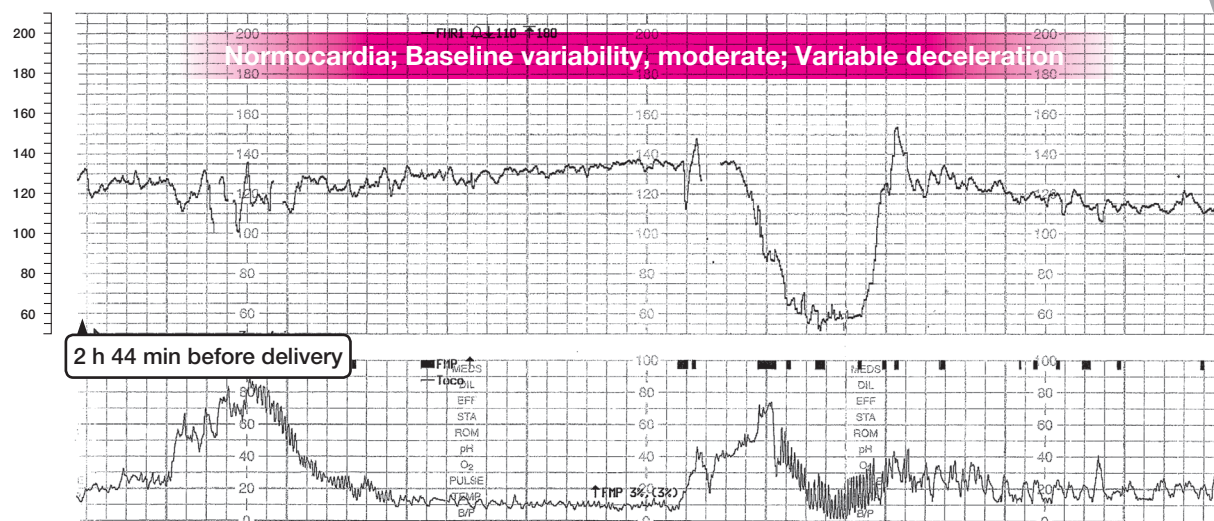
During hospitalization



3 h 4 min before delivery

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Cervical dilatation 9 cm  
Green amniotic fluid

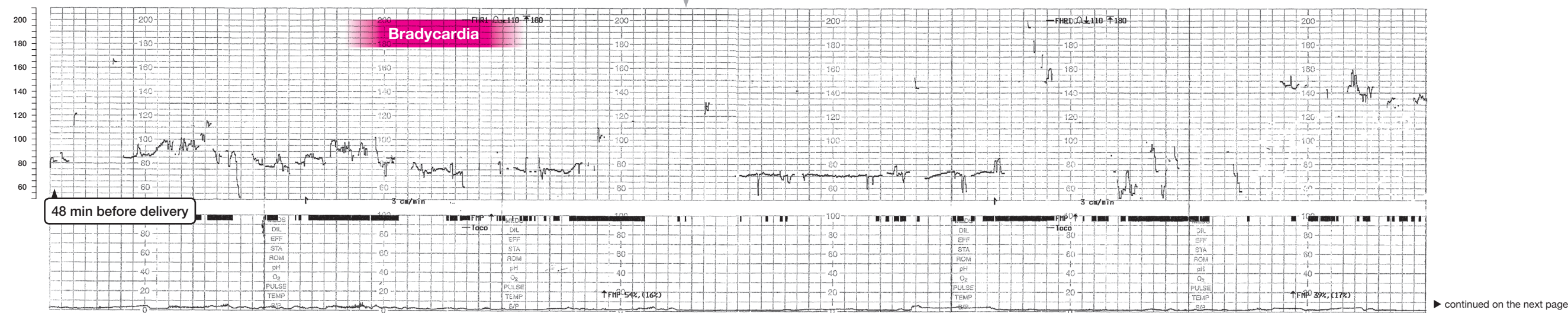
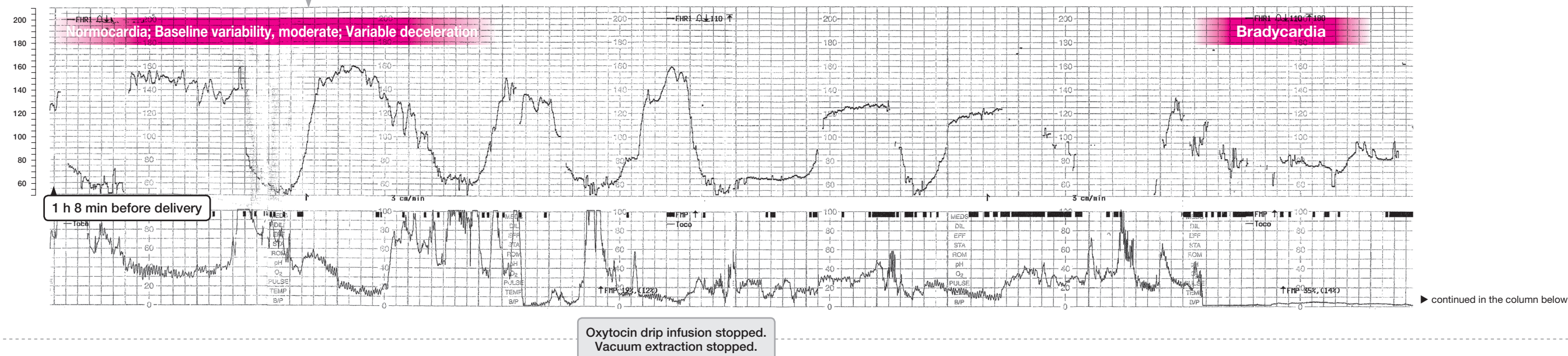
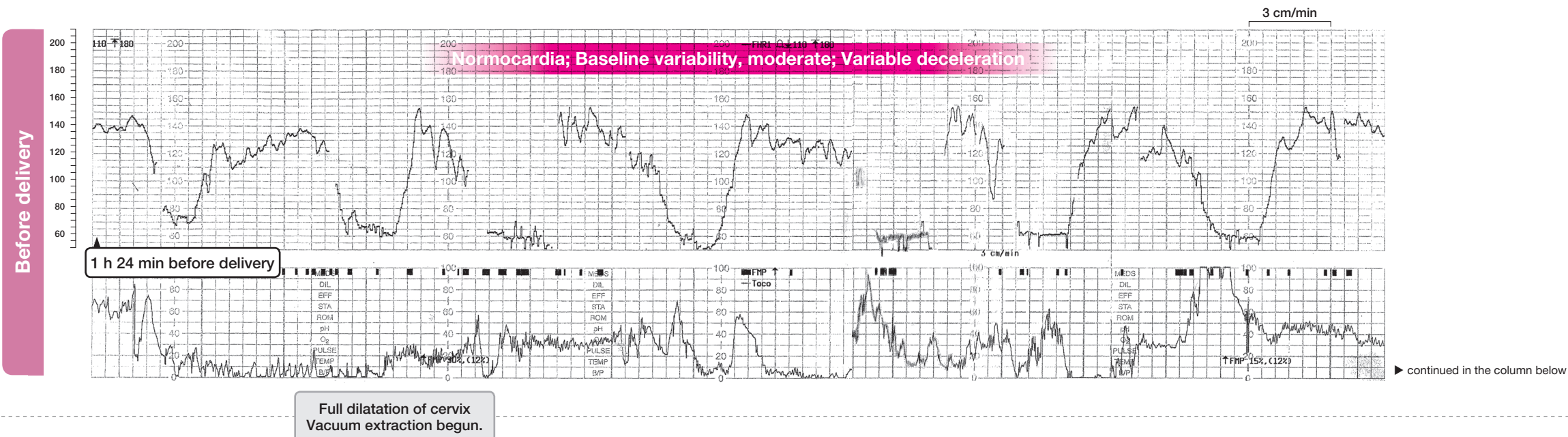


2 h 44 min before delivery

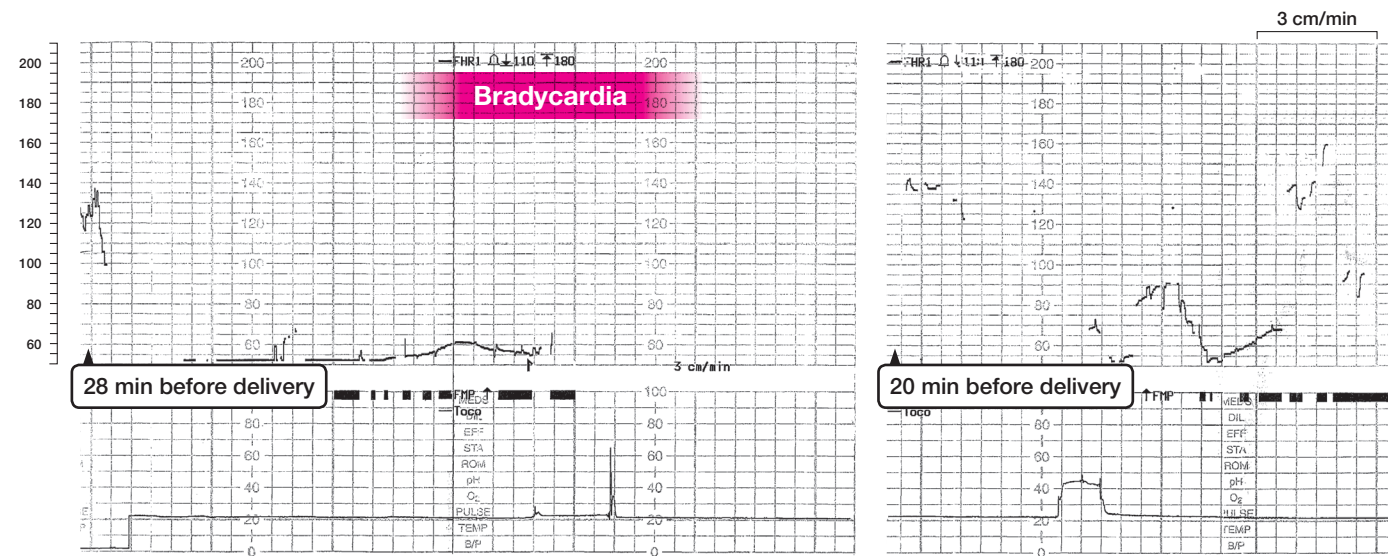
2 h 19 min before delivery  
Oxygen supplementation begun again.

2 h 9 min before delivery  
Oxytocin drip infusion begun because of the diagnosis of secondary weak pains.









16 min later, baby was delivered by cesarean section.

### Findings associated with delivery

- Umbilical cord blood gas analysis (arterial or venous blood, unspecified): pH 6.7 level
- Newborn course:  
Apgar score; 1 at 1 min  
1 at 5 min
- Operative findings:  
Malrotation (occiput posterior position of the vertex)
- Findings of the amniotic fluid, umbilical cord, and placenta:  
Meconium staining  
Histopathological examination ► No information

- Causes of the development of cerebral palsy in the cause analysis report
- Unknown or unspecified causes



# 1. Case examples by the main cause of the cerebral palsy

## Case 35 (Unknown or unspecified causes- 3)

The Japan Obstetric Compensation System for Cerebral Palsy : Cardiotocograms of Cerebral Palsy Cases  
Case examples by the main cause of the cerebral palsy

### Summary

Gestational weeks 37 weeks' gestation

Risk factors None

Birth weight 2500 g level

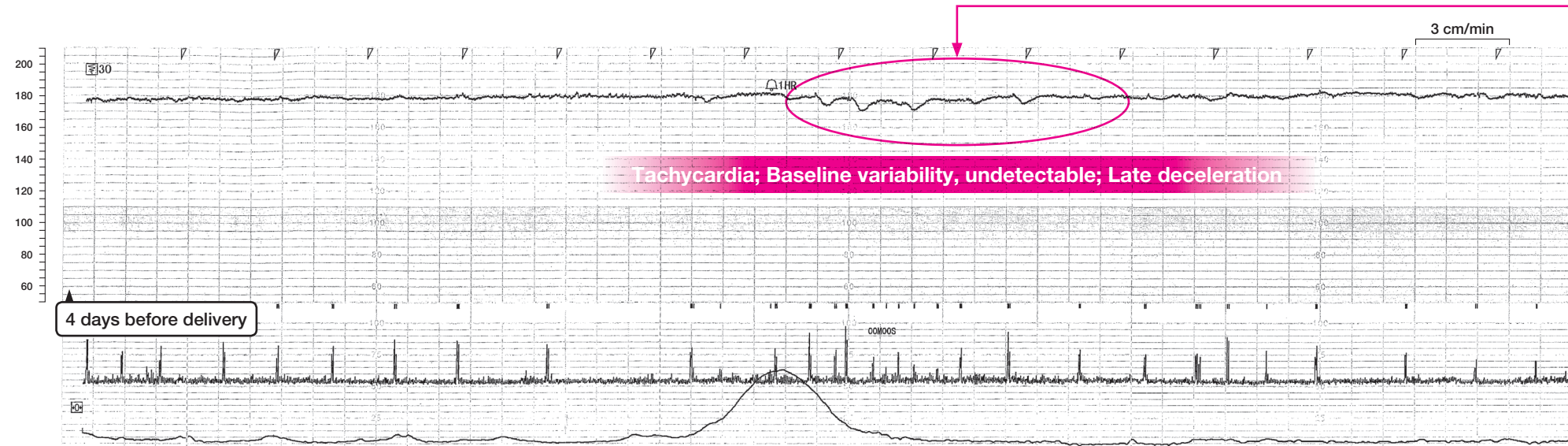
Delivery course The woman visited the transport source birthing facility because of the awareness of decreased fetal movements. ▶ She was referred to the birthing facility because of a diagnosis of non-reassuring fetal status. ▶ Cesarean section was performed.

At the outpatient prenatal care

4 days before delivery

She noted hiccups-like movements of the fetus (movements akin to generalized seizures).

4 days before delivery



### Cautions in interpretation

Note that this pattern is not a baseline variability, but a variability during the late decelerations.

3 days before delivery

She noted decreased fetal movements.

the day before delivery

She noted the loss of fetal movements.

At presentation to the transport source birthing facility

She visited hospital as she became aware of the loss of fetal movements.

9 h 6 min before delivery

Normocardia; Baseline variability, undetectable

She was referred to the birthing facility because of a diagnosis of non-reassuring fetal status.

Approximately 7 h 33 min before delivery

At presentation to the birthing facility

5 h before delivery

No abnormalities were found in the umbilical arterial blood flow on ultrasonography. Biophysical profile scoring (BPS) was 4 points; Amniotic fluid index (AFI) 22-23 cm

4 h 23 min before delivery

Body temperature 36.9 °C

Ultrasonography was performed 2 times before cesarean section. The result of biophysical profile scoring (BPS) was 4.

During hospitalization at the birthing facility, before delivery

3 h 58 min before delivery

Tachycardia; Baseline variability, undetectable

3 h 42 min later, baby was delivered by cesarean section.

### Findings associated with delivery

- Umbilical artery pH was 6.9.
- Newborn course:  
Apgar score; 1 at 1 min  
1 at 5 min
- Findings of the amniotic fluid, umbilical cord, and placenta:  
Meconium staining; White infarcts  
Histopathological examination ▶  
Chorioamnionitis

- Causes of the development of cerebral palsy in the cause analysis report  
Unknown or unspecified causes



# 1. Case examples by the main cause of the cerebral palsy

## Case 36 (Unknown or unspecified causes- 4)

The Japan Obstetric Compensation System for Cerebral Palsy : Cardiotocograms of Cerebral Palsy Cases  
Case examples by the main cause of the cerebral palsy

### Summary

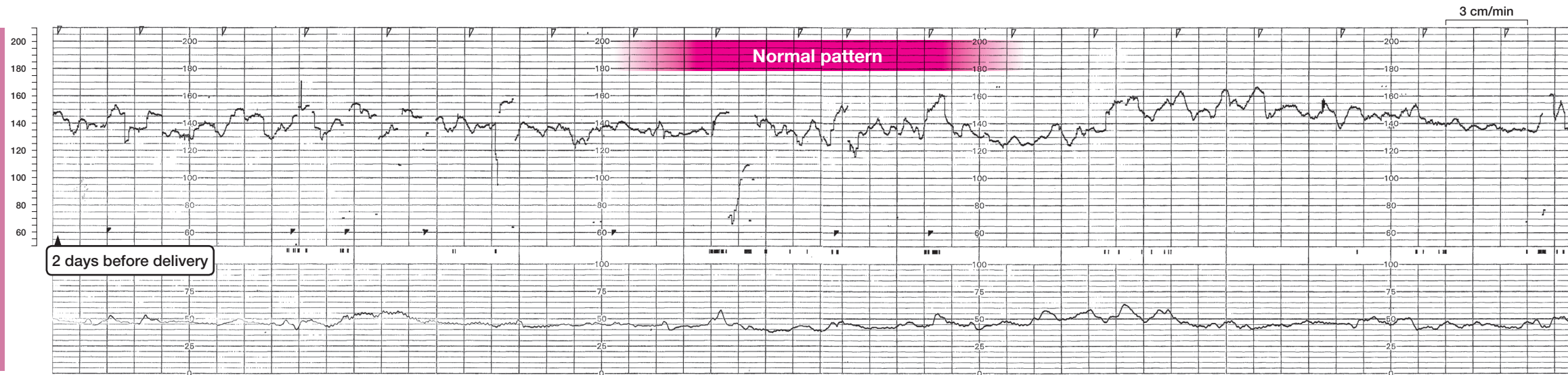
Gestational weeks 40 weeks' gestation

Risk factors None

Birth weight 3800 g level

Delivery course The woman was admitted to hospital for induction of labor. ▶ Oxytocin drip infusion was used for induction of labor. ▶ Vacuum extraction was tried based on the diagnosis of non-reassuring fetal status. ▶ Cesarean section was performed.

On admission



2 days before delivery

Ten laminarias were inserted.  
One dose of sodium prasterone sulfate hydrate was administered.

the day before delivery

Sodium prasterone sulfate hydrate was administered three times.  
Laminaria extracted.  
Induction of labor with oxytocin drip infusion ▶ Oxytocin drip infusion stopped.

During hospitalization

18 h 42 min before delivery

Cervical dilatation 3 cm

15 h 17 min before delivery  
Induction of labor was initiated with oxytocin drip infusion.

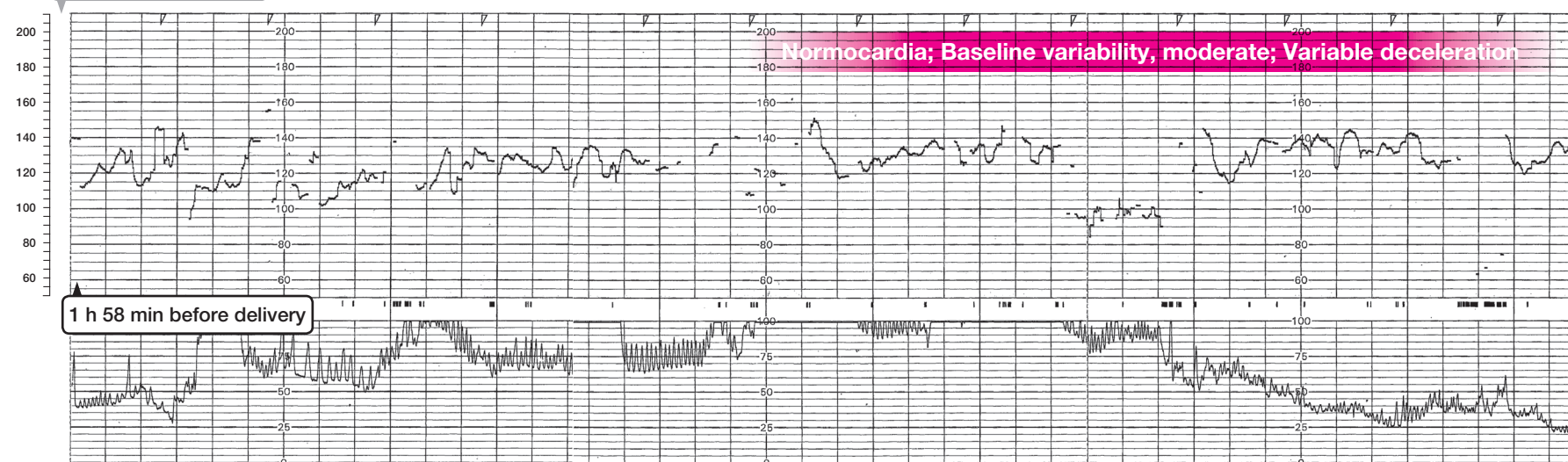
14 h 42 min before delivery

Sodium prasterone sulfate hydrate was administered.  
(thereafter, the same drug was administered twice.)

6 h 12 min before delivery

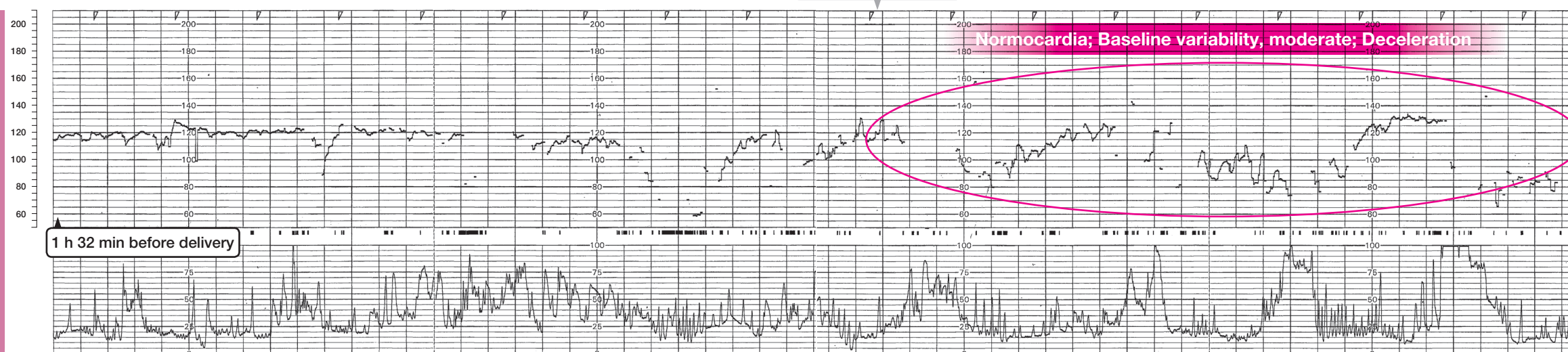
Scopolamine butylbromide was administered.  
(thereafter, the same drug was administered twice.)

Cervical dilatation 9 cm



Full dilatation of cervix

Before delivery

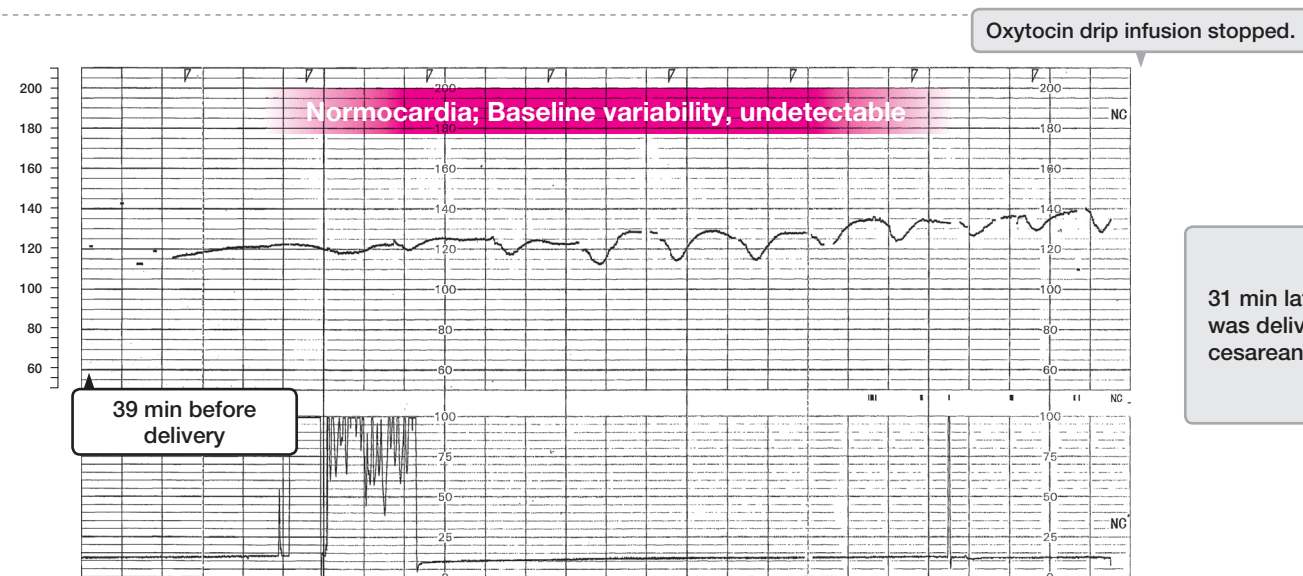
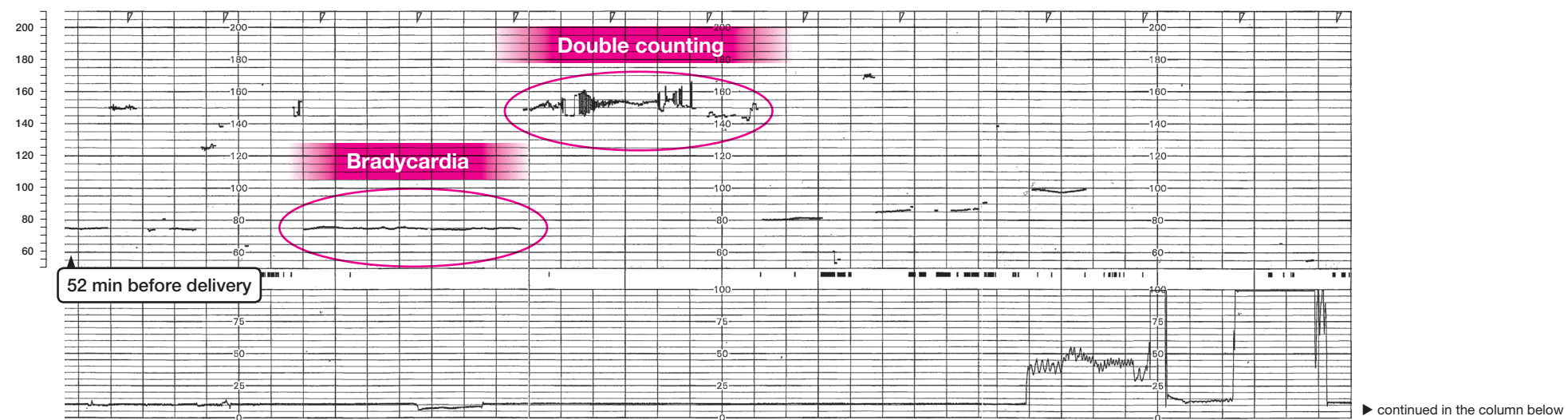
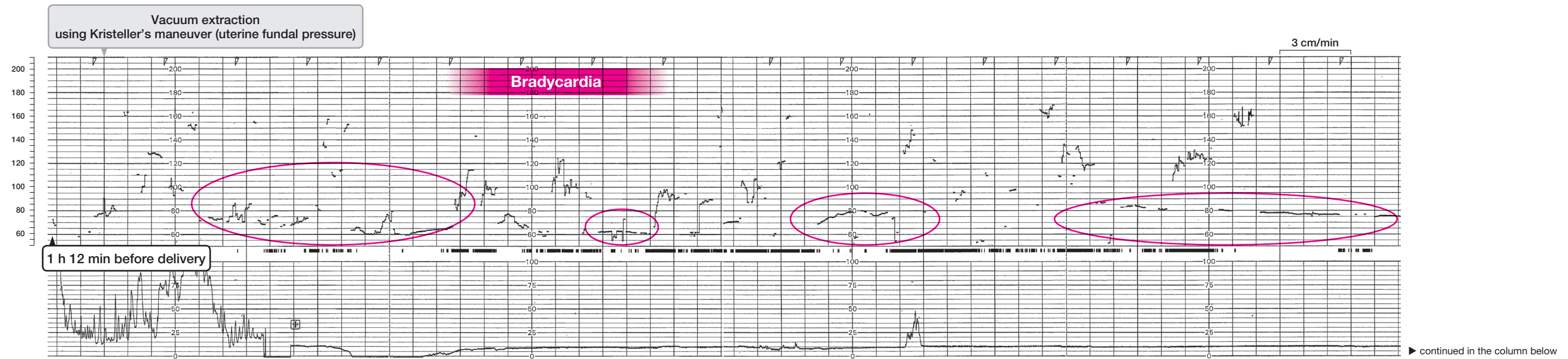


### Cautions in interpretation

Although decelerations continued to recur, the interpretation was difficult due to many noises. The Doppler probe should be placed at the appropriate site.

▶ continued on the next page





#### Findings associated with delivery

- Umbilical cord blood gas analysis: No information
- Newborn course:  
Apgar score; 3 at 1 min  
4 at 5 min
- Findings of the amniotic fluid, umbilical cord, and placenta:  
Histopathological examination ► No information

- Causes of the development of cerebral palsy in the cause analysis report  
Unknown or unspecified causes



# 1. Case examples by the main cause of the cerebral palsy

## Case 37 (Unknown or unspecified causes- 5)

The Japan Obstetric Compensation System for Cerebral Palsy : Cardiotocograms of Cerebral Palsy Cases  
Case examples by the main cause of the cerebral palsy

### Summary

Gestational weeks 33 weeks' gestation

Risk factors Threatened abortion

Birth weight 2200 g level

Delivery course She was admitted to hospital because of rupture of membranes and onset of labor. ► Baby was delivered vaginally.

On admission

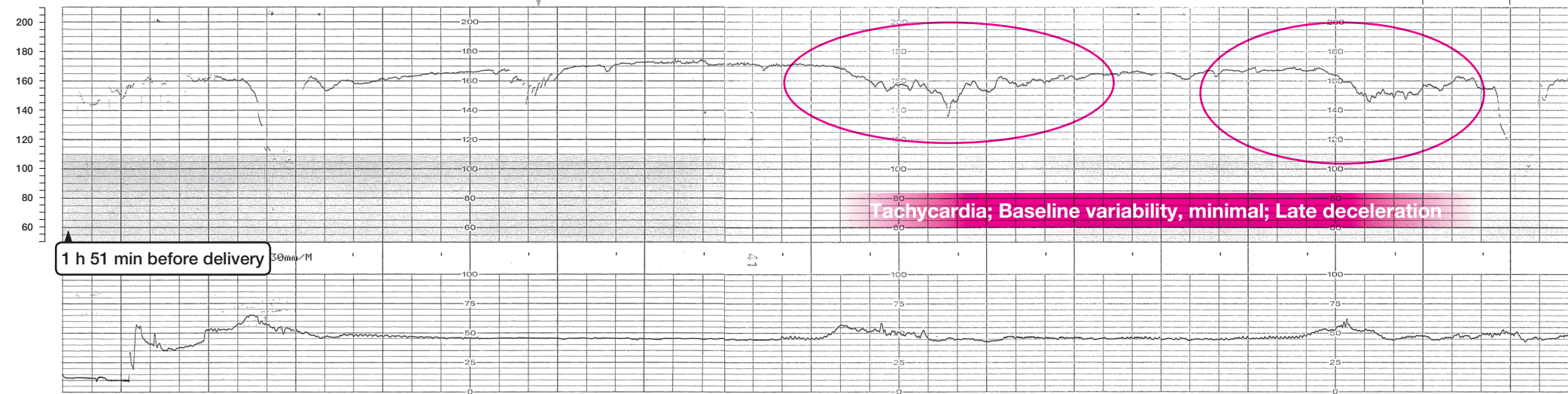
Approximately 11 h 46 min before delivery  
Back pain and low back pain

4 h 46 min before delivery  
Rupture of membranes.

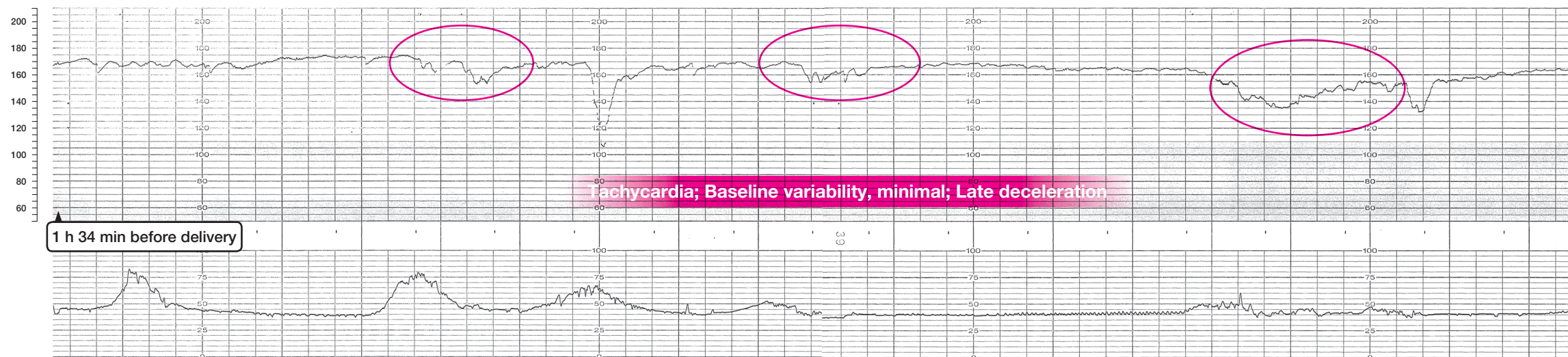
3 h 46 min before delivery  
Onset of labor

2 h 16 min before delivery  
The woman was admitted to hospital.  
Cervical dilatation 1-2 cm  
Body temperature 36.4 °C

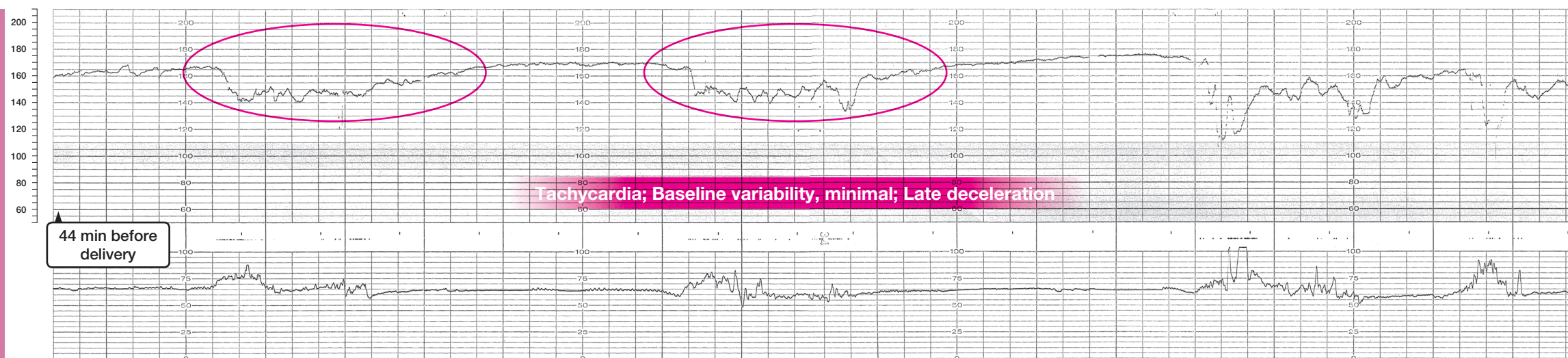
Cervical dilatation 3 cm



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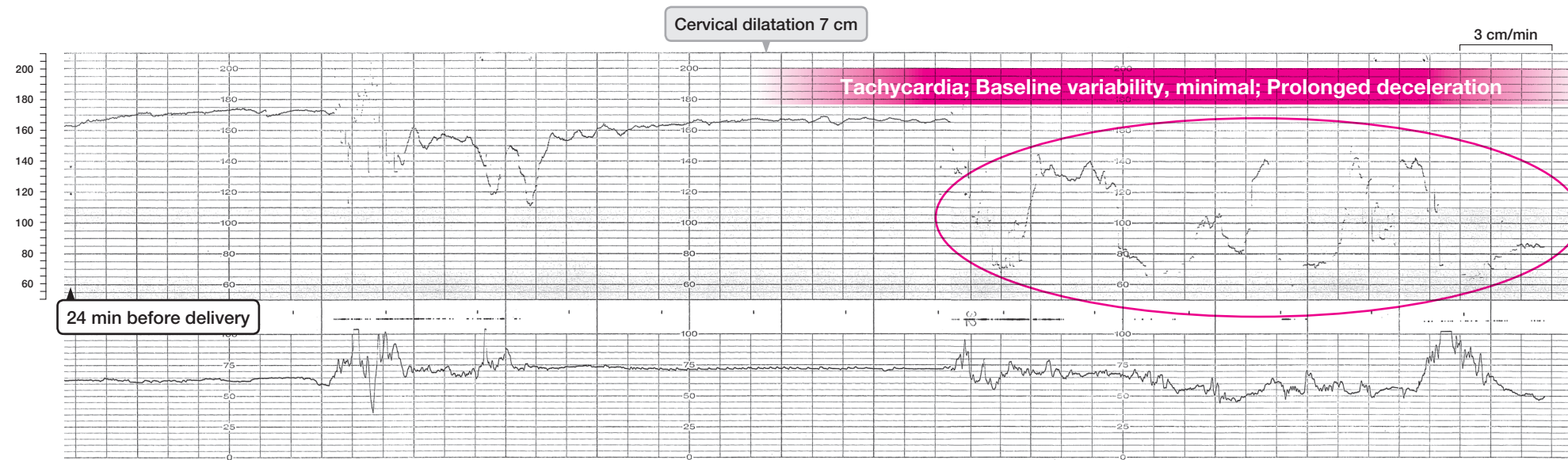


Before delivery



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7 min later, baby was delivered by cesarean section.

#### Findings associated with delivery

- Umbilical artery pH was 7.3 level
- Newborn course:  
Apgar score; 3 at 1 min  
5 at 5 min
- Findings of the amniotic fluid, umbilical cord, and placenta:  
Entanglement of the umbilical cord (a single loop)  
Histopathological examination ► Chorioamnionitis; Funisitis
- Causes of the development of cerebral palsy in the cause analysis report  
Unknown or unspecified causes



# 1. Case examples by the main cause of the cerebral palsy

## Case 38 (Unknown or unspecified causes- 6)

The Japan Obstetric Compensation System for Cerebral Palsy : Cardiotocograms of Cerebral Palsy Cases  
Case examples by the main cause of the cerebral palsy

### Summary

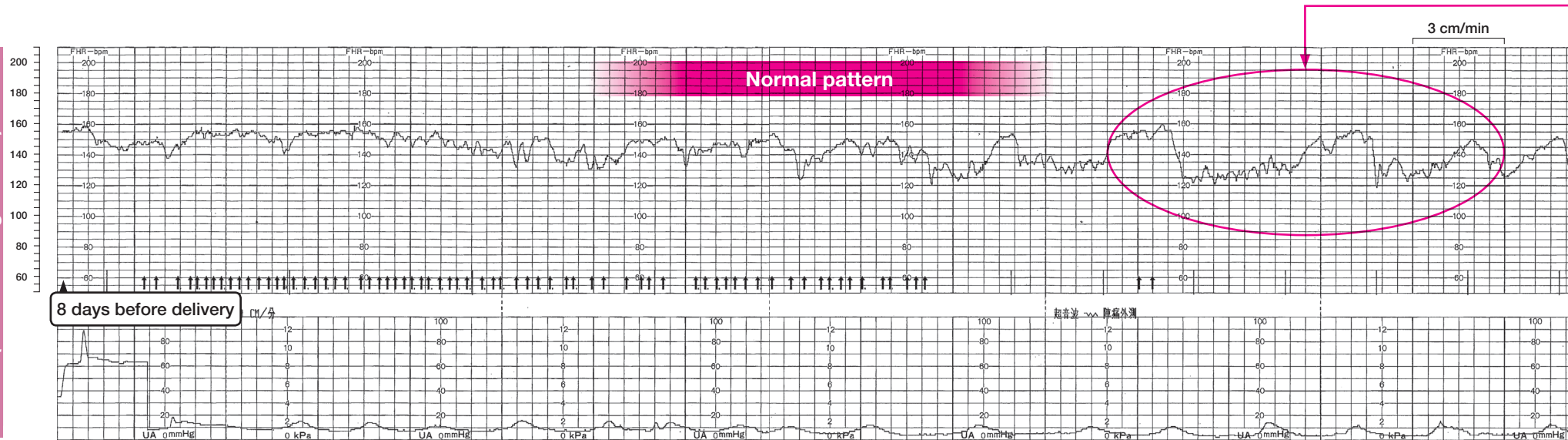
Gestational weeks 39 weeks' gestation

Risk factors None

Birth weight 2600 g level

Delivery course The woman was admitted to hospital because of onset of labor. ▶ Drip infusion of oxytocin was used for augmentation of labor. ▶ Baby was delivered vaginally.

At the outpatient prenatal care  
(37 weeks of gestation)



### Cautions in interpretation

The tracing in the second column, shows that the baseline variability has clearly decreased and the accelerations have disappeared as compared to the tracing in the first column.

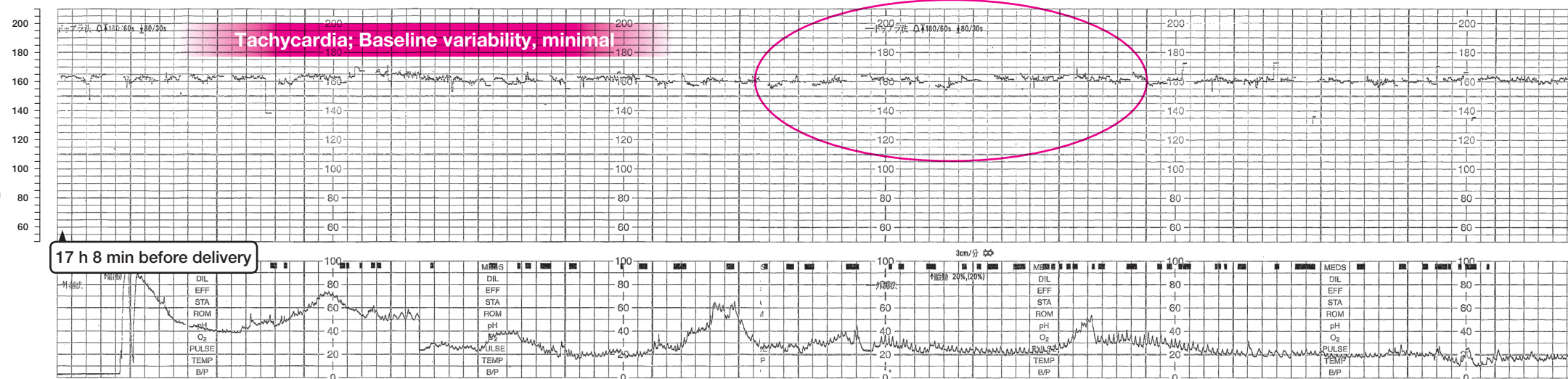
On admission (7 days after the last  
outpatient prenatal care)

20 h 38 min before delivery

Onset of labor

17 h 28 min before delivery

The woman was admitted to hospital.  
Cervical dilatation 2 cm  
Bloody show



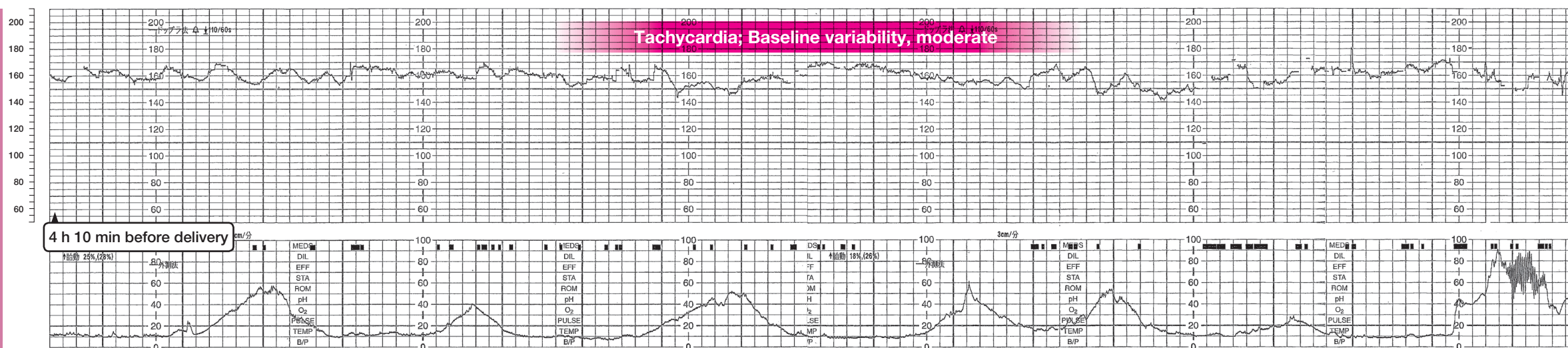
7 h 28 min before delivery

Rupture of membranes;  
Cervical dilatation 3 cm

5 h 55 min before delivery

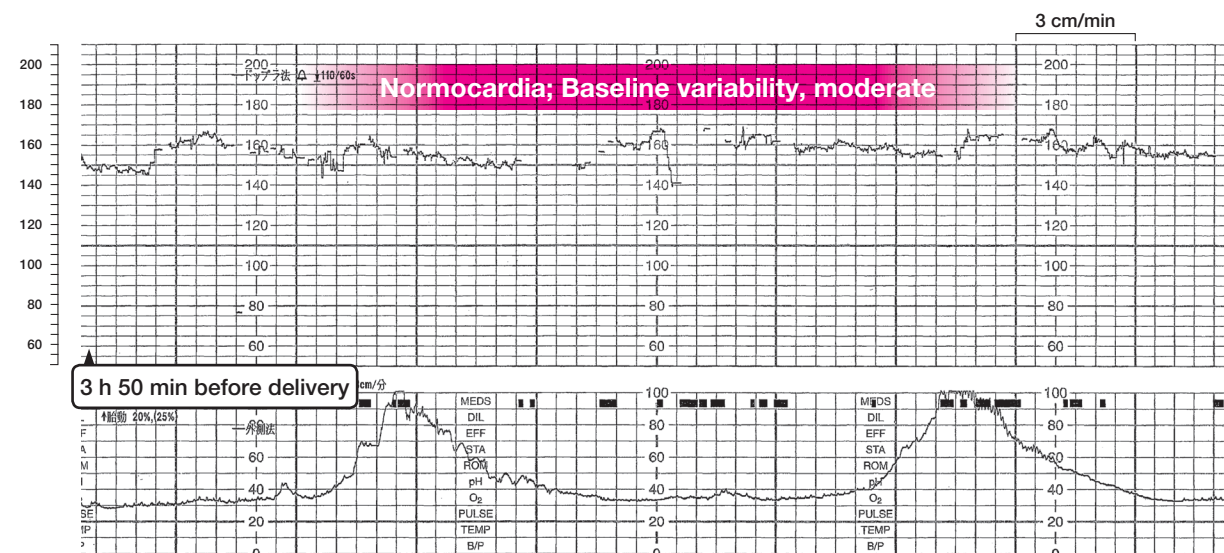
Artificial rupture of membranes was performed; Meconium staining  
Cervical dilatation 5-6 cm

During hospitalization

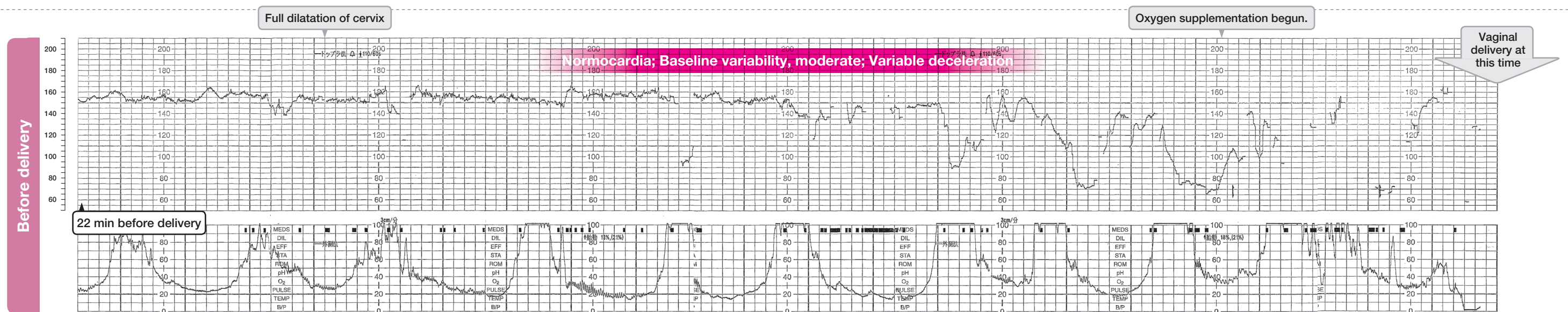


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1 h 28 min before delivery  
Cervical dilatation 6-7 cm  
Oxytocin drip infusion begun  
for augmentation of labor  
because of a diagnosis of  
weak pains.



#### Findings associated with delivery

- Umbilical artery pH was 7.2 level
- Newborn course:  
Apgar score; 1 at 1 min  
1 at 5 min
- Findings of the amniotic fluid, umbilical cord, and placenta:  
Entanglement of the umbilical cord (a single loop);  
Meconium staining  
Histopathological examination ► No information

- Causes of the development of cerebral palsy in the  
cause analysis report  
Unknown or unspecified causes



# 1. Case examples by the main cause of the cerebral palsy

## Case 39 (Unknown or unspecified causes- 7)

The Japan Obstetric Compensation System for Cerebral Palsy : Cardiotocograms of Cerebral Palsy Cases  
Case examples by the main cause of the cerebral palsy

Summary

Gestational weeks 39 weeks' gestation

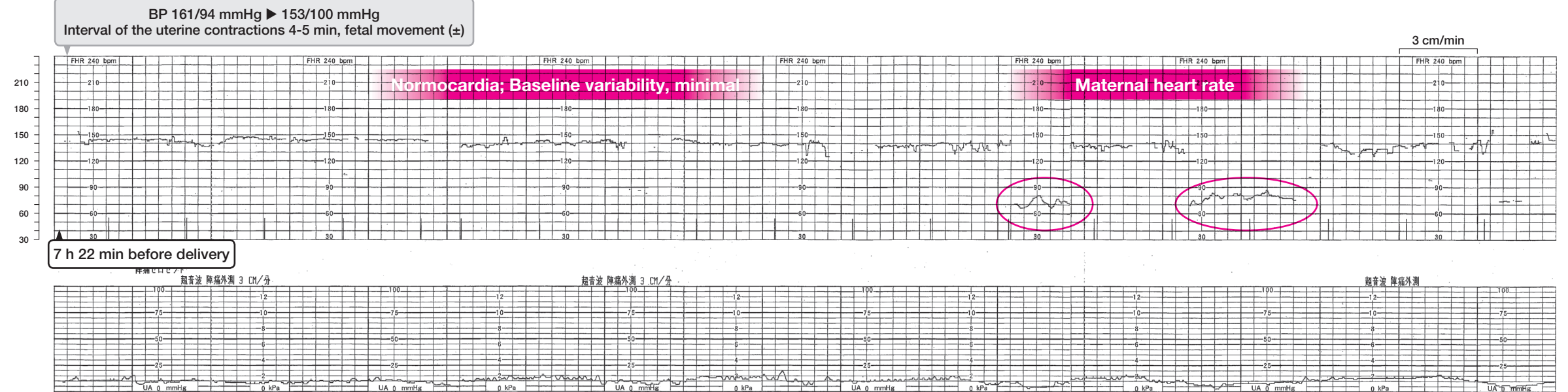
Risk factors Fetal growth restriction, obesity

Birth weight 2400 g level

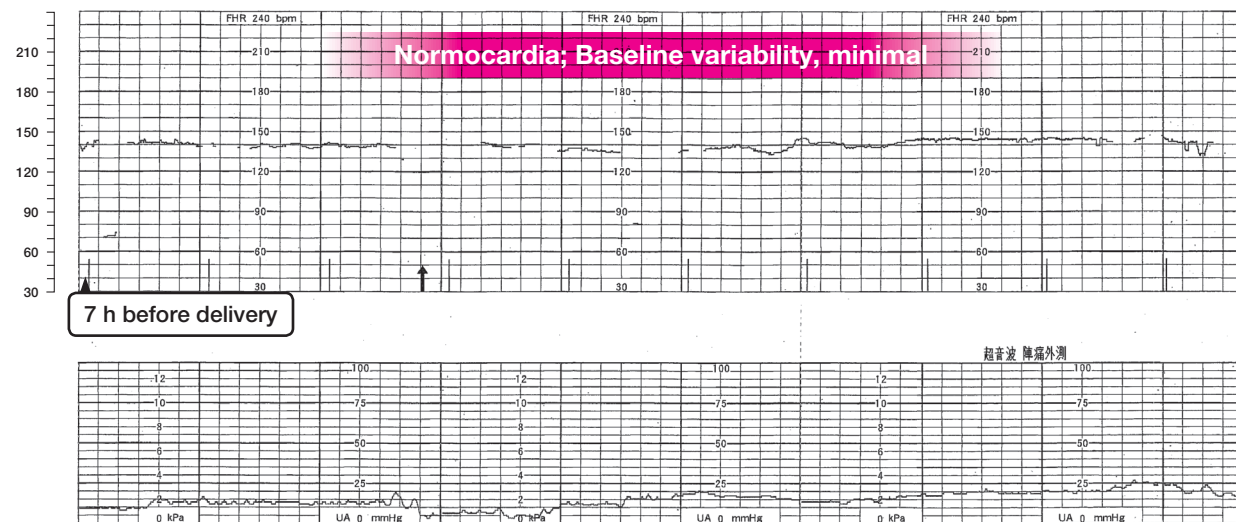
Delivery course The woman was admitted to hospital because of onset of labor. ▶ Drip infusion of oxytocin was used for augmentation of labor. ▶ Baby was delivered vaginally.

On admission

7 h 42 min before delivery  
Onset of labor



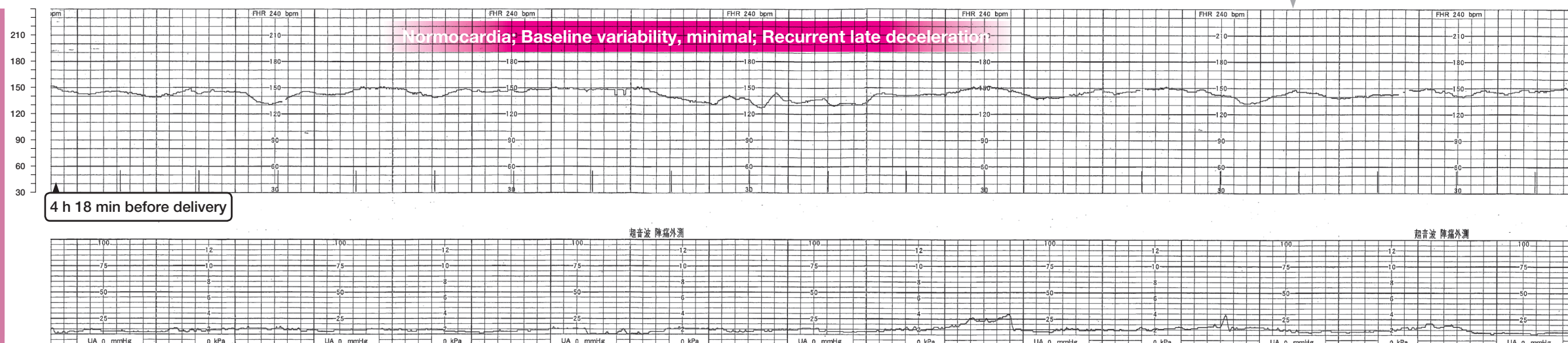
▶ continued in the column below



5 h 47 min before delivery  
Cervix was closed

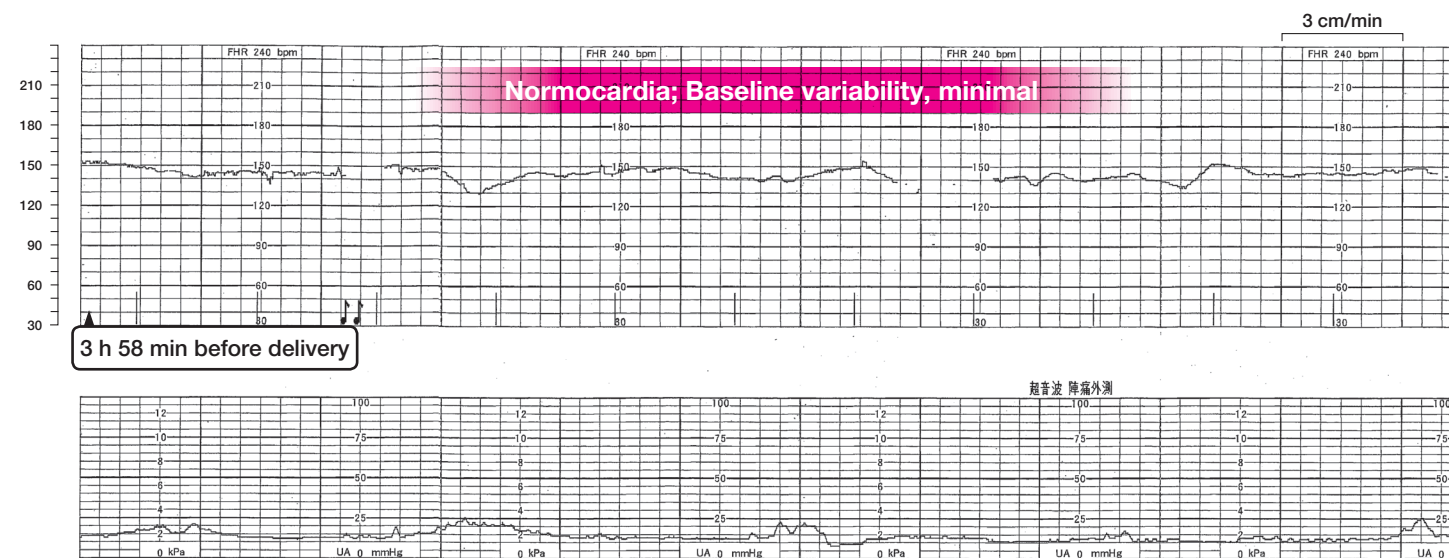
Fetal movement (±)  
Maternal repositioning; Vibroacoustic stimulation

During hospitalization



▶ continued on the next page





2 h 52 min before delivery

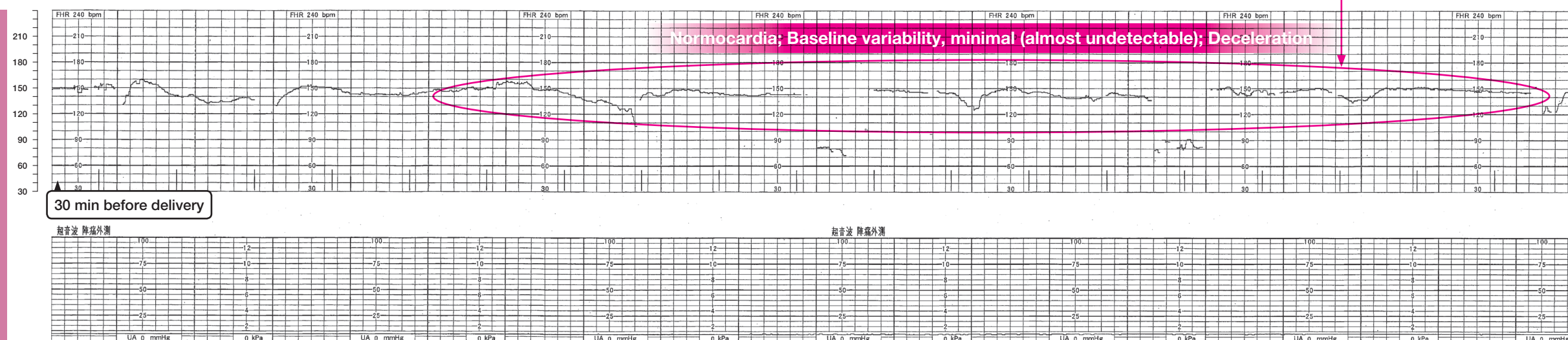
Interval of the uterine contractions 2-3 min  
BP 142/82 mmHg

1 h 6 min before delivery

Oxygen supplementation begun.  
Cervical dilatation 5-6 cm

42 min before delivery

Oxytocin drip infusion begun because of weak pains.

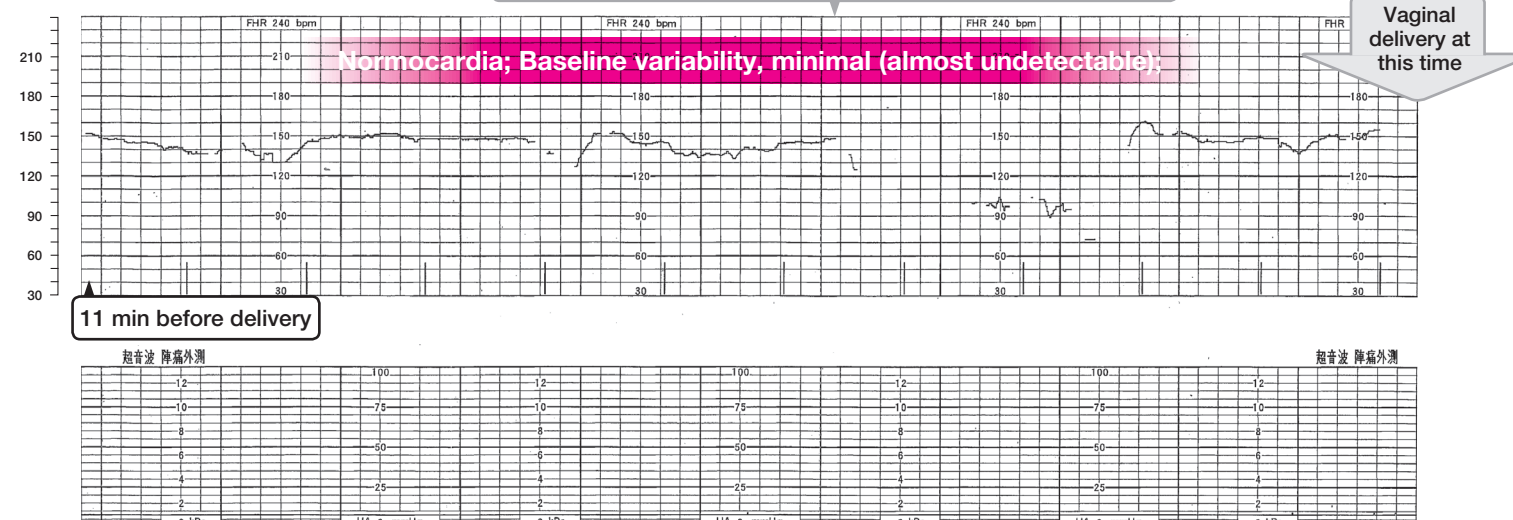


### Cautions in interpretation

The fetal heart rate patterns were consistent with recurrent late decelerations. Uterine contraction patterns are important to interpret deceleration patterns. Tocodynamometers should be placed at the appropriate site for accurate recording of uterine contractions.

► continued in the column below

Artificial rupture of membranes was performed; Meconium staining  
Full dilatation of cervix



### Findings associated with delivery

- Umbilical artery pH was 7.1 level
- Newborn course:  
Apgar score; 6 at 1 min  
8 at 5 min
- Findings of the amniotic fluid, umbilical cord, and placenta:  
Meconium staining  
Histopathological examination ► Infarct regions and thrombus in the placenta

- Causes of the development of cerebral palsy in the cause analysis report  
Unknown or unspecified causes



# 1. Case examples by the main cause of the cerebral palsy

## Case 40 (Unknown or unspecified causes- 8)

The Japan Obstetric Compensation System for Cerebral Palsy : Cardiotocograms of Cerebral Palsy Cases  
Case examples by the main cause of the cerebral palsy

### Summary

Gestational weeks 40 weeks' gestation

Risk factors Obesity

Birth weight 3100 g level

Delivery course The woman was admitted to hospital because of rupture of membranes. ▶ Oxytocin drip infusion was used for induction of labor. ▶ Mother was transported because of the diagnosis of non-reassuring fetal status. ▶ Cesarean section was performed.

During hospitalization at the transport source birthing facility

39 h 39 min before delivery

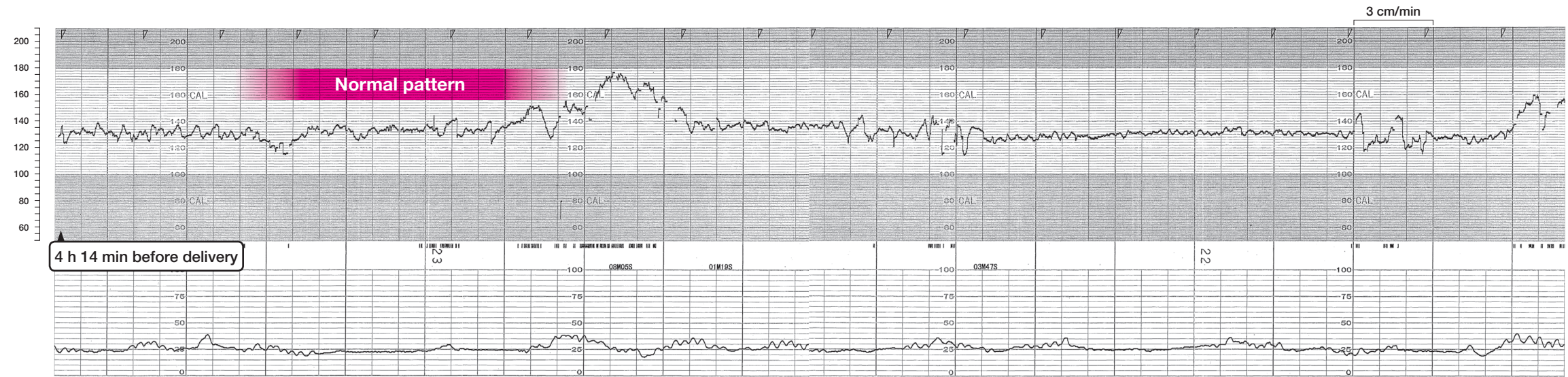
The woman was admitted to hospital. She noted uterine contractions at 15- to 20-minute intervals. Cervical dilatation a half fingertip dilated; Rupture of membranes.

11 h 9 min before delivery

Cervical dilatation 2.5 cm  
Oxytocin drip infusion begun.

10 h 49 min before delivery

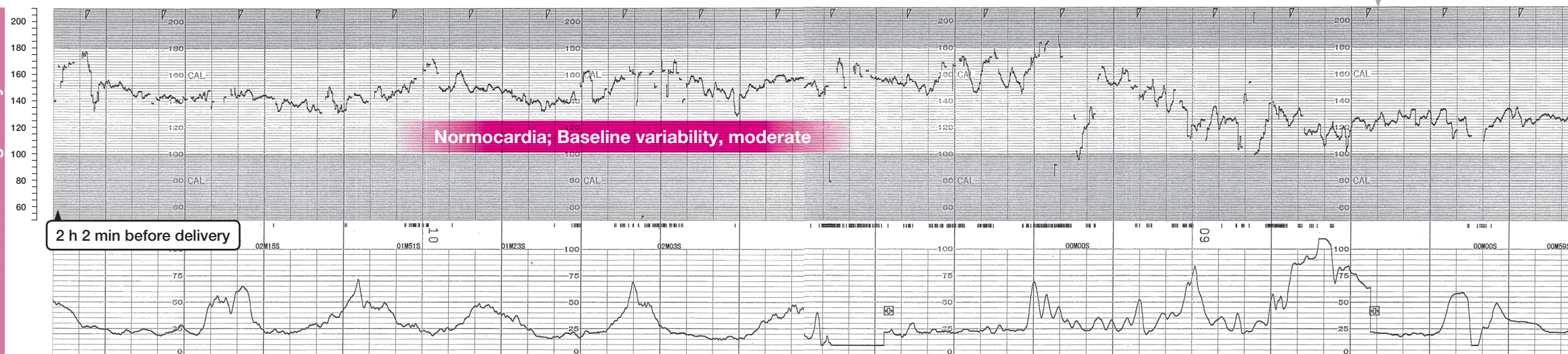
Onset of labor



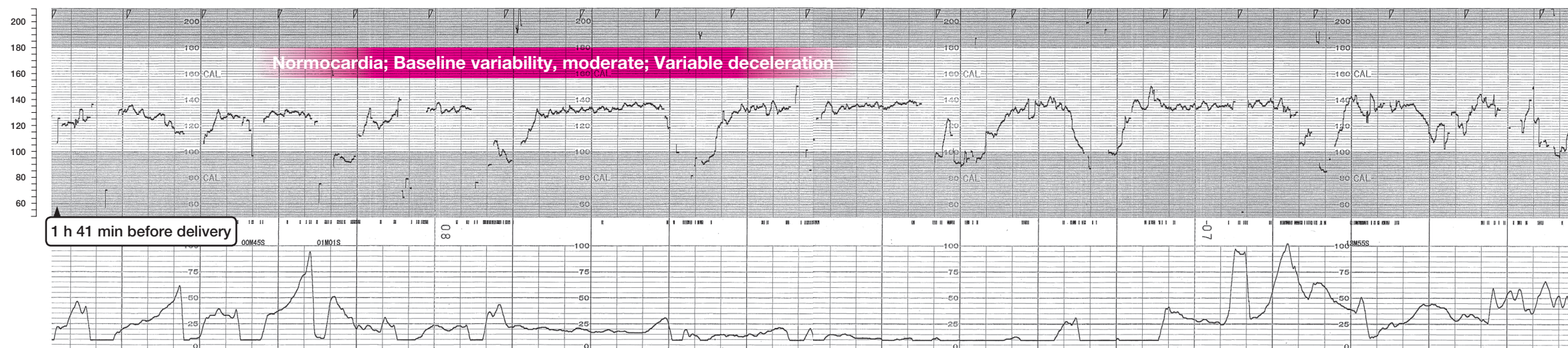
3 h 29 min before delivery

Cervical dilatation 4-5cm

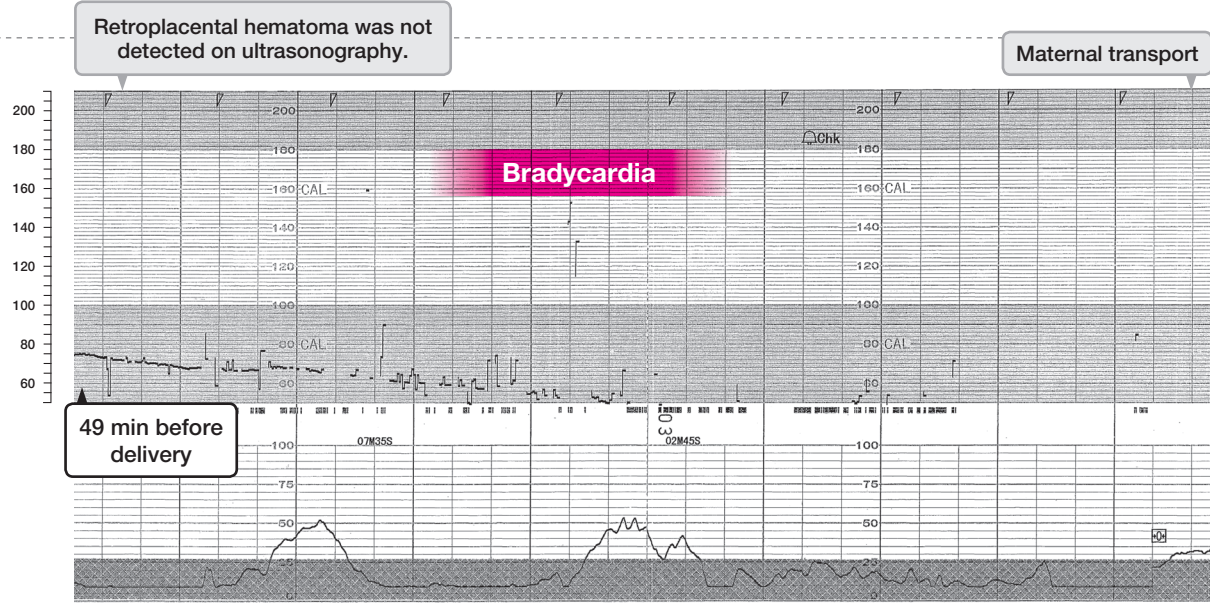
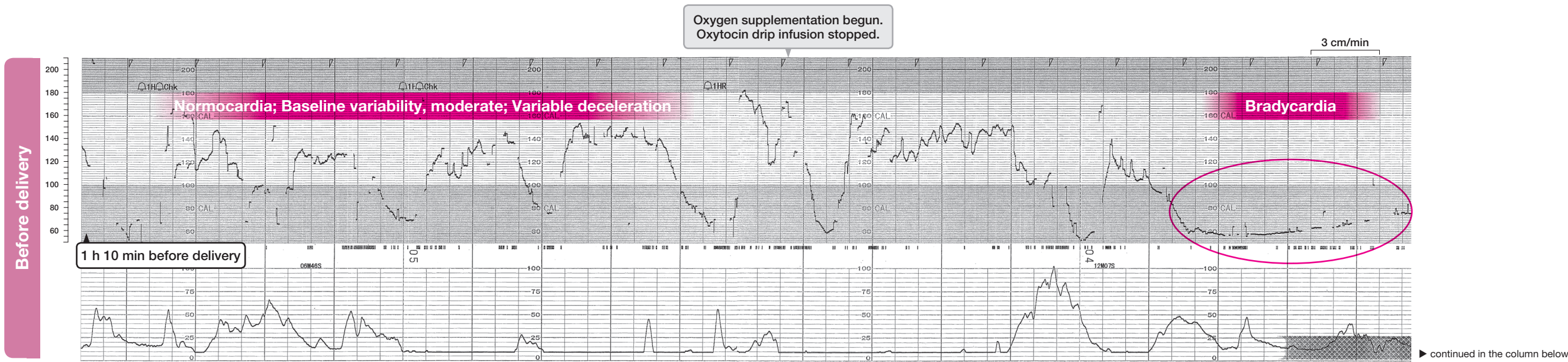
During hospitalization at the transport source birthing facility



▶ continued in the column below







#### Findings associated with delivery

- Umbilical cord blood gas analysis: No information
- Newborn course:  
Apgar score; 0 at 1 min  
0 at 5 min
- Operative findings:  
Thinning of the lower uterine segment
- Findings of the amniotic fluid, umbilical cord, and placenta:  
Meconium staining; Entanglement of the umbilical cord (a single loop); Almost absent amniotic fluid  
Histopathological examination ► Infarcts;  
Necrosis of the decidua; Calcium deposits of the villi  
Staphylococcus epidermidis was isolated from the intrauterine culture.

- Causes of the development of cerebral palsy in the cause analysis report  
Unknown or unspecified causes



# 1. Case examples by the main cause of the cerebral palsy

## Case 41 (Unknown or unspecified causes- 9)

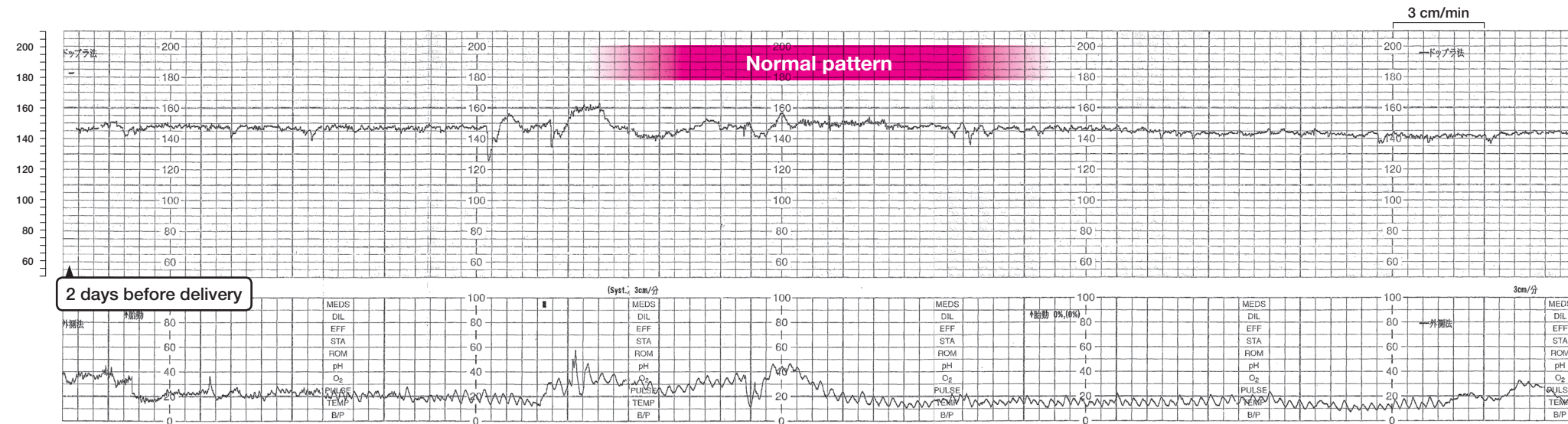
The Japan Obstetric Compensation System for Cerebral Palsy : Cardiotocograms of Cerebral Palsy Cases  
Case examples by the main cause of the cerebral palsy

**Summary** **Gestational weeks** 39 weeks' gestation **Risk factors** Pregnancy-induced hypertension (preeclampsia) **Birth weight** 2600 g level  
**Delivery course** The woman was admitted to hospital for the management of pregnancy-induced hypertension. ▶ Onset of labor. ▶ Vacuum extraction was performed based on the diagnosis of non-reassuring fetal status.

On admission

2 days before delivery

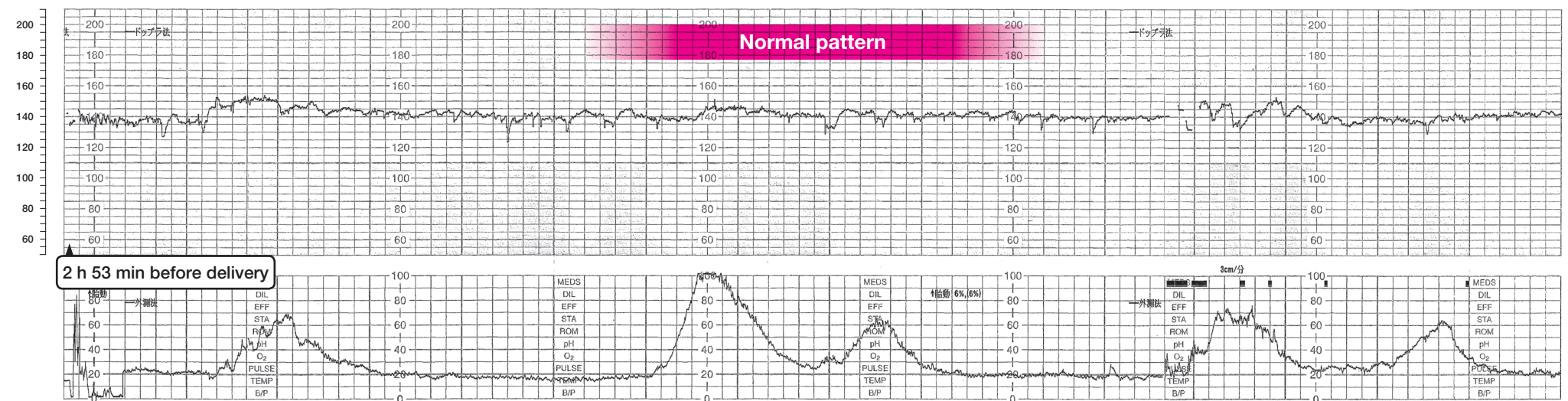
She was admitted to hospital for the management of pregnancy-induced hypertension.  
BP 142/92 mmHg  
She began taking an oral antihypertensive drug.  
Urinalysis (24-hour creatinine clearance 219.6 L/day, proteinuria 5762 mg/day)



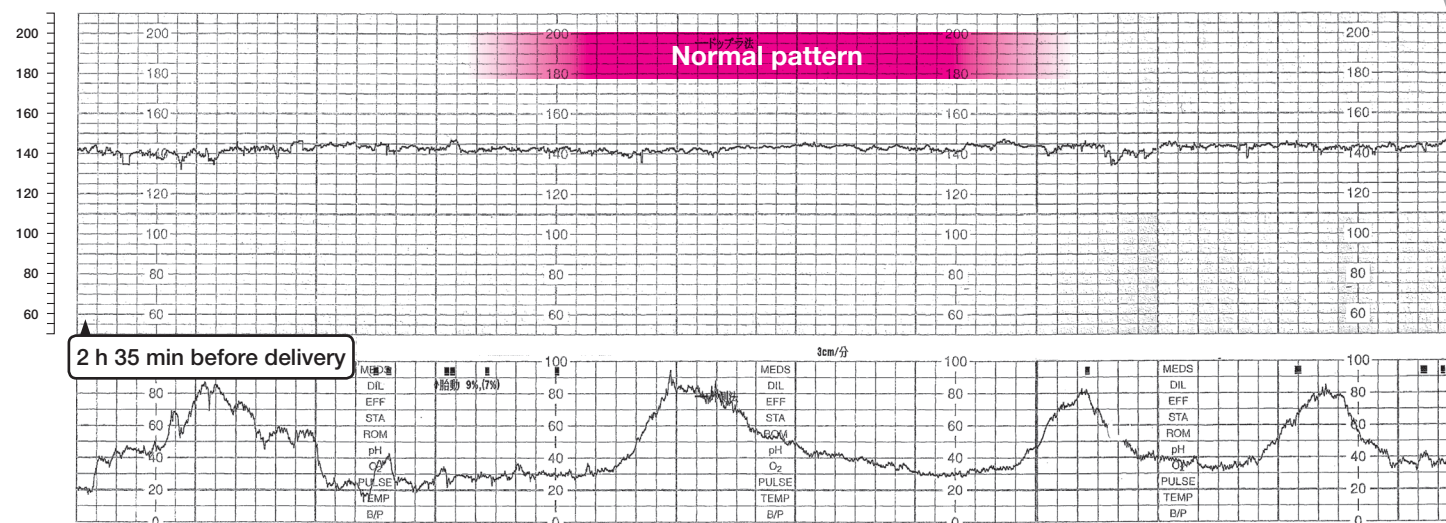
During hospitalization

4 h 8 min before delivery

Onset of labor



BP 143/88 mmHg  
The FHR monitoring was interrupted.



1 h 8 min before delivery

Interval of the uterine contractions 4 min; A small amount of vaginal bleeding  
The FHR was 140 bpm level on auscultation.

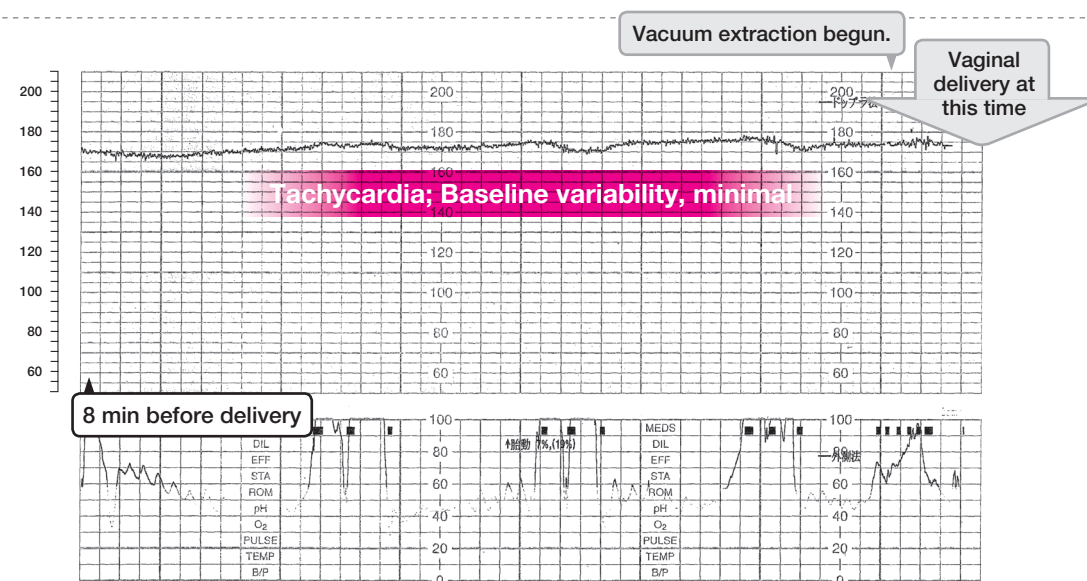
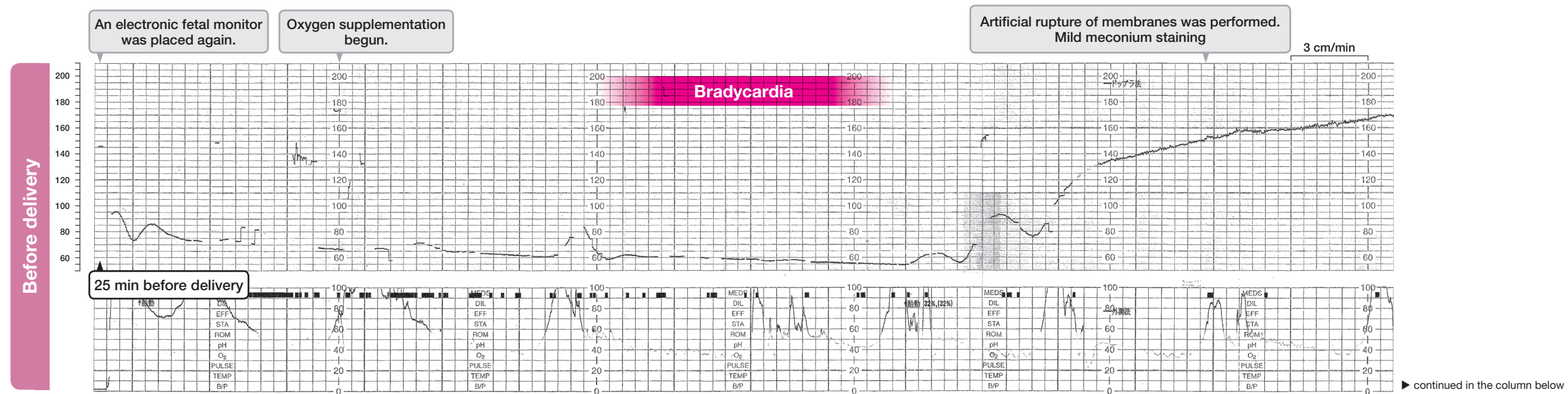
48 min before delivery

Bloody discharge increased.

38 min before delivery

Full dilatation of cervix





#### Findings associated with delivery

- Umbilical artery pH was 7.0 level
- Newborn course:  
Apgar score; 4 at 1 min  
4 at 5 min
- Findings of the amniotic fluid, umbilical cord, and placenta:  
Histopathological examination ► A few infarct changes

- Causes of the development of cerebral palsy in the cause analysis report  
Unknown or unspecified causes