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DEPOSITION EXHIBIT
Edelberg #1
12/4/92 BMJ

October 31, 1991

Mr. Christopher M. Mellino
Charles Kampinski Co., L.P.A.
Attorneys at Law
1530 Standard Building
1370 Ontario Street
Cleveland, Ohio 44113

Re: Rita Berardinelli vs. Marymount Hospital, et al

Dear Mr. Mellino:

I have reviewed in detail the obstetrical records of Rita Berardinelli's first full-term pregnancy when she gave birth to Zachary Berardinelli. I have reviewed the Marymount Hospital records for the mother, as well as the Marymount records for the neonate, and subsequent hospital admissions for Zachary Berardinelli at University Hospitals of Cleveland. I have also reviewed the deposition given by Amin El-Mallawany, M.D. on September 12, 1991.

Rita Berardinelli was a 30-year old para 0030, whose estimated due date was August 15, 1988. After an apparent uneventful prenatal course, she was admitted to Marymount Hospital on September 1, 1988 at 11:12 p.m. Initial exam revealed the cervix to be 1 to 1+ 1/2 centimeters dilated, 90% effaced and -3 station. There was spontaneous rupture of the membranes with thick meconium. Contractions were noted to be 1+. Initial monitoring was by an external fetal monitor and appeared to be within normal limits. Records indicated that she was soon switched to internal fetal monitoring.

At 5:15 a.m. on September 2, oxytocin augmentation was begun and a vaginal exam revealed Rita Berardinelli to be 1 to 2 centimeters dilated, 90% effaced and -2 station. At 6:30 a.m. the patient was 3 centimeters dilated, 90% effaced and -2 to 3 station; internal monitoring was begun. An epidural was then placed, and at 7:15 a.m. oxygen was started at 5 liters per minute. A maternal tachycardia was noted at approximately 9:10 a.m. At approximately 10:00 a.m. a fetal tachycardia was evident, with the heart ranging from 160 to 190 beats per minute. Good variability was noted. The maternal temperature at 10:15 a.m. was noted to be 99.8. A vaginal exam at 10:30 a.m. revealed the patient to be 6 centimeters, 0 station and 100% effaced. The fetal tachycardia persisted throughout the morning, and the patient was noted to be progressing in terms of cervical dilatation, but no descent of the presenting part was noted.

The patient's temperature continued to rise, and at 12:40 p.m. was 102.5. At 12:55 p.m. patient was noted to be completely dilated and began pushing. Monitor tracing shows intermittent late decelerations beginning at 1:10 p.m. The tachycardia continued until the monitor was removed at 1:26 p.m. At least two-thirds of the contractions in the second stage were associated with late decelerations. There were some variable decelerations associated with pushing. No further vaginal exams were listed by the nursing staff, and the nurse's notes indicated that at 1:47 p.m. forceps were applied by Dr. El-Mallawany, with slow delivery of the baby's head with the patient pushing. Delivery of the baby was not accomplished until 1:53 p.m., and nurses reported that abdominal fundal pressure was required.

Dr. El-Mallawany's dictated delivery note indicated that the patient was a post-term pregnancy, 42-weeks gestational age, with meconium staining, fever and probable amnionitis. He stated in his dictation that the vertex was direct occipito-anterior, and the head was about +2 station when the forceps were applied. He indicated that a shoulder dystocia was encountered, rotation was required, and superpubic pressure was added. The baby was delivered in critical condition with Apgars of 0 at 1 minute, 0 at 5 minutes, and 3 at 10 minutes.

Neonatology was in attendance for resuscitation. Pediatrics noted on the newborn infant progress record of Marymount Hospital that there was marked molding of the fetal head. The initial pH done on the baby indicated severe acidosis with a pH of 6.876 and a base excess of -12.4. This pH was done at 2:23 p.m. The baby was transferred to University Hospitals of Cleveland and those records confirmed molding of the neonate's head. The baby was noted to be large for gestational age and approximately 42 weeks gestational age. The baby weighed 4,750 grams when it was first weighed at University Hospital. Final diagnosis was that of hypoxic encephalopathy secondary to difficult birth.

Analysis

A pregnancy of 42-weeks gestational age is a strong risk factor for macrosomia. There is no evidence in the records that Dr. El-Mallawany estimated the fetal weight prior to delivery. Dr. El-Mallawany stated during his deposition that he remembers estimating the fetal weight at 9 to 9-1/2 pounds, which would qualify as a large-for-gestational-age (LGA) infant. LGA babies are known to be at risk for shoulder dystocia; and when an LGA baby is anticipated, an ultrasound should be done to confirm one's estimated fetal weight. If a pregnant woman is nondiabetic, a fetal weight of 4,500 grams or greater has a high association with shoulder dystocia.

Operative delivery, either by forceps or vacuum extraction, in the macrosomic infant also has a high association with shoulder dystocia, and instrumentation by forceps or vacuum should be avoided when a LGA baby is anticipated. It is mandatory that forceps not be applied to a molded vertex at the +2 station in a nulliparous female because of the significant risk of 1) cephalopelvic disproportionment and 2) the possibility that the vertex is not even engaged in the pelvis at this point. If the latter exists, one is performing a

high-forceps delivery. We know from pediatric records that significant molding did exist, and one could anticipate this just from the slow descent of the vertex. Obviously, a carefully done vaginal exam would have revealed molding and contradicted the use of forceps.

On the basis of the late decelerations in second stage, coupled with the fetal tachycardia, a Cesarean section was medically indicated. Had a section been done at this point, the neonate would have required treatment for sepsis but, in all probability, would have sustained no brain damage. It should be noted that pathology did indicate an active chorioamnionitis and that the baby, no matter what the route of delivery, may have experienced some degree of sepsis. Had the clinical estimated fetal weight in early labor been done and the macrosomia identified, and the estimated fetal weight by ultrasound found to be 4,500 grams, an elective Cesarean section early in labor or even prior to labor would have been appropriate and met standards of care.

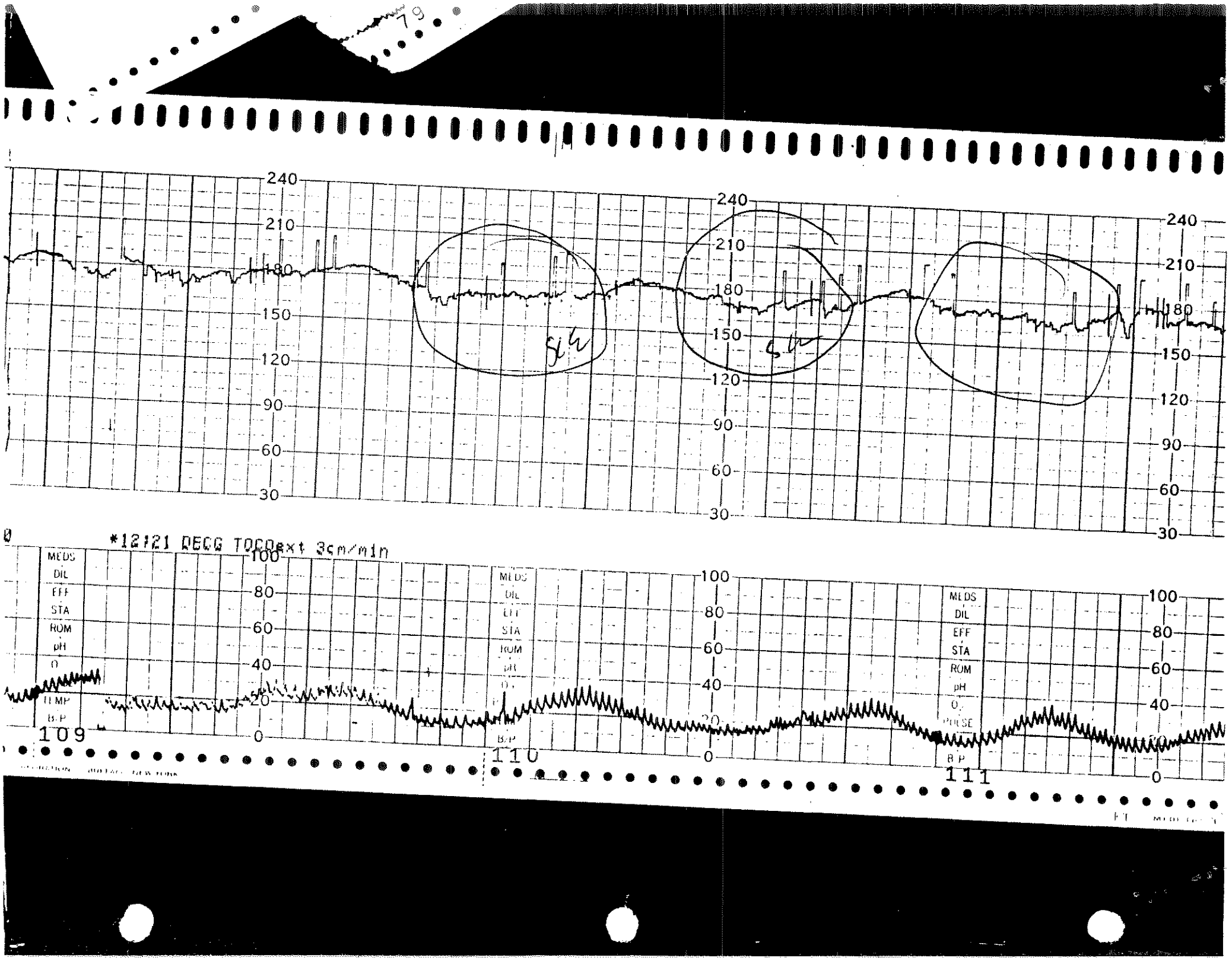
In conclusion, when Dr. El-Mallawany failed to estimate the fetal weight, failed to recognize fetal macrosomia, failed to recognize fetal distress, failed to recognize cephalopelvic disproportionment, failed to recognize fetal head molding and applied forceps to a head that was in the mid-pelvis to high-pelvis, he fell below reasonable standards of care for the practice of obstetrics and caused the severe birth asphyxia that Zachary Berardinelli sustained. It also appears from the medical records that Dr. El-Mallawany managed shoulder dystocia incorrectly because of the application of fundal pressure and the failure to employ the McRoberts maneuver.

Sincerely,

Stuart C. Edelberg, M.D.

SCE/rms

Enclosure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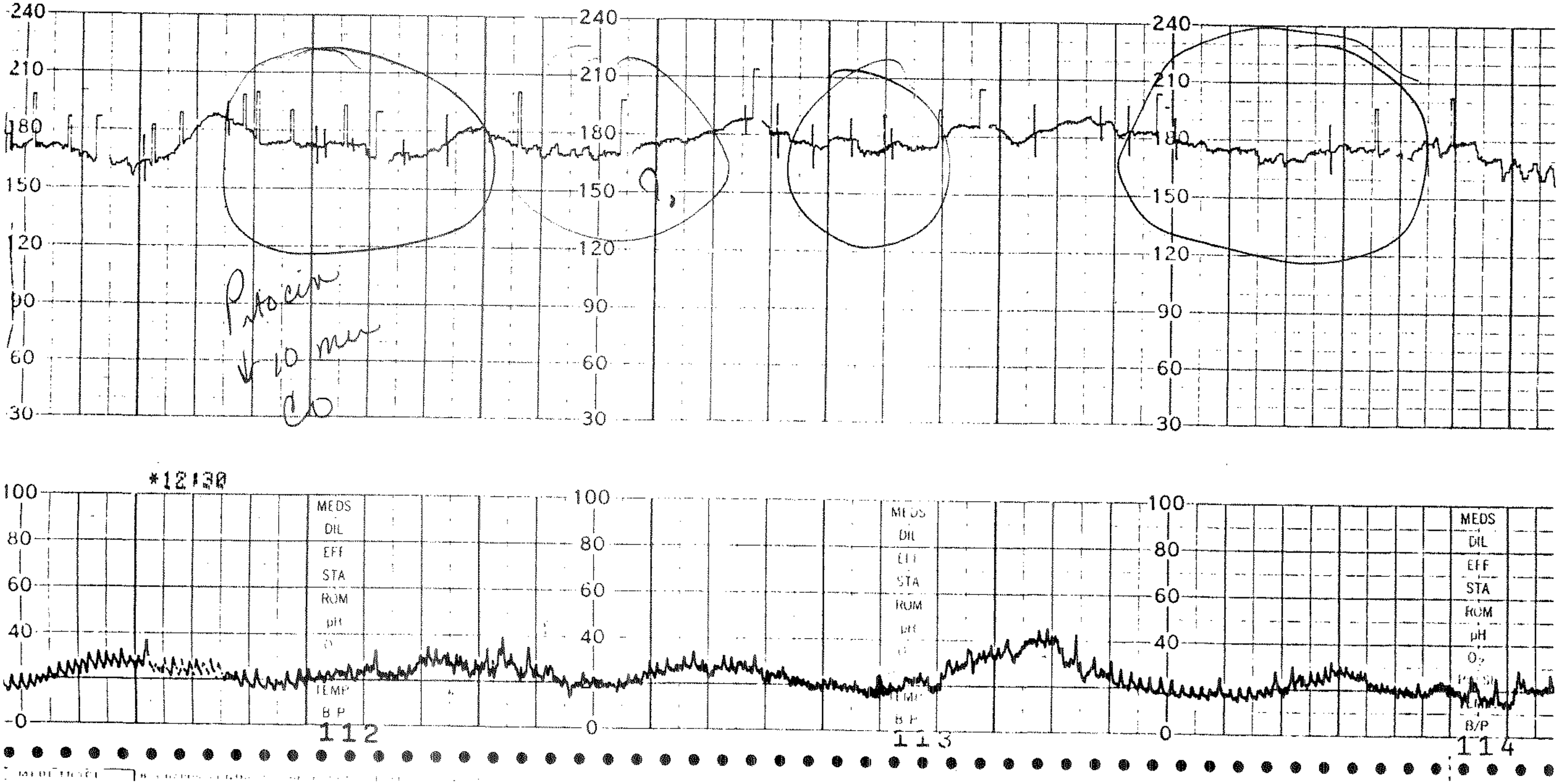
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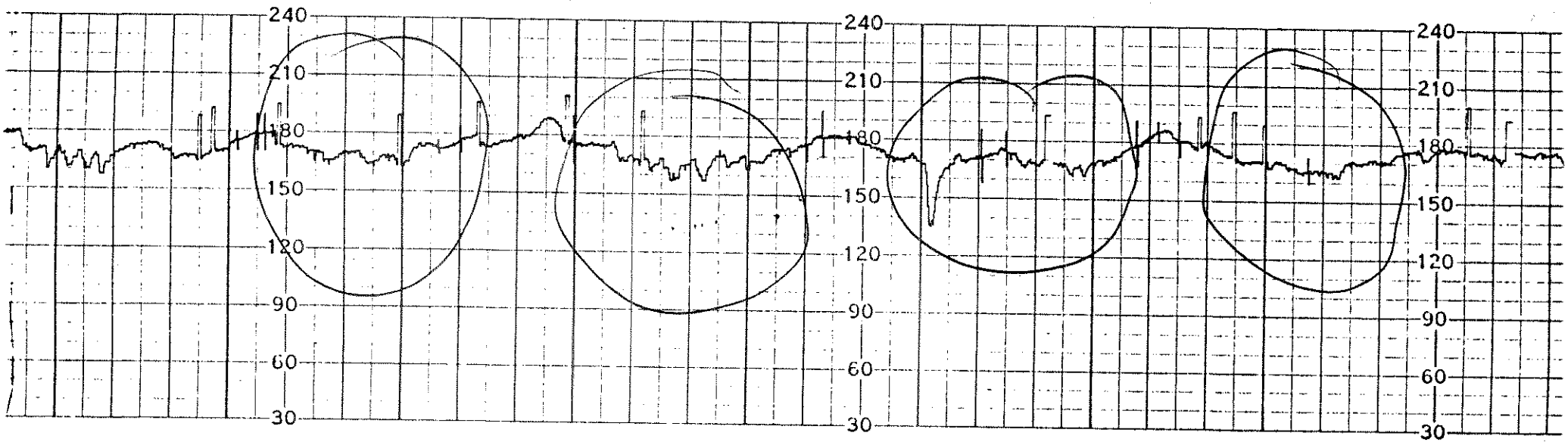
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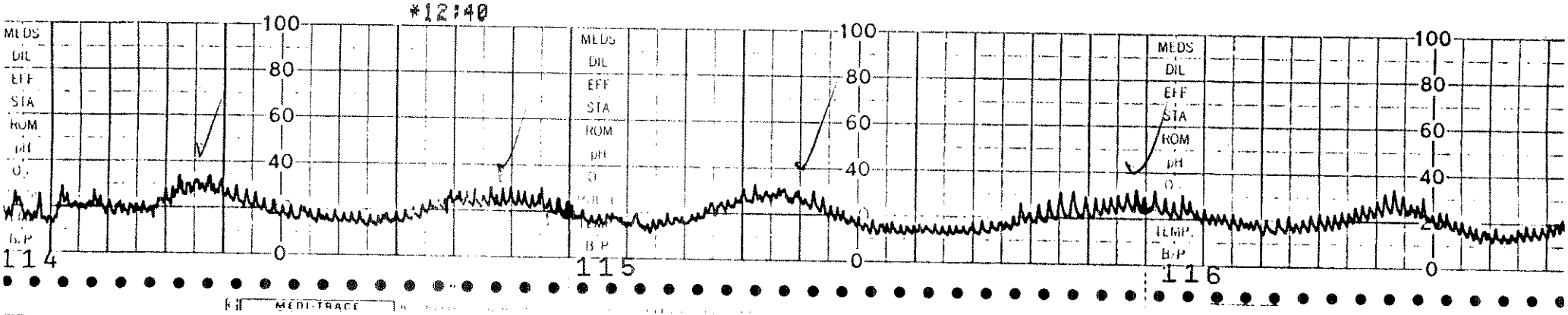
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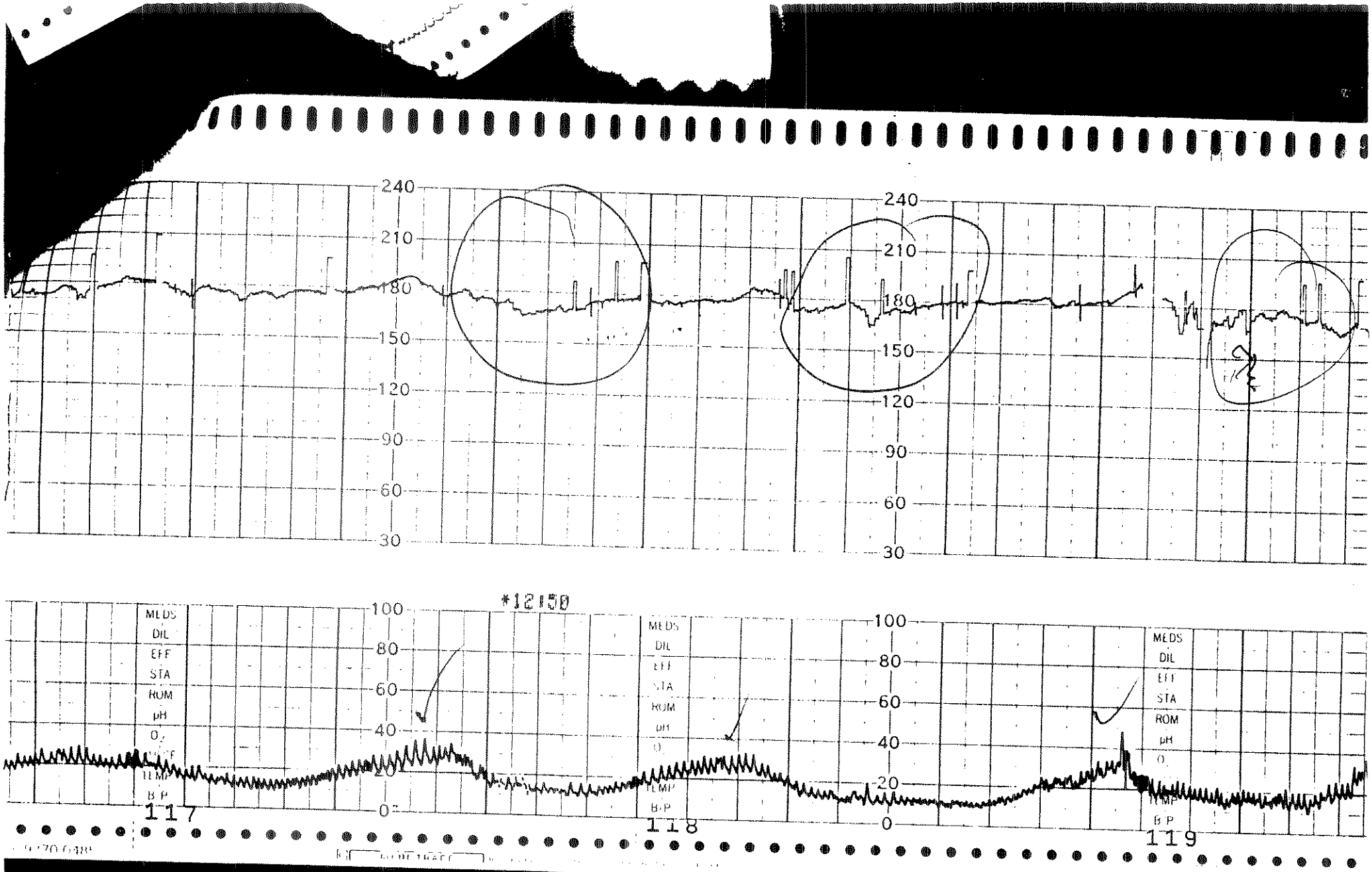
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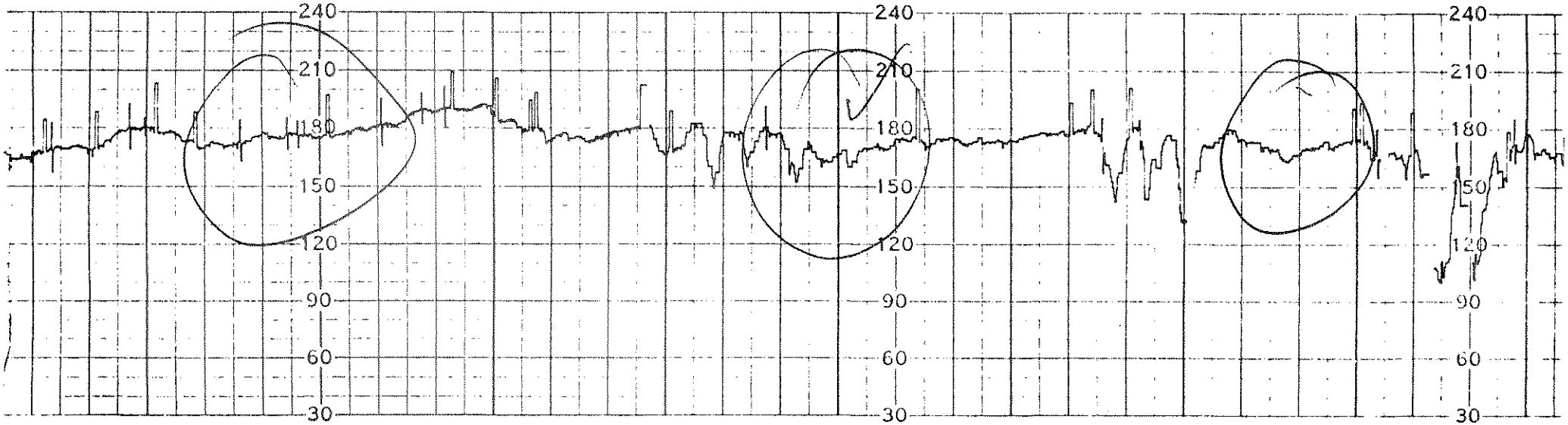
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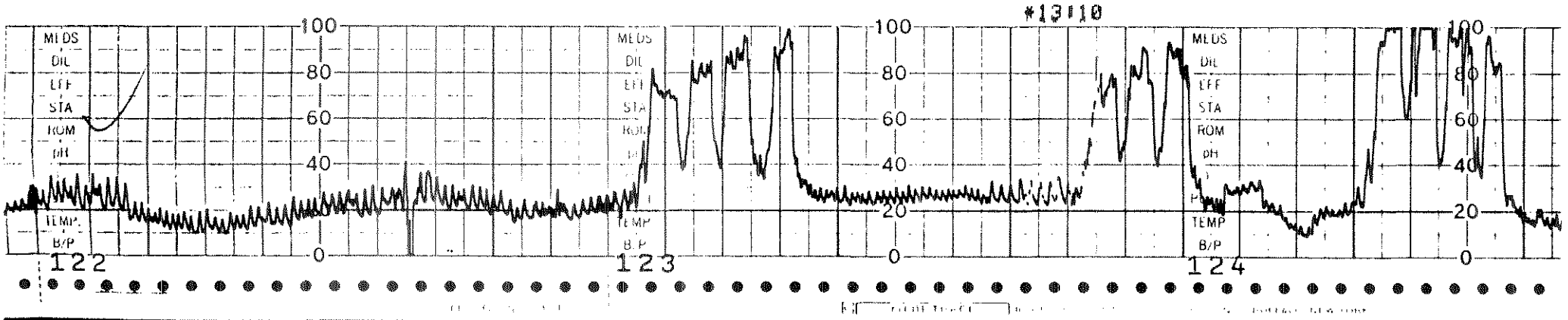
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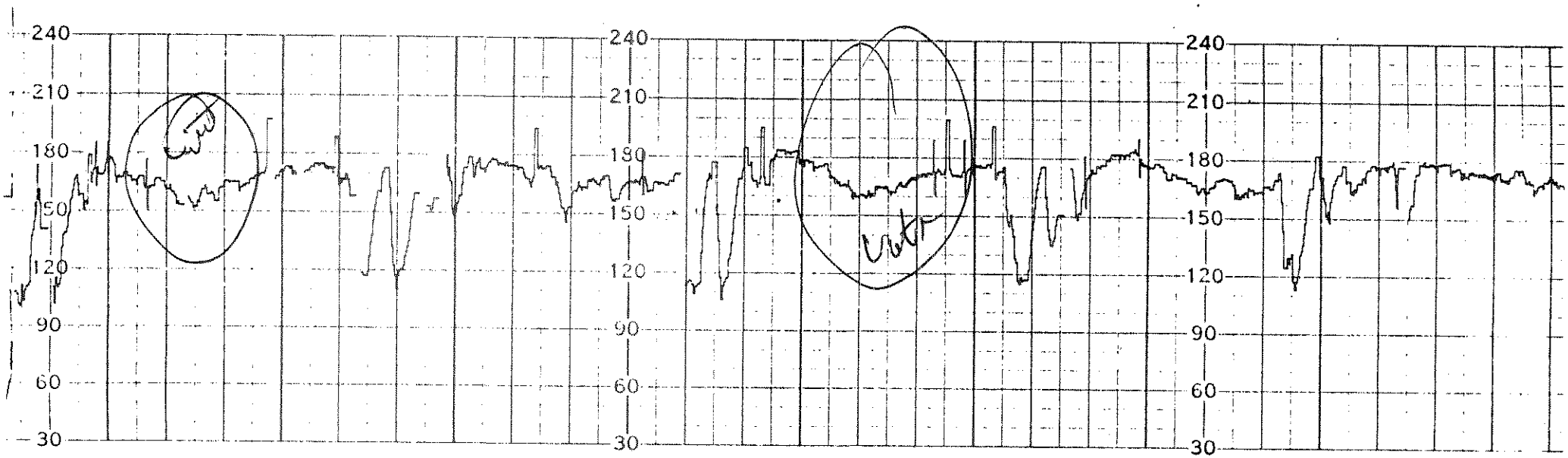
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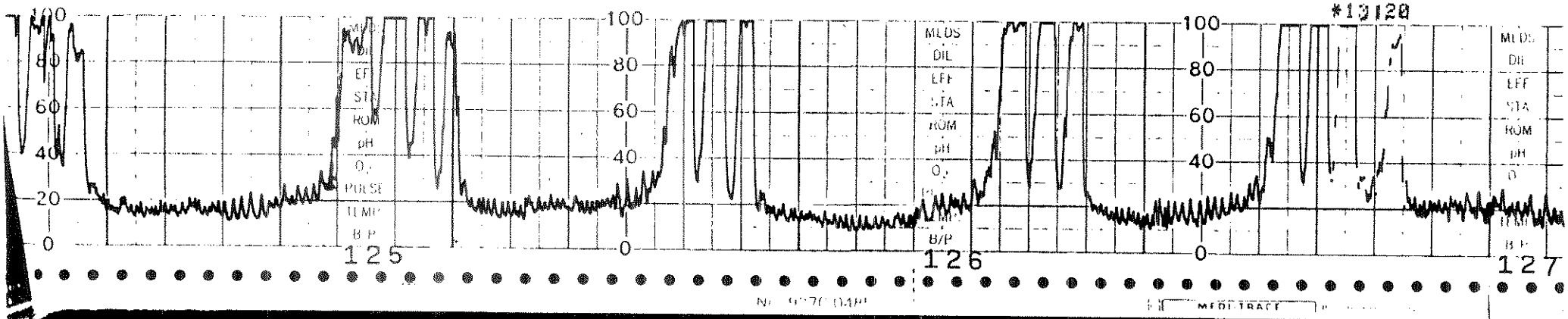
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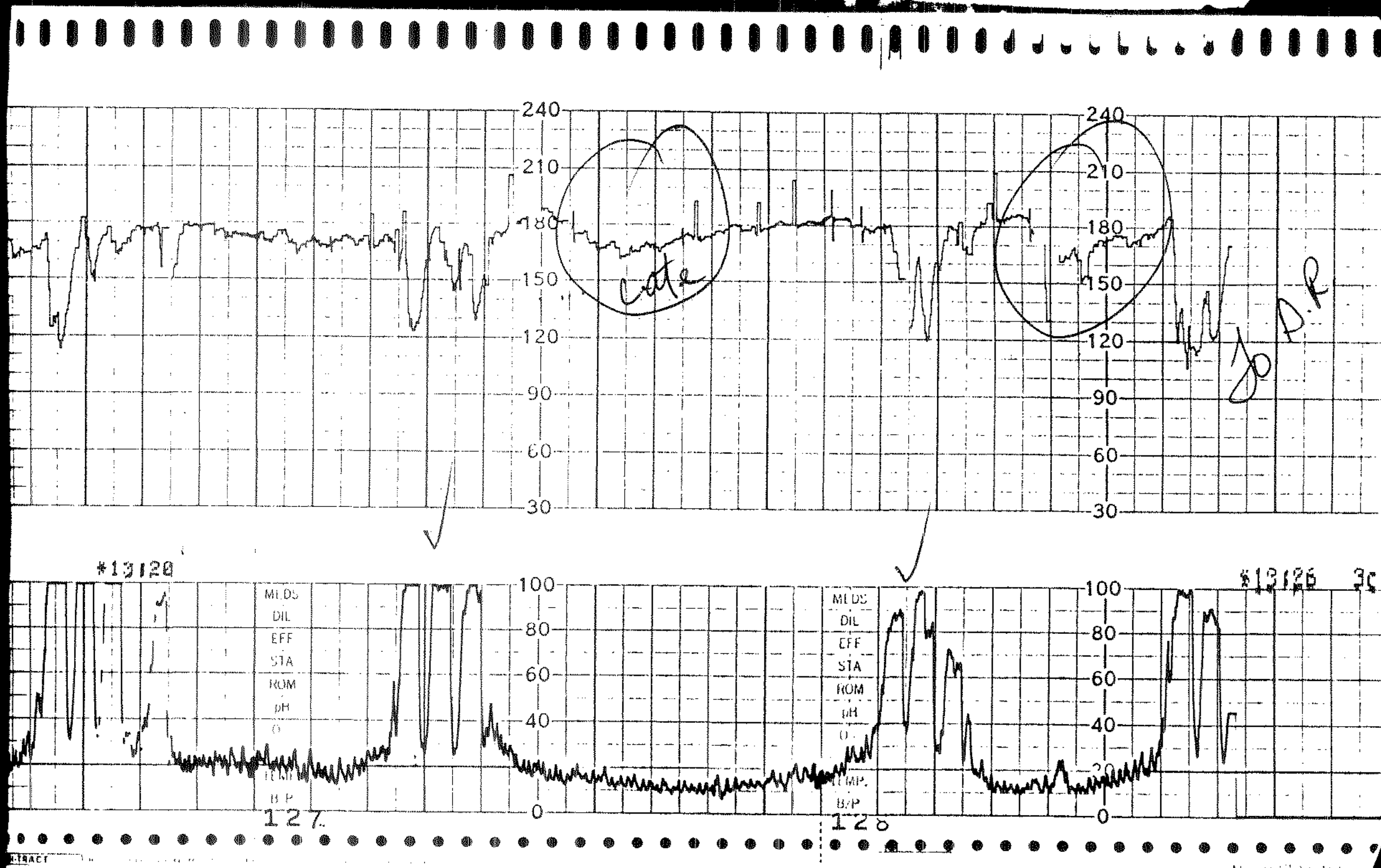
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U.S. on 2/1/88 = 10.5 wk = 25 Aug

U.S. on 4/18/88 = 22 wks = 16 Aug

Dr. in discharge summary says 42 wks ∴

One of the potential risk factors is macrosomia.

?, Dubowitz score

Agree monitor tracing has variability and no fetal stress - agree with Dr. [illegible] ∴ M. if forceps does NOT have to be done [illegible] with [illegible].

EC - Malcarney depo (1)

p13 Saw this pt as part of a group practice
p15 says he can not request the record - only the pt can
p37 pt had fever and was tachycardic (2° to fever)
p38 says fetal distress can cause tachycardia.
p39 says ultrasound estimate the fetal weight

p42 says he would write down estimate of large or small baby but not average baby. Need to know size of pelvis because this is more important

p44 says you have to look at purdel height on prenatal record to know what it is [but no prenatal record at hospital] Does not measure this at hospital.

p45 He says he did not expect as large a baby as was del.

p52 says he expected a 9-9½ lb baby (this is the 2nd time he said this in the depo)

p61 Says fetal head at time of forceps was at +2 station

p64 10 AM fetal tachycardia temp of 99.8 at 10:15 AM

p87 Says there was no molding per operative report

p87 Says anything +1 or +2 is low freq,

says 0 status mid freqs

p88 Says molding has nothing to do with freqs del

p85 says he can tell if molding is present

p104 Says he ~~flexed~~ the legs – No mention of extension at knee joints.

8/29/88 OUT at [illegible]
prolonged CST / [illegible] noted
variability [illegible] Dr Brown

8/31/88 Mary out false labor Dr. Brown

Admission Data base [illegible] 8/25/88?
8/15/88
LMP 10/12/87
neg CST

9/1/88 → 9/6/88 Del admission
low forceps shoulder extraction
preg 42 wk
meconium stain
shoulder dystocia
low forceps
shoulder extraction

Summary Fetal [illegible] of labor
+2 Station
Epidural
Forceps
RML
Reg. antibiotics for infection
post - placenta showed chorioamnionitis
heavy meconium
pit augmentation
Fetal tach
shoulder dystocia

Start 10 30 PM 9/1/88 FD 12 55 Del 9/2/88

1st Stage 14'-25" 2nd stage 55 min

(2)

active phase at 9⁰⁰ AM
FD at 1 PM

Apgar 0'-0⁵-3¹⁰

progress note
3-4 AM 8⁵⁰ AM
meconium staining
pit on

9⁰⁵ AM meconium staining ...
4-5 cm station 0

1⁰⁰ PM F.D. 0 station (small ant lip)
Temp 102.5

~~1005~~ 1:05 PM FD +1 pushing good
await OR

OA low forceps
shoulder dystocia / supra pubic pressure

Nursing Notes

4/1/85 11³⁰ meconium noted FH somewhat ...

4/2 1⁴⁰ AM FH ↓ 80-90 - repositioned - good recovery

(3)

5^{00} pm 1-2 cm 90% -2 sta

5^{45} start pit

1000 cc LR with 20 units pitocin
= 20 milli units / cc
per protocol

5^{30} ↑ 5 gtts/min = 5/60 × 20 = 1.4 mu/min

6^{15} ↓ pit hyperstim

6^{30} int. monitor applied

7^{05} O_2 started ? Why

Del Dictation

Del from +2 station
epidural
shoulder dystocia with no prolongation of
del

9/1/88 Reactive NST

OB data base to OR 1330
Del 1353

8^{50} Dr. Mollenaway in to see pt
12^{30} he " " is coming back to hosp

9

Fetal monitor

Begin 10/12 120 base line - good variability
accels noted

1:33 AM bradycardia

2:00 ↓ variability

3:00 ↓ variability

4:00 accels

5:14 pit started ↑ variability

10:00 Tachycardia good variability
some variables

Tach cont.

12:20 lates.

12:30 back off on pit to 10 min/min

12:40 late cont mother now febrile

1:00 pm PD

1:26 monitor ends!

Deep variables with contractions / prolapsed cord

1:47 FH recorded as stable

1:53 del

Baby record

Says Birth asphyxia
42 wk LGA

No McRoberts done

EDC 8/15/ by U.S.
Moth G V P00IV 0
Shoulder dystocia – took 5 minutes to del shoulder
nuchal cord – foul smelling fluid
intubated at birth

1st gases 6.87
CO_2 116
O_2 26.9
HCO_3 20.1
O_2 sat 24
BE -12.4

Prob severe asphyxia
Sepsis
meconium aspiration

New Born record Note marked molding

Post dates
meconium
pitocin
fetal tach to 180 ← Scalp PH & Del in view of meconium and tach and prob lates
flow intermittent lates
D/C monitor at 1 26 AM
to DR
Del at +2 station) must not use forceps
only TFH in DR +2 station with
153 del marked molding
shoulder dystocia
marked molding of head

Where are pre natal records

Wt at RBC 4750 grams.

Blood gase on arrival to RBC PH 6.87
PCO_2 116 PO_2 269
Birth asphyxia Dx
prob: Sepsis
meconium aspiration
S/P Full cardiac arrest
~~LOA~~