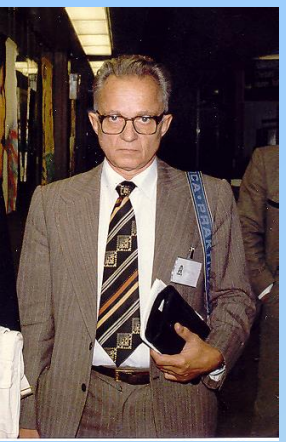

Această prezentare e dedicată Prof. Dr GeorgeLitarczek

When things are not going according to the routine…. A caesarian section case in court

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Routine…..

- **“A regular way of doing things in a particular order”**
- **“A boring state or situation in which things are always done the same way”**

(Merriam-Webster Dictionary)

Since this is a course on obstetrical anesthesia…

Some medico-legal problems are specific for this field of activity:

- We are taking care of two lives in the same time
- In most of the cases both “patients” are healthy
- There would always be a situation of injuring the fetus, with long-term medico-legal consequences
- We interfere with a physiological process (the labor) by starting an analgesia procedure
- Obligation to institute caesarian section (CS) delivery in no more than 30 minutes from the moment of decision (The American College of Obstetrics and Gynecology)

And some more specific points

- The informed consent has to specify:

  *arterial hypotension effect on the fetus

  *alternatives for analgesia

  (Sometimes the consent is obtained on the spot, when the parturient is not too alert and ready to understand small details)

- General anesthesia poses some peculiar problems (delayed gastric emptying, difficult intubation, accidental awareness)
- Positioning (danger of vena cava compression)
- The reality imposed by preeclampsia and eclampsia

The time came to present the case

Dar înainte de toate.....

- O întrebare pentru cei din sală:
- Când a fost ultima oară când aţi efectuat o anestezie peridurală ?

- Ieri?
- În ultima săptămână
- În ultima lună
- În ultimele şase luni
- Niciodată

It is 12 o’clock in the labor room

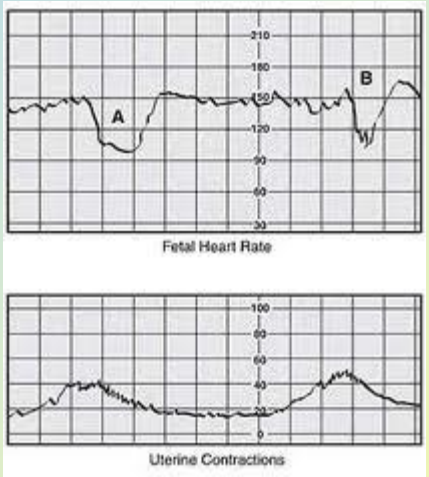
- A 37-old patient, in her 37th week of a third pregnancy, the first two under epidural, no difficulties, no incidents
- 4 cm cervical dilatation, contractions every 15 minutes
- Anesthesiologist obtaining the informed consent, patient seems to understand all the explained details

Ten minutes later…

- Oxygen and fluids are delivered
- Patient in lateral position
- A 17G epidural needle is used , L2-3
- Loss of resistance identification of the space, aspiration through needle
- A multi-orifice epi- catheter is inserted (5 cm into the space)
- Test dose through catheter: 3 ml bupivacaine 0.25% and adrenaline 1/200,000- no change in BP and HR after 3 minutes
- 10 ml bupivacaine 0.125% injected through catheter
- 10 minutes later analgetic level T9
- Continuous infusion of bupi- 0.0625% + fentanyl 2 micro/ ml, 10 ml per hour

Some more 75 minutes passed

- No labor progress
- Signs of fetal distress
- Fetal scalp blood : pH 7.19, lactate 8 mmol/l



The indication for CS is clear

- The hour is 14.00 Patient brought to the OR
- 10 ml more of bupivacaine 0.25% is injected through the catheter, analgetic level T6
- Abdominal incision for CS
- 10 minutes later patient complain of difficulty in breathing followed by loss of conscience and respiratory arrest
- Last BP : 84/50

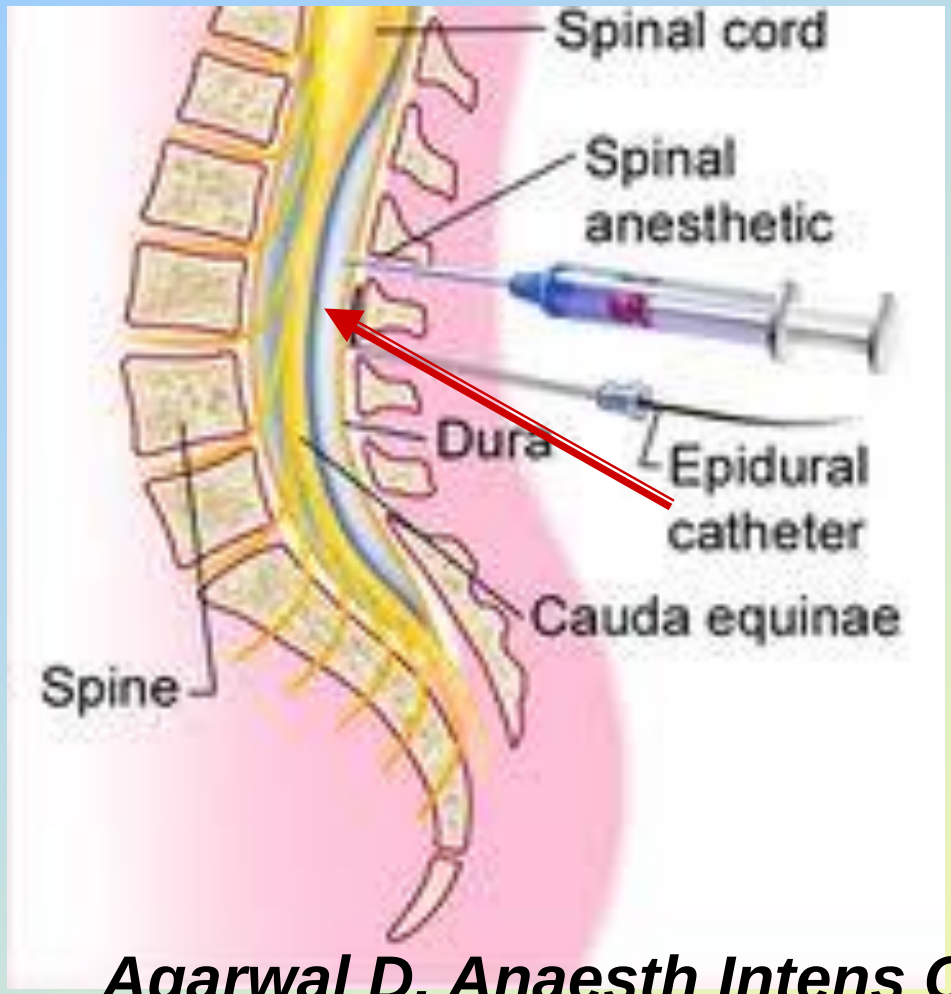
Now we have a real problem

- The anesthesiologist performed a quick tracheal intubation and mechanical ventilation (after Sellick maneuver)
- Isoflurane in low dose is administered
- Phenylephrine in infusion till BP is 115/60
- Urinary output 50 ml in 25 minutes

The happy end

- Baby delivered, Apgar score at 1 minute 7, at five minutes 9
- Patient ventilated two more hours
- Fully recuperated from the cardiovascular and respiratory point of vu
- 12 hour-surveillance in the ICU

So, what did it happen?
A dural puncture of the epi-catheter!



- It could happen – very seldom
- In most cases it happens after days of normal functionality
- If a normal dose is administered it could lead to “total spinal”

Agarwal D. Anaesth Intens Care 2010;38, nr 1: accidental subdural block in 0.82% of epidural analgesia

Hartrick CT et al Anesth Analg 1985;64:175
Jaeger JM, Madsen ML Anesthesiology 1997;87:718

- **Two cases in which the epidural catheter migrated into the subdural space after four days of normal functionality**
- **Possible explanations:**

***vigorous movements**

***a pseudo-perforation, actually a high block produced by accumulation of more than one dose**

***a very slow migration with perforation of dura**

Dural puncture happens, with or without catheter….

- ***Singh S et al***

The ScientificWorld Journal 2009

- **40,129 patients in OB**
- **765 complications**
- **300 accidental dural puncture**
- **Residents- 1.65%**

  Specialists – 0.92%

  (p < 0.01)

- ***Jadon A et al***

Indian J Anaesth 2009

The general incidence of dural puncture : 0.4-0.6% of all epidural catheter insertions

Jadon A et al

Indian J Anaesth. 2009

Incidence of dural puncture

- **Total number of epidurals 885**
- **Inadvertent dural puncture 34**
- **Incidence 3.8%**

Let’s go back to “our” patient

What the anesthesiologist did after the incident

- Explained the family (outside the OR) the incident
- Emphasized the fact that both mother and child were OK
- When the patient awoke a full explanation was offered to her
- A full description of the incident was put in the patient's chart

But, three months later…….

- A complain was sent by the patient's advocate to the hospital
- The letter included:

*a request for financial compensation

*a threatening regarding a court complain

By the way, nothing special these days….

Beckmann LA Anaesth Intens Care 2005

- **Studied the medico-legal climate among Australian and New Zeelandese anesthesiologists**

<u>Results</u>

***34% had personal experience of litigation**

***74% expected a similar thing during their professional career**

Obstetric anesthesia was the most common subspecialty of practice TO BE CEASED by professionals due to medico-legal concerns

3% quit, 13% intend to quit!!!!

What the plaintiff's letter included?

- The parturient was not explained about the risk of an epidural analgesia procedure for labor
- The epidural analgesia produced a prolongation of the 2nd stage of labor
- No second-dose test was done before the epidural injection for CS
- Patient still stressed because of the panics produced by the respiratory arrest
- She could not nurse her child
- Nightmares, hallucinations, lack of sleep

More than this….

- **The plaintiff's advocate brought a quotation from the document published by the American College of Obstetricians and Gynecologists (2000):**

" Epidural analgesia for labor should be instituted after a cervix dilatation of at least 5 cm"

Does anybody has an answer in the defense of the anesthesiologist?

The parturient was not explained about the risk of an epidural analgesia procedure for labor

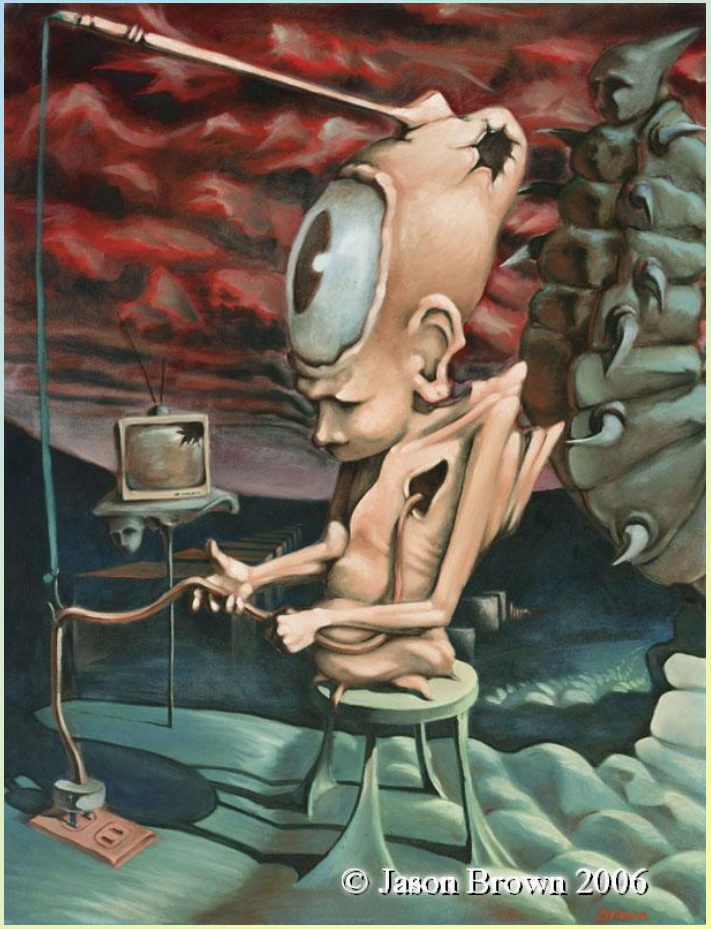
The epidural analgesia produced a prolongation of the 2nd stage of labor

No second-dose test was done before the epidural injection for CS

A very detailed letter was sent by the hospital Risk Management Unit

Understanding

Physician must be sure that the patient understood the explanations, including strict medical some terms
Recall does not ALWAYS accurately reflects understanding!



BUT…..

The famous Patterson vs VanWiel case (1965)

- The anesthesiologist proposed Ms P. epidural analgesia for labor, explaining that “some kind of risk could be involved”
- The anesthesiologist: *“she understood the nature of the answers and there was no impairment to her ability to consent to anethetic”*
- The patient had a cardiac arrest for one minute, successful resuscitation for mother and baby
- She suited the anesthesiologist for failure to obtain informed consent for epidural

The court:

***patient’s consent was adequate**

***staff testimony proved the conversation**

Prolongation of the 2nd stage of labor

- ***Chestnut D et al***

Anesthesiology 1994

Parturients divided into less or more than 5 cm dilatation –epi-analgesia

Results:

***no higher interval to complete dilatation**

***no increase in malposition**

***no increase in CS rate or instrumental vaginal delivery**

- ***Luxman D et al***

Int J Obst Anesth 1998

Parturients divided between those with less or more than 4 cm dilatation

Results:

***no difference in length of labor**

More than this....

- **Segal S in "Evidence-based practice of Anesthesiology", Saunders 2004 pp 395:**
- **True, the suggestion of the ACOG is to perform epidural anesthesia after 5 cm dilatation**

BUT

"…Epidural analgesia should be provided on demand…"

"Maternal request is a sufficient medical indication for pain relief during labor and …."epidural is usually the preferred method" (ACOG Committee Opinion nr 231, 2000)

“No second-dose test was done before the epidural injection for CS”

- **The defense attorney asked the opinion of one of the experts in this subject, this time from Holland**

(……Lirk P.,Brit J Anaesth 2012)

Here is an except form Dr Lirk’s message:

“I am not aware of guidelines stipulating an obligatory test-dose before top-up. I did not find this mentioned in the Dutch Guidelines (www.cbo.nl).....

The ASA guidelines similarly do not list an obligation to chek before top-up”

More about the test-dose

Davies JM Anesthesiology 2009

- ***"The use of a test dose is recommended for early detection of accidental intrathecal injection, but……"***
- ***"Delays in recognizing and treating cardiorespiratory collpse secondary to a high block as well as inadequate resuscitation equipment continue to result in maternal injury"***

And the last one…

Mishra P et al M E J Anesth 2009

"Subarachnoid placement cannot be ruled out only by a standard test dose unless the anesthesiologist Is very careful about sensory block level"

- **Their explanation on catheter migration:**

"*sub-athmospheric pressure in the epidural space is exaggerated by movement and respiration and gripping action by ligamentum flavum propelling the catheter inwards as patients straighten their back from the flexed position"*

The case is now in court

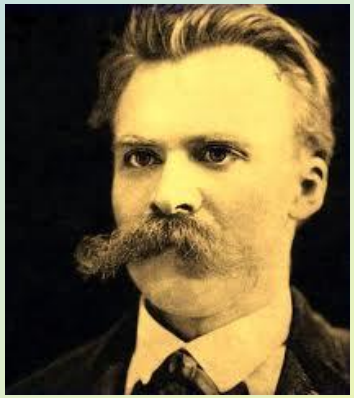
- The defense demanded a psychiatric evaluation. There are some data that the patient got some psychiatric treatment before giving birth last time
- The plaintiff pretended that the husband was not permitted to be with his wife when the anesthesiologist interviewed her
- The judge asked for a third opinion (a neutral expert opinion)
- See you in a couple of years, after the sentence……..

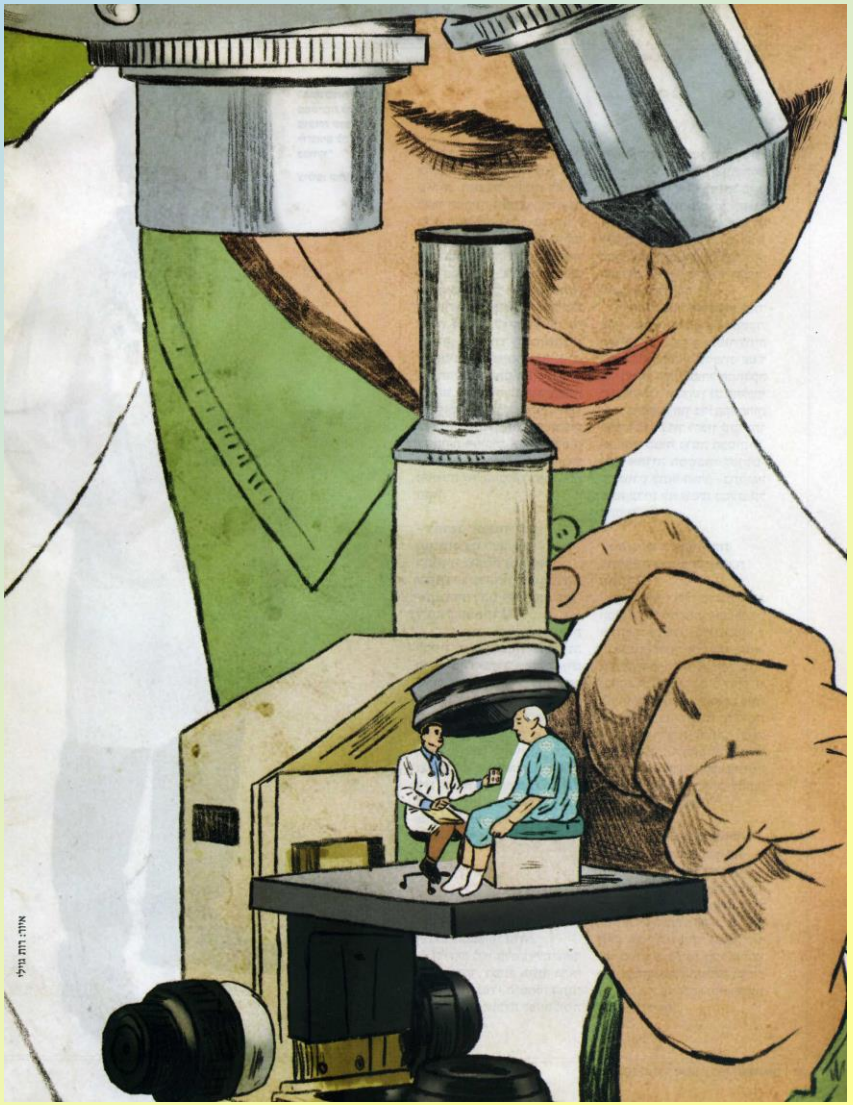
Any lesson to take home?

- Even a correct management does not always bring good results
- Even when a quick and proper intervention does not prevent a legal suit
- Even a nice and friendly approach to patient and family does not always prevent a complain

“There are no facts, only interpretation”

F. Nietzsche





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Deadline for proposals to the scientific program: February 1st, 2016

Proposals to be addressed to: gurman@bgu.ac.il

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Proposals to be addressed to : Secretary@ESCTAIC.org

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