

Chapter Ten

Self-fulfilling prophesy

This high rate of morbidity and mortality created a false association between normal birth and bad outcomes, which reinforced the idea that normal childbirth itself was dangerous – so dangerous that women died *even* when delivered by doctors and surrounded by the gleaming stainless steel and surgical sterility of an operating room. In the minds of both the lay public and the medical profession, this was interpreted as indisputable proof that normal childbirth was inherently pathological.

Ironically, the frequency and severity of complications associated with medical interventions fueled the campaign to further medicalize childbirth, a move that the public and the medical profession both saw as a modern improvement. Without realizing it, obstetrics had become *bound by the very laws that governed the error it was trying to correct*, that is, efforts by obstetricians to make childbirth safer were themselves adding unnatural risks and resulting in unnecessary complications. As with the hand-washing issue of the 1840s, many in the obstetrical profession of the early 20th century also dismissed facts that did not match up with their assumptions.

An Inconvenient Truth: Maternal-infant mortality in the 1920 and 1930s is best reviewed in the words of the obstetricians and public health official of the era:

“...in 1921 the maternal death rate for our country was higher than that of every foreign country for which we have statistics, except that of Belgium and Chile.”

[Dr Hardin, M.D, 1925-A; p.347]

“Maternal mortality in [our] country when compared with certain other countries, notable England, Wales and Sweden is, according to Howard, ‘appallingly high and probably unequaled in modern times in any civilized country’.

These rates ...of 88.48 [maternal deaths] per 10,000 births are on a par with those of Sweden **110 years ago**; are 75% *higher* than those of England and Wales *60 years ago*; are 120% higher than England and Wales in 1911-1915 and *exceed* the rates of England and Wales for 1918 by nearly 75% for puerperal fever and 150% for all other afflictions of the puerperal state combined.”

[Dr. Ziegler, M.D. 1922-A]

“The *International Year Book of Care and Protection of Children* gives emphasis to the fact that the United States has still a higher rate of maternal mortality than any other of the principal countries of the world Pregnancy causes more deaths among women ages 15-40 years of age than any other disease except tuberculosis.

“Twenty five thousand women die in the United States every year from direct and indirect effects of pregnancy and labor. Three to five percent of all children die during delivery and thousands of them are crippled.”

[1925-A .p. 350]

Testimony on the efficacy of midwifery care was presented in 1931 to the *White House Conference on Child Health and Protection by the Committee on Prenatal and Maternal Care*. Dr.

Reed concluded, in his 1932 report, that:

“...untrained midwives approach and *trained midwives surpass* the record of physicians in normal deliveries has been ascribed to several factors. Chief among these is the fact that the circumstances of modern practice induce many physicians to employ procedures which are calculated to hasten delivery, but which sometimes result in harm to mother and child.

On her part, the midwife is not permitted to and does not employ such procedures. She waits patiently and lets nature take its course.” [emphasis in original]

In 1932, Dr. Louis Dublin, a physician-statistician who was president of the American Public Health Association and a Third Vice-President for the Metropolitan Life Insurance Company, reported that the lack of access to physiological care as provided by professional midwives was estimated to result in approximately 70,000 preventable maternal-infant deaths every year. This was reported by Dr. Alan Guttmacher (founder of Guttmacher Institute, NYC) in his 1937 book:

“We have had a small but convincing demonstration by the Frontier Nursing Service of Kentucky of what the well-trained midwife can do in America. The midwives travel from case to case on horseback through the isolated mountainous regions of the State. There is a hospital at a central point, with a well-trained obstetrician in charge, and the very complicated cases are transferred to it for delivery” [Dr. Dublin, MD, 1032].

“In their first report they stated that they have delivered over 1000 women with only two deaths -- one from heart disease, the other from kidney disease. During 1931 there were 400 deliveries with no deaths. [as reported by Dr. Guttmacher, 1937-A, p.136]

“The study shows conclusively that the type of service rendered by the Frontier Nurses safeguards the life of the mother and babe. If such service were available to the women of the country generally, there would be a **savings of 10,000 mothers’ lives** a year in the U.S., there would be **30,000 less stillbirths and 30,000 more children alive** at the end of the first month of life.

“What are the advantages of such a system? It makes it economically possible for each woman to obtain expert delivery care, because an expert midwife is less expensive than an expert obstetrician. Midwives have small practices and time to wait; they are expected to wait; this is what they are paid for and there they are in no hurry to terminate labor by ill-advised operative haste.

“Though we cannot make an exact comparison between the maternal mortality in the United States and that in European countries, we can at least make a rough comparison. All who have studied the problem agree that the rate for Holland, Norway, Sweden, Denmark is far superior to our own. Why? ... it must be due to a difference in the patients themselves and differences in the way that pregnancy and labor are conducted in the two regions.”

“What about the conduct of labor in the two regions? Here is where the major differences

lie. In the first place, ... at least 10 percent of labors in this country are terminated by operation. In the New York Report 20 percent of the deliveries were operative, with a death rate of more than 1 in each 100 of the operated, and 1 in 500 of those who delivered spontaneously. ... Fifty-one percent of all the maternal death in Scotland occurred in the 24 percent in which the labor was operative. Let us compare the operative rates of these relatively dangerous countries [USA, Scotland] with those of the countries which are safer.

“In Sweden the interference rate is 3.2 percent, in Denmark it is 4.5, while in Holland it is under 1 percent.

What is responsible for this vast difference in operative rates? ...

Analgesics and anesthetics, which unquestionably retard labor and increase the necessity for operative interference, are almost never used by them in normal cases; and more than 90 percent of their deliveries are done by midwives unassisted. And midwives are trained to look upon **birth as a natural function which rarely requires artificial aid from steel or brawn.**

[Guttmacher; 1937-A, p. 133- 136; *emphasis added*]

The very next year (1933), the New York Academy of Medicine published a study of maternal deaths in the patients of physicians. Out of 2,041 deaths, 1360 or two-thirds were identified as preventable. The authors noted that death rates for mothers had not improved since 1913, which was when physiological management by midwives was eliminated physicians. They noted that newborn deaths from birth injuries had actually increased and that hospital care brought no advantages to either mothers or babies. Doctors had to admit that mothers were safer at home with a midwife. Medicalized labor and birth as a surgical procedure had become the norm but the assumption that this would dramatically improve outcomes was not borne out by the facts.

The authors of the NY Academy of Medicine’s study noted that many births were attended by physicians who were so poorly trained they simply didn’t know what they were doing. Some missed obvious signs of hemorrhagic shock and other treatable conditions. Others violated basic antiseptic standards or damaged the mother’s birth canal with the improper use of forceps, which lead to fatal infections, uterine prolapse or incontinence. Midwives, who did not rely on the use of instrument, had superior outcomes as compared with physicians.

In 1934, the Committee on Maternal Welfare of the Philadelphia County Medical Society expressed concern that the rate of deaths of infants from birth injuries had **increased 62%** from **1920 to 1929**. This was largely due to drugs and anesthesia given to the mother that depressed respirations at birth, and to the use of fundal pressure in combination with forceps, especially what was termed “high” forceps. High forceps are no longer used, as it is a very dangerous technique that mean applying forceps to the baby’s head when it is still high in the pelvis (at or above the inlet of the pelvis). Sometimes physicians even inserted forceps thru a partially dilated cervix and up into the uterus in an attempt to complete the dilation of the cervix by using downward traction on the fetal head as a dilating wedge. This and other dubious practices were soundly condemned in textbooks published after 1913 by DeLee, who warned, “the accoucheur must be constantly aware of their murderous possibilities” [page 1018, Principles and Practices of Obstetrics, DeLee, 4th edition]

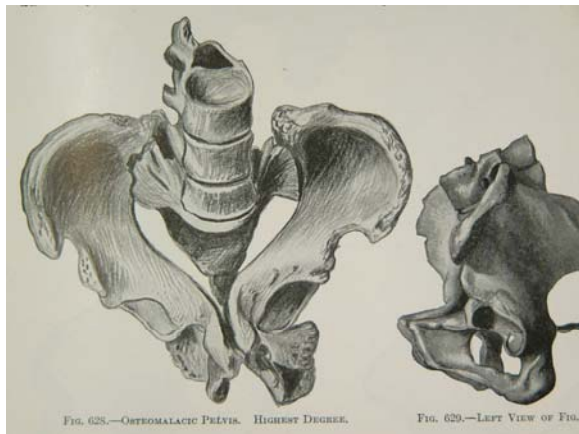
To Force or Not to Force(ps)

Here is Dr. DeLee's definition of forceps as an instrument to facilitate delivery:

“The forceps of obstetrics is an instrument designed to extract the fetus by the head from the maternal passages, without injury to it or to the mother. As soon as the right of either is encroached upon, the instrument ceases to be the forceps of obstetrics, but becomes simply an instrument of extraction, similar to the craniotomy forceps, and not so good. [ibid, page 1013]

DeLee makes the important distinction that forceps are instruments of *traction* and not for *rotation*. He stressed that they must only be used if the mother's pelvis large enough and shaped appropriately for the baby to pass through, and stressing that forceps cannot/should not be used for women with rickets or other pelvic deformities. “Contracted pelvis is really a contraindication for forceps.” [ibid, p. 1018]

Fig. ??? Contracted Pelvis -- deformed by severe rickets



The general public often thinks about forceps in the reverse, believing wrongly that the purpose of forceps is to deliver a woman with a contracted pelvis. In truth, only inducing labor when the baby is extremely premature or performing Cesarean surgery at term can rescue a baby from a deformed pelvis. Forceps are only able to make up for inadequate pushing efforts by the uterus and or the mother.

Dr. DeLee lists 5 conditions for the use of forceps in the 4th edition of his textbook. These include a pelvis

large enough to permit vaginal delivery; the cervix must be effaced and dilated; the membranes must be ruptured and out of the way; the head must be engaged [zero or +1 station] and the baby must be alive. Acknowledging that forceps are not able to overcome the lack of space resulting from a contracted or too-small pelvis, the very fact that forceps were used successfully establishes that the mother's pelvic was adequate for a spontaneous birth.

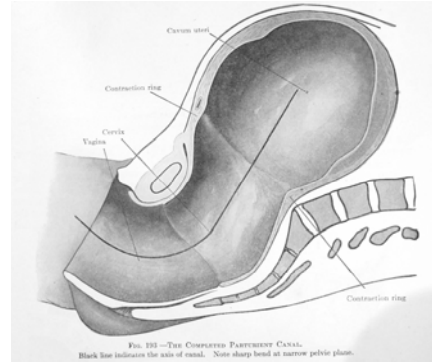
The Anatomy of Normal Childbearing & its relationship with Obstetrical Forceps

What most people don't appreciate is how hard it is to use any mechanical force in the “J” shaped birth canal of a childbearing woman. Babies don't come straight out, like a train coming out of a tunnel, which means you can't just pull them out with the medical equivalent of salad tongs or a toilet plunger. Learning how to artificially circumvent that 60-degree angle, even with the “**artificial aid of steel or brawn**” is formidable for the obstetrician and damaging to maternal and fetal tissue.

The childbearing pelvis – that is, the internal bones that form the passage the baby must pass through -- is a hollow space shaped like the lower-case letter “j”. In anatomical terms, this is called the parturient axis, officially named the “curve of Carus” by anatomy professor Gustav Carus in 1789.

Black line traces the “J” of birth canal

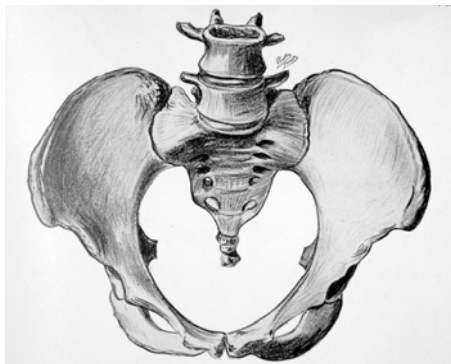
People erroneously think of the birth canal as a straight chute (like a lower-case ‘I’), going straight down thru the lower half of the mother’s body. In other words, if the mother was lying down and you were watching from the side, people *wrongly* assume that her baby would pass through the pelvis and out of her body the same way a train comes out of a tunnel – a straight cylindrical object passing thru a straight cylindrical container. But this is *not* anatomically accurate for our human anatomy.



Imagine instead that you are looking at an upright pregnant woman from the side as she labors and gives birth while still in an upright posture. If you had x-ray vision, you would see that the long stem of the ‘j’ tracks with the mother’s lower spine and the curved foot of the letter bends forward with the lower half of the birth canal. What this means is the pelvic outlet -- last 1/3 of the journey bends forward at a 60-degree angle.

This requires the baby to go around a ‘corner’ (an acute angle). If the mother is standing, her baby will emerge into the world going forward into her waiting hands. This is very different from going straight down towards the floor, where it would be hard for her to reach and might be injured as it fell to the ground. Not doubt “frontal delivery” is an important survival characteristic, as 99.99% of human history predates hospital obstetrics, which meant it was the mother herself who was responsible for ‘catching’ her baby.

Were you to look down into the pelvis from the top, you would notice that the big triangle-shaped bone at the very end of the spine -- the sacrum and coccyx -- encroaches into the pelvic outlet about half an inch. In this regard, the pelvis is like a hollow bowl with smooth walls on three sides but slightly bent in on the fourth side, making it impossible for anything that is the same size and shape as its upper circumference to pass through and out the bottom without seriously banging into this encroaching bony mass and perhaps being stopped by it.



However, in the second stage of labor, after the baby is squeezed out of the uterus thru the cervix and begins its trek down into the birth canal, you would see something remarkable. The place where sacrum affixes to the lower end of the spine is itself a joint – that is, motion is technically possible – and the effects of pregnancy hormones makes this and other pelvic joints slightly movable. In addition, these hormones make the cartilage that holds the two sides of the pubic bone together. This pelvic joint also becomes

unusually elastic. Thus the pelvic joints loosen somewhat and widen both front to back and side to side, giving the baby an extra 1-2 centimeters of room to negotiate its passage into the world.

Of course, this nifty trick **ONLY** works if the mother is standing, squatting or is in some other position that makes ‘right use’ of gravity and allows her sacrum to move back out of the way (similar to the way a pet door is pressed open by the dog or cat as it passes through). However, if the mother is bearing her own weight on her lower back, such as lying down with her legs held up in stirrups, the sacrum cannot move out of the way, and sometimes the trap door gets stuck in the closed position. When a woman tries to give birth lying down, not only must gravity be defied in order to push the baby uphill and around a corner, but she must do this with the doorway partially blocked, reducing the aperture of the pelvis by as much as a third.

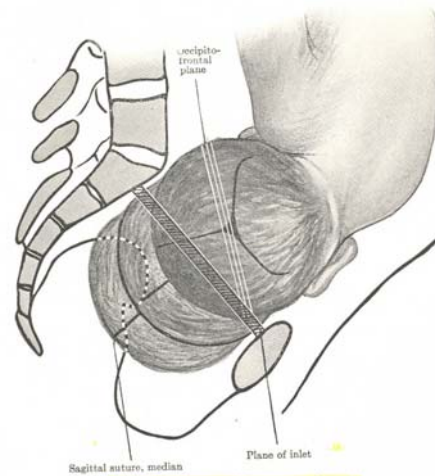
If the baby is small or the mother’s pelvis is big, the forces of labor and extra effort on her part can overcome this impediment. However, for a mother who lying down, the baby will still have to be pushed uphill and will emerge in an upward angle (towards the ceiling). This is obviously a lot harder and may require the use of forceps or vacuum if the mother has had anesthesia. Unfortunately, if the reverse is true (a relatively big baby and/or small pelvis) the baby can get stuck – the ‘obstructed labor’ of Old World fame but with a New World reason. In modern life, this would require a forceps delivery or a Cesarean.

Figure #??

The triangular **sacrum** (at left), the **pubic bone** (at right) and the relationship of the **baby's head** to both bones as it travels down thru the **birth canal**.

The **baby's head** makes a **60 degree arc** down thru the birth canal and rotates under the **pubic bone**.

When the mother is upright, the baby is **born going forward**, into the hands of the mother or birth attendant.



As the baby’s head descends deeper into the birth canal, the sacrum and coccyx are pressed back out of the way, the same way a small pet door is bumped back out of the way when a dog or cat passes thru them.

In the ancient world or for women in poor countries without access to obstetrical services, cephalopelvic dystocia (CPD) eventually results in the death of the baby and may cause the mother to develop a fistula between her bladder or rectum or other debilitating forms of incontinence due to obstructed labor or associated with the use of episiotomy and forceps. It should be noted however, that CPD caused by positioning the mother on her back or other “wrong uses of gravity” in modern societies and the damage it may cause to the baby or the mother’s pelvic floor, are iatrogenic in origin and therefore preventable complications.

The everyday miracle of normal biology, in combination with the right use of gravity, gives the baby an *extra couple of centimeters* of room to negotiate its passage into the world. These ‘silly little centimeters’ are frequently the difference between a safe and spontaneous normal birth and one that requires the use of artificial, forcible or mechanical interventions (such as forceps) or Cesarean section.

Right and Wrong Use of Gravity ~ “There is no alibi for not knowing what is known”

J. Rovinsky, MD -- foreword of Davis Obstetrics (1966)

Even though historic birth attendants and traditional midwives had no formal training in the science-based study of anatomy as we think of it today, they had ample opportunity to observe that childbearing women, when left to their own devices, almost universally chose to be mobile during labor and to assume some form of upright position during the birth of the baby. Midwives also noted that, on those rare occasions that women chose or circumstances required them to be lying down, the labor was much slower and the mother had to push longer and harder to get the baby out. Sometimes she wasn’t able to deliver unless or until she got back up into a gravity-friendly position. For a laboring mother, lying down is an anti-gravitational position that can reduce the pelvic outlet by almost a third, while simultaneously requiring the mother to push her baby up hill around a 60-degree bend. It’s no surprise that it is harder and takes longer and sometimes doesn’t work at all.



FIG. 485.—EXAGGERATED LITHOTOMY POSITION.

For a laboring mother, lying down is an anti-gravitational position that can reduce the pelvic size by almost *a third*, while simultaneously requiring the mother to push her baby up hill. Not only must her efforts defy gravity, but in this unnatural position the passage is partially blocked. When the mother is bearing her own weight on her lower spine, such as lying on her back with her legs held up by the nurse or put in obstetrical stirrups, the aperture of her pelvis is reduced, as the sacrum cannot move back out of the baby’s way.

If the baby is small or the mother’s pelvis is big, the normal forces of labor and extra effort by the mother can overcome this impediment. However, when the mother is lying on her back, the baby must still head upward, towards the ceiling. Obviously this is a lot harder and takes a lot longer than it would if gravity were being used to the benefit of mother and baby.

The Parturient Axis - giving birth *without* the added benefit of gravity, while mother lying on her back.



The baby must first negotiate its way under the **pubic bone** by rotating its head from sideways(head position #1) to an **up / down orientation** (#2)

Then the **crown** of the baby's head **spins under the public arch** (#2) will be **born pointing up, towards the ceiling.** (#3)

Head position #4 is **after** the baby's head has already delivered upward, restitutes as the body rotates to deliver the shoulders

Unfortunately, if the baby is unusually *big* or the mother's pelvis unusually *small*, the baby can get stuck. This describes what was historically known as 'obstructed labor'. After 4 to 6 days of useless labor, the baby would eventually die and very often the mother would develop a fistula (opening) between her vaginal and her bladder or rectum – a horrific life-long disability. In the modern world, a Cesarean section would be done after some hours of good pushing without any subsequent progress.

Obstetrics and the Hard Job of Fooling Mother Nature

One way to assist 'faulty nature' (the natural physiological effects of anti-gravitational positions for second stage) is to perform an episiotomy. Much of obstetrics is the story of how hard it is to fool with 'Mother Nature'. The history of obstetrical forceps is the record of the various ways the medical profession has tried to "work around" the problems caused by that 60-degree angle of the parturient axis. When

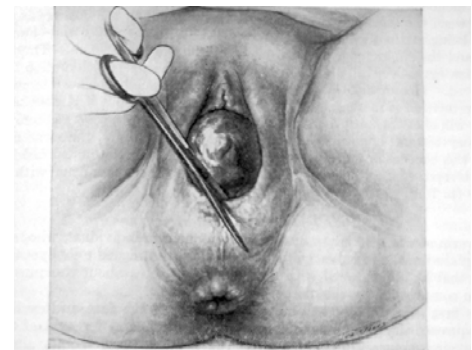


FIG. 323.—EPISIOTOMY INCISING SKIN, FOURCHET, AND URO-GENITAL SEPTUM. Shows the fascia over the left pillar of the levator ani, which may or may not be incised, depending on the size of the child and the distensibility of the tissues.

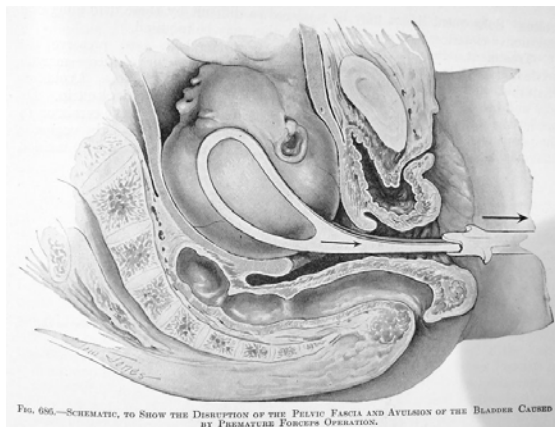


FIG. 686.—SCHEMATIC TO SHOW THE DISRUPTION OF THE PELVIC FASCIA AND AVULSION OF THE BLADDER CAUSED BY PREMATURE FORCEPS OPERATION.

forceps are being used, the anti-

gravitational position of the mother, who must be laying on her back with her legs in stirrups, works directly against the natural and necessary mobility of the childbearing pelvis. It is hard to get an undamaged baby out of the unconscious, anesthetized (or numbed) body of a laboring woman who can no longer push effectively or get her baby out by her own efforts.

Hard as it is for a mother lying on her back to push her baby uphill against gravity, it is even more difficult for the doctor to pull on the fragile skull of an unborn baby “from below”. He must stand on the floor in front of her pelvis and pull with enough force to get the baby to go around the corner and emerge at an uphill angle (baby’s head pointing towards the ceiling).

An instrument called a ‘Bill’s axis traction handle’ was invented to transfer some of the force from the lateral pull of the handles, so the direction of the energy force would be diagonally upward, as if the obstetrician was suspended from the ceiling.

But no matter how clever the mechanical devices, obstetrical forceps still depended on **the use of force** and resulted in many ‘adverse events’. The maternal-infant outcome statistics reflected a high percentage of poor outcomes that were the result of extracting heavily narcotized babies out of the inert bodies of their anesthetized mothers.

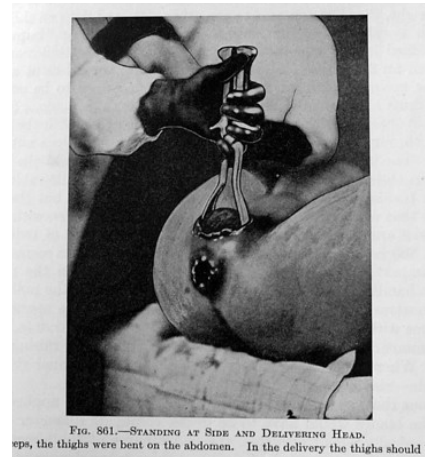


FIG. 861.—STANDING AT SIDE AND DELIVERING HEAD. In the delivery the thighs should be bent on the abdomen.

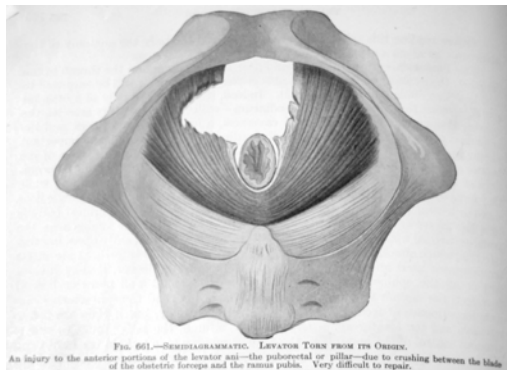


FIG. 661.—SEMI-DIAGRAMMATIC. LEVATOR TORN FROM ITS ORIGIN. An injury to the anterior portion of the levator ani—the puborectal or pillar—due to crushing between the blade of the obstetric forceps and the ramus pubis. Very difficult to repair.

Fig. 661: Original caption from 1924 textbook describing the damage caused by the use of forceps:.

Levator Torn from its Origin.

“An injurydue to crushing between the blade of the obstetrical forceps.... Very difficult to repair.”