Cesarean Section - What Happens During Surgery

If the mother is to be conscious, an anesthesiologist will inject spinal or epidural anesthesia (usually fentanyl, a derivative from the opium family; and bupivicane, a derivative from the cocaine family) into the mother's back or epidural space (between the vertebra) via a thin catheter. Vomiting and/or dry heaves may occur as a reaction from the narcotics, as may uncontrollable shivering. A catheter is inserted into her urethra to allow urine to be eliminated.

In a sterile operating room, with a surgical team in "scrubs", masks, hair net, and gloves, preparation continues with strapping the mother's arms, crucifix-style, to an operating table. A nurse starts an IV with fluid and/or narcotics (usually demerol or stadol, a derivative of the morphine family), and an anesthesiologist applies oxygen and/or general anesthesia. A curtain is hung between the mother and her lower body to prevent her from seeing the surgery. Her belly is laid bare and she is completely naked, save for a hospital gown that is now pulled up to her neck or just below her breasts. Her belly and pubic area are rubbed with a 10% Povidone-Iodine solution (a.k.a. "Betadine") and her pubic hair is shaved. A sticky plastic drape is laid over her belly to stabilize her skin.

A horizontal incision is made with a scalpel, just above the pubic bone where the pubic hair begins, slicing through five layers of skin, tissue, and muscle: 1) the derma, or outer layer of skin and 2) fat; 3) the fascia, the tough, thin layer that supports the muscle; 4) the rectus muscle, which is manually separated with the fingers down to the pubic bone; and 5) the peritoneum, the shiny layer that encases the entire abdominal cavity. Suction is applied to absorb excess blood. A metal "spatula" known as a bladder blade is inserted to pull back and protect the bladder. Another "spatula" known as a rectractor is inserted at the top of the incision and/or on the sides, and are pulled back tightly to enlarge the incision, usually by two surgical assistants. Another incision is made into a sixth layer, the uterine lining, taking care not to cut the bladder, causing infection. Suction is again applied. Sponges and gauze are used to blot blood and fluid pooling in the abdominal cavity.

The mother may feel intense pulling and tugging to dislodge the baby's head from the pelvis. If vertex, the baby is pulled by the neck backwards out of the pelvis and then by the head through the incision in the uterus. The baby's nose and mouth are then suctioned to remove any amniotic fluid, mucous and/or meconium from the airway. The remainder of the baby's body is pulled from the mother's uterus through the abdominal incision, taking care not to tear the uterine or abdominal incision wider.

The umbilicus is clamped and cut immediately and the child may be held up over the curtain for the mother to see before being taken to a warm table to be suctioned further, toweled off, footprinted, weighed, measured, tagged and wrapped in a blanket and hat. Pitocin and/or

methergine is immediately injected into the mother's IV to begin contractions of the uterus to aid in the removal of the placenta. The remaining umbilicus is then pulled and the placenta is scraped off the uterine wall by hand to tear away the placenta from the uterine wall. The placenta is removed and examined to ensure all pieces are intact. The uterus is then removed from the mother's body and placed on her stomach for the incision repair. One set of stitches is made in the wall of the uterus, then a second layer of stitches in the outer lining. The uterus is then pushed back through the abdominal incision and into the mother's body. Sponges and gauze are counted to ensure none are left in the surgical cavity. The abdominal cavity is irrigated with water to flush out bacteria (to prevent infection) and check for bleeding.

Approximately 1000cc of blood is lost during the procedure. A layer of absorbable stitches are made in the rectus muscle, another layer of sutures are made in the fascia. The plastic drape is pulled away from around the abdominal incision and another set of absorbable sutures or staples may be used for the outer layer, usually removed three to five days later by a nurse. A second dose of demerol may be injected into the mother's IV to aid in relaxation as she is wheeled into recovery to hold her child when the physician allows it. Again, the mother may experience dry heaves and/or uncontrollable shivering and chills.

Within 24 hours, the urine catheter is removed and she is allowed to stand and perhaps walk to the bathroom or shower. Within three to five days she is discharged and permitted to return home, with a check of her incision in two weeks. If infection or seeping occurs, antibiotics may be prescribed. Incision pain may occur constantly or intermittently for up to a year. Feeling may be regained on the incision site, or nerve damage may result in permanent lack of sensation. Her ability to birth normally in the future may be called into question.

For video of a cesarean section, contact The Learning Channel at (800) 544-1717 and request a copy of the video, "The Operation: Cesarean Section."

Photos courtesy of Sabrina Cuddy, Photographer Mike Cuddy