
Procedures in Family Practice

Lateral Sims' Deliveries: A New Application for an Old Technique

C. Richard Kirkwood, MD, and Linda Clark, MD
Seattle, Washington

The left lateral Sims' position is a time-honored but neglected childbirth position. Increasing use of bed deliveries as a part of natural childbirth in birthing rooms makes side deliveries attractive, since the perineum is better visualized and the obstetrician has greater freedom of movement. Impeding widespread adoption of the lateral Sims' position is a lack of experienced personnel to teach the procedure and a lack of suitable descriptions and depictions in the literature. This paper presents the advantages and problems of using this position and provides a detailed description of the technique for those interested in incorporating it into their practices.

The growing popularity of alternative birthing centers and natural childbirth has stimulated interest among obstetricians in new techniques for managing labor and delivery.^{1,2} Although several versions of birthing chairs are available commercially, they are expensive and in general unsuitable for laboring. In addition, birthing chairs usually require a modified "propped" lithotomy position for delivery, whereas some women may prefer lying on their side.^{3,4}

The lateral Sims' position provides an attractive alternative for both mother and obstetrician, since

it adapts readily to most birthing environments, including delivery tables, without special or expensive equipment and may significantly decrease some delivery complications. In a series from his own practice, Irwin⁵ reported a decrease in hypotension, less blood loss, and fewer episiotomies using the lateral Sims' position. A decrease in hypotension has been noted by other authors.⁶ An increased incidence of acidosis in the fetus has also been reported in lithotomy compared with lateral deliveries.⁷ Diminished danger of maternal aspiration of vomitus⁸ and less cardiovascular, urinary tract, and respiratory tract compromise⁹ have also been suggested as advantages of the lateral position but have not been systematically studied.

For obstetricians trained in lithotomy deliveries, the 90-degree tilt in the perineum relative

From the Department of Family Medicine, School of Medicine, University of Washington, Seattle, Washington. Requests for reprints should be addressed to Dr. C. Richard Kirkwood, Department of Family Medicine, RF-30, School of Medicine, University of Washington, Seattle, WA 98195.

to the accoucheur, necessitating realignment of hands for such procedures as the Ritgen maneuver and fetal suctioning, may well discourage initial attempts. Little help is available in the literature; although a written description is available from one British source,¹⁰ no clear diagrams exist for easy reference. This paper is intended to provide a detailed description and depiction of lateral Sims' delivery to aid those wishing to add the technique to their obstetric repertoire.

Indications and Contraindications

Delivery in the lateral Sims' position is feasible in all alert, controlled patients for whom a spontaneous vaginal delivery is anticipated and who are comfortable assuming the position. In the authors' experience, the use of the vacuum extractor is not difficult, and Irwin⁵ has successfully done breech extractions and forceps deliveries in this position. However, deliveries that may require large episiotomies (eg, large infant, elderly primipara, persistent posterior presentation) are more difficult, and it would probably be inadvisable to use lateral Sims' positioning. Since the patient must be in control of her lower extremities, spinal anesthesia is also a relative contraindication.

Procedure

Birth Room Preparation

A convenient configuration for accomplishing delivery is shown in Figure 1. Minimal equipment is necessary, but a Mayo stand, a wheeled stool with height adjustment, and a portable spotlight are desirable. A bean-bag chair or soft wedge for positioning the mother's legs is useful, freeing the coach to focus on the patient and the nurse or attendant to be of greater use monitoring maternal and fetal well-being. Adequate space for the obstetrician is also important; at least 4 to 6 feet between the delivery bed and nearest obstruction is

required. Of course, adequate supplies and facilities for dealing with unforeseen complications must be available, including oxygen, suction, and resuscitation equipment.

Patient Preparation

It helps considerably in managing the delivery to have a prepared patient and a coach who understands the procedure and its advantages. Although the patient may assume any position during the second stage of labor, a dry run of the actual delivery position early in labor will prevent awkwardness when the head is actually crowning. Points to be rehearsed include positioning the mother's back relative to the edge of the bed, positioning her legs and the coach, and handing the baby to the mother.

Conduct of Delivery

As crowning nears, the mother assumes the lateral Sims' position with her back angled away from the edge of the bed and the plane of the upper sacrum as close to the edge of the bed as is comfortable. The superior leg is positioned by an assistant using a soft cushion; a bean-bag chair covered with an easily cleaned material is most useful for this purpose. After perineal preparation with antiseptic soap, a single large drape is placed over the inferior leg and the support for the superior leg, creating a large sterile field on which to deliver the baby and conveniently suction and place cord clamps.

During crowning of the fetal head, the most comfortable position for the obstetrician is to sit parallel to the sacrum with the left forearm resting on the mother's hips, allowing control of the occiput (Figure 2). The right hand is free to assist the delivery of the chin and to suction the baby's mouth and nares.

After the head is delivered, the obstetrician can rotate his position 180 degrees to be directly

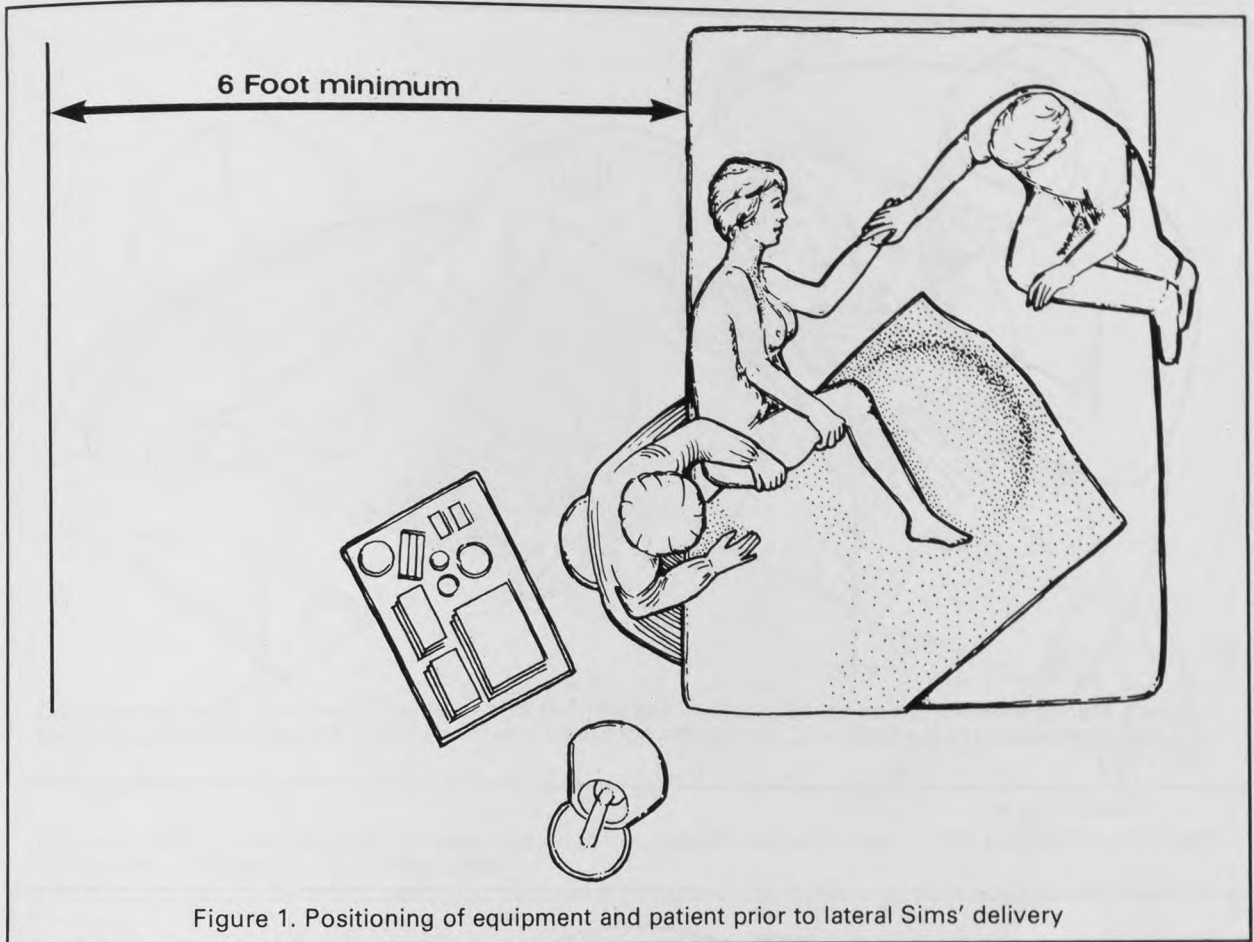


Figure 1. Positioning of equipment and patient prior to lateral Sims' delivery

opposite the mother's perineum, allowing for both hands to be used in delivering the shoulders and aftercoming parts (Figure 3). Once delivered, the baby may be placed on the sterile field posterior to the mother for cord cutting and assessment of Apgar or, alternatively, handed directly to the mother for skin-to-skin contact (Figure 4).

With the mother's thighs flexed and abducted 30 to 40 degrees, inspection of perineum, vagina, and cervix is easily accomplished after delivery using a strong parallel-beam spot lamp. Extensive lacerations, retained placental fragments, or cervical lacerations requiring repair may necessitate transferring the patient to a traditional delivery table with stirrups and restraints. However, in the authors' experience this has not been necessary.

Clinical Series

In a series of 70 consecutive vaginal deliveries in 2.5 years of practice, 23 women (33 percent) were delivered of babies in the lateral Sims' position by one of the authors (CRK). Forty-eight percent of the mothers were primiparous, and none required episiotomy. The mean length of second stage labor was 44 minutes (69 minutes for the primiparous and 21.9 minutes for the multiparous mothers) and the mean fetal Apgar at five minutes was 9. Seven of the 23 women had small first-degree perineal tears, the majority in multiparous patients. There were no other complications, and subjective satisfaction with the comfort and ease of the procedure was high among mothers and spouses or coaches.

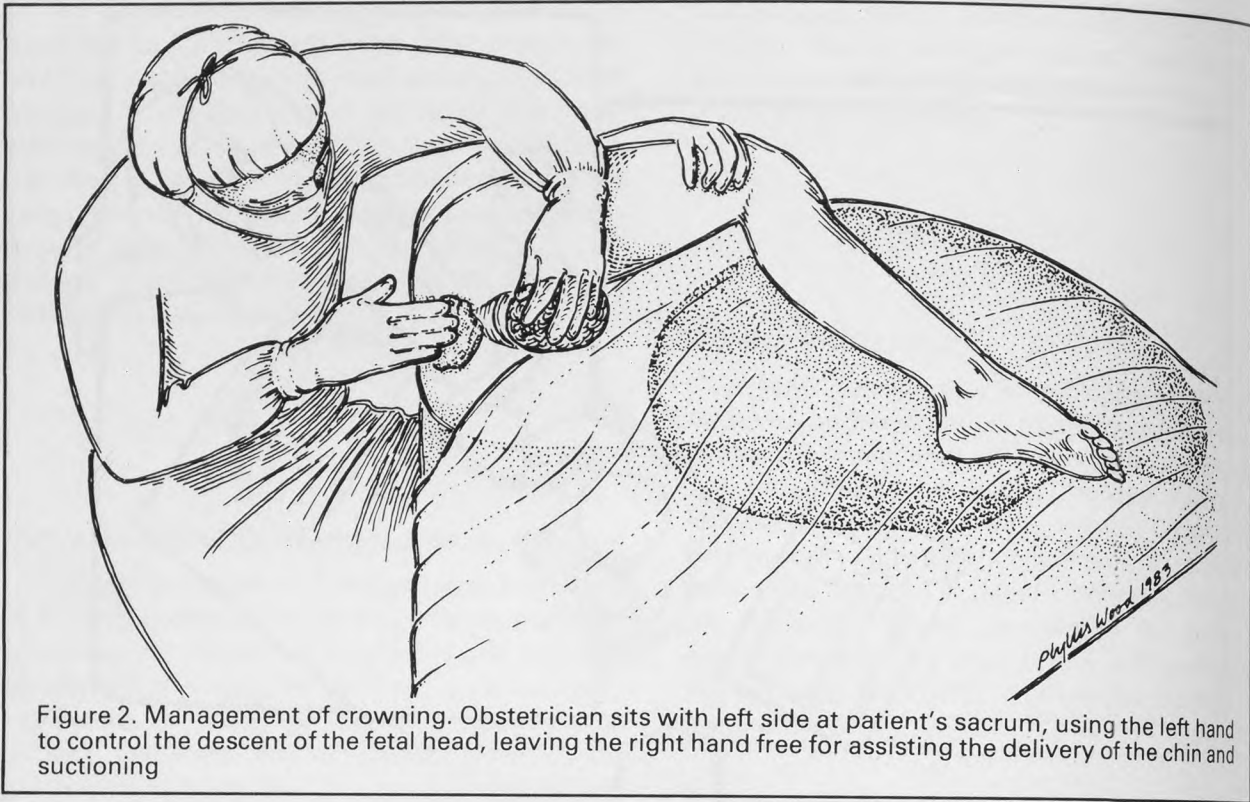


Figure 2. Management of crowning. Obstetrician sits with left side at patient's sacrum, using the left hand to control the descent of the fetal head, leaving the right hand free for assisting the delivery of the chin and suctioning

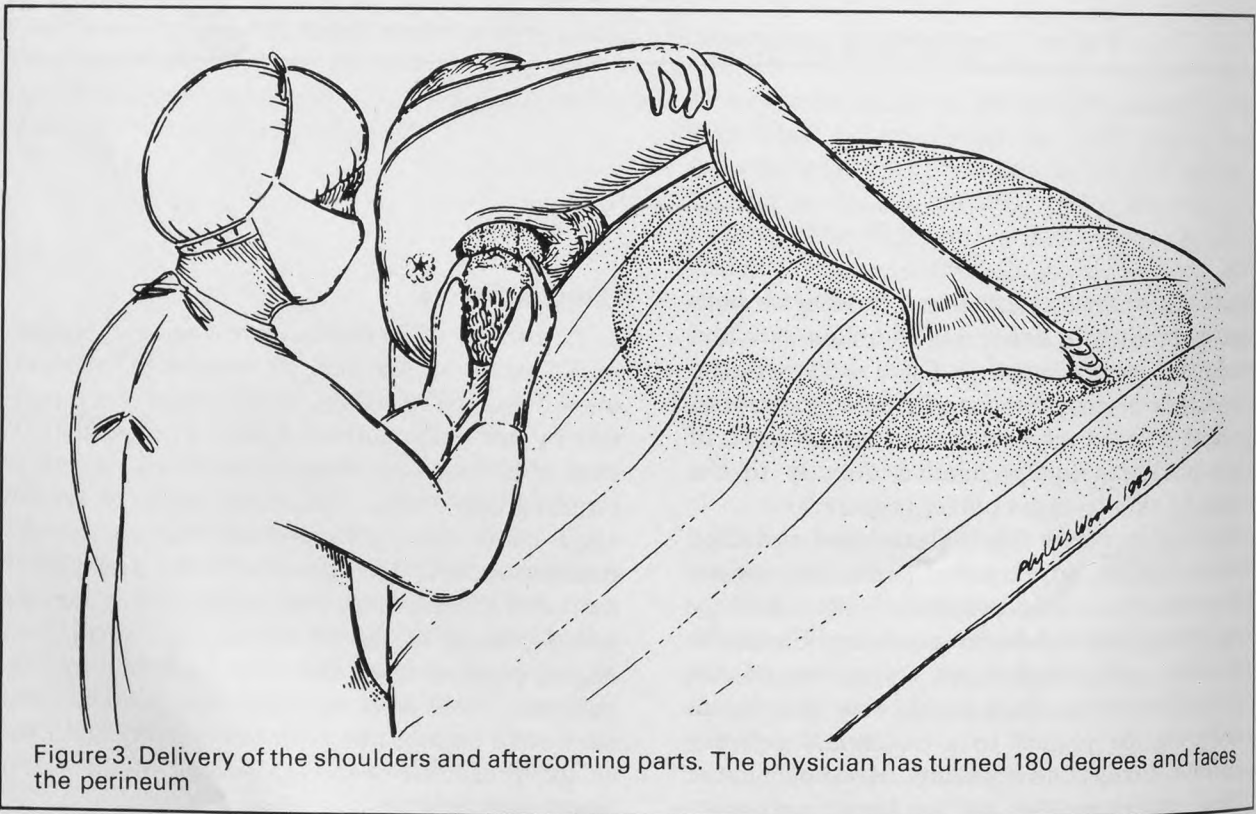


Figure 3. Delivery of the shoulders and aftercoming parts. The physician has turned 180 degrees and faces the perineum



Figure 4. Delivery completed. The baby may be placed directly on the mother's chest before the cord is cut by handing it between the mother's legs

The lateral Sims' position is an efficient, readily accepted, and potentially safer method of delivering women in bed than the traditional lithotomy position. No special equipment is necessary, and the mother is allowed full participation in the delivery process. Once the obstetrician overcomes his feelings of awkwardness with the position, this technique is far easier than lithotomy deliveries without stirrups because the perineum is in full view and accessible. Until larger series are published addressing questions of safety and untoward events in unselected patient populations, ultimate judgment as to the superiority of this procedure over other techniques must be suspended. At present, however, the lateral Sims' position is a useful, if neglected, delivery technique that deserves a wider familiarity than it currently enjoys in American obstetrics.

References

1. Dunn HP: Come back, left-lateral! *NZ Med J* 89:180, 1979
2. Leak WN: Position for delivery. *Br Med J* 2:735, 1955
3. Roberts J: Alternative positions for childbirth. *J Nurs Midwifery* 25:13, 1980
4. Mehl LE, Peterson GH, Shaw NS, Creevy DC: Complications of home birth. *Birth J* 2:123, 1975
5. Irwin HW: Practical considerations for the routine applications of left lateral Sims' position for vaginal delivery. *Am J Obstet Gynecol* 131:129, 1978
6. Quilligan EJ, Tyler C: Postural effects on the cardiovascular status in pregnancy: A comparison of the lateral and supine postures. *Am J Obstet Gynecol* 78:465, 1959
7. Humphrey MD, Chang A, Wood EC, et al: A decrease in fetal pH during the second stage of labour, when conducted in the dorsal position. *Br J Obstet Gynaecol* 81: 600, 1974
8. Hugo M: A look at maternal position during labor. *J Nurs Midwifery* 22:26, 1977
9. Bond S: Principles and practice: Reevaluating positions for labor—lateral vs supine. *JOGN Nurs* 2:29, 1973
10. Oxorn H, Foote WR: *Human Labor and Birth*, ed 3. New York, Appleton-Century-Crofts, 1975, pp 110-111