

# Bump, Twist, Rock and Roll to Correct Uterine Torsions

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I would like to describe a simple technique for correcting uterine torsions. Each bovine practitioner easily recalls obstetrical cases involving uterine torsions that were a source of satisfaction and other cases that were not so satisfying. Dr. Herriott in "All Creatures Great and Small" described the traditional rolling technique on a Jersey cow belonging to his future father-in-law. His success was so satisfying that he felt comfortable asking the man if he could marry his daughter. Diagnosis of uterine torsion is easily determined by palpating the twisted folds of the anterior vagina. The direction of the torsion is determined by following the vaginal folds from the dorsal aspect of the anterior vagina. If the folds go to the left and downward, the uterus is twisted to the left or counterclockwise. If the folds spiral downward and to the right, the uterus is twisted to the right (clockwise). The direction of torsion can be verified by rectal palpation.<sup>1</sup>

After diagnosing a uterine torsion the bovine practitioner also needs to know whether or not the cervix is dilated. Cervical stenosis may be secondary to the uterine torsion and may dilate following correction if the fetus is alive. Uterine torsion and secondary cervical stenosis with a nonviable fetus generally requires a C-section. Vaginal stenosis with a viable fetus also generally requires a C-section.

Nonsurgical treatments for uterine torsions with a viable or nonviable fetus with a dilated cervix would traditionally include rotation of the fetus and uterus through the birth canal, the rolling technique, the rolling technique with a plank, and the detorsion bar. Auld recommended alternating right and left abdominal ballotment to assist swinging the calf prior to reduction per vagina.<sup>2</sup> Roberts also cites Benesch and Wright using abdominal ballotment with two assistants where each assistant pushes alternately on opposite sides. This causes the uterus to roll back and forth, aiding the obstetrician who is working on the fetus and uterus through the birth canal.<sup>3</sup>

The anatomical structure of the cow allows a right flank ballotment to have greater impact on the uterus than left flank ballotment. Right flank ballotment then will have a clockwise force and would be beneficial on a left (or counterclockwise) torsion. Left flank ballotment will have a dampened impact on the uterus

but has been used successfully on right (clockwise) torsions. The left (counterclockwise) torsions occur about 75% of the time.<sup>4</sup>

The practitioner may choose to evaluate the use of the traditional treatment options in comparison to a modification of the abdominal ballotment. The rolling technique with a plank can be very successful and quick but generally requires two assistants.<sup>5</sup> The detorsion bar is also successfully applied but is not always available and poses some risk of rupturing the uterine wall.

My associates and I are using a modified right flank ballotment technique on left uterine torsions. Following a caudal epidural, the obstetrician attempts to rock the fetus as much as possible (i.e. ¼ rotation), using the fetal head or metacarpal (or metatarsal) to initiate the rocking motion. Meanwhile, one assistant bumps the calf, pushing downward and inward, in the lower right flank in synchrony with the obstetrician's rocking motion. Often times flexing the fetlock joint and applying a twisting action on the hoof will help get the uterus detorsed, assisted by the right flank ballotment. Bump, twist, rock, and roll describes this technique to correct uterine torsions. Past ABBP President Dr. David McClary demonstrated an enthusiastic version of bump, twist, rock, and roll on the dance floor at St. Paul. My enthusiasm for the technique is the result of at least a dozen successful cases that used a minimum of time.

If cervical stenosis exists after correcting the uterine torsion, my experience suggests giving the cow some time to resume labor if the calf is alive. The caudal epidural may have a negative effect at this point. Correcting a uterine torsion with a nonviable fetus and cervical stenosis is generally unsuccessful and a C-section should be performed.

The main advantage to the modified right flank ballotment technique compared to casting and rolling is the reduction in required manpower, while allowing for a rapid, successful, satisfying correction of the left uterine torsion.

## References

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