Writing for the PRO Position:
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The purpose of this debate is not to discuss whether artificial rupture of membranes is a beneficial procedure, but rather to discuss whether L&D staff nurses should be allowed to perform the procedure. Nurses are required to follow the rules and regulations set forth by their state or provincial nurse practice act and must abide by their institution’s policies and procedures. If state or institutional policies prohibit nurses from performing amniotomies, then of course they should not be performed.

That said, in the wrong hands, an amnihood can be a dangerous instrument. In the right hands, it can be a useful tool. As every perinatal nurse knows, there are many compelling reasons for not artificially rupturing membranes, including high fetal station and risk of inadvertent prolapse of the umbilical cord (Hall, 2002). However, these reasons are the same whether it is the RN, advanced practice nurse (APN), or physician who performs the amniotomy. While I do not believe it is appropriate for RNs to artificially rupture membranes solely for the convenience of physicians, in my opinion, under the right conditions, an RN who has demonstrated competence in the procedure can safely perform an amniotomy.

Just as the nurse who applies an FSE should have special education, the nurse performing an amniotomy should have received special education and have documented competence prior to performing an amniotomy independently. The competence of any care provider (including residents, medical students, and APNs) should be validated before amniotomy is allowed.

In my opinion, in order to prevent potential harm to the patient or her fetus, the nurse rupturing membranes must have at least 6 months experience performing vaginal exams, and must have demonstrated expertise with this basic skill. Because there is an association between early amniotomy and fetal distress (Fraser, Turcot, Krauss, & Brisson-Carrol, 2003), amniotomy performed by the RN should be reserved for patients in active labor. In addition, to minimize the risk of umbilical cord prolapse, the fetal presenting part should be at zero station or lower. Amniotomy by the RN when the fetal head is not engaged is unsafe and should not be done.

The RN should only perform an amniotomy in a setting where an emergency cesarean birth occurs rapidly. Surgical personnel, anesthesia providers, and physicians must be readily available. Should a cord prolapse occur after an amniotomy, the RN must be able to care for the patient in an appropriate and safe manner. Nurses who artificially rupture membranes should clearly understand the risks, benefits, and alternatives to membrane rupture. They should be able to educate the patient accordingly, and have the patient’s permission to rupture membranes. The nurse should have knowledge of the current literature as it relates to amniotomy and should share this information with her peers. In my opinion, when RNs perform amniotomy according to the criteria discussed here, there should be no increase in the likelihood of harm to mother or fetus.

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References
Artificial rupturing of membranes (AROM) can lead to associated risks of a prolapsed umbilical cord, disruption of an undiagnosed vasa previa or placenta previa, and an increased likelihood of fetal heart rate (FHR) decelerations (Goffinet et al., 1997). Although the physical act of rupturing the membranes in and of itself is not technically difficult, the intervention carries risks that can be devastating without the immediate availability of a surgical team, operating room, and obstetrician.

In my opinion, nurses should not perform amniotomies because they cannot effectively manage the potential complications. For example, umbilical cord prolapse requires immediate emergency birth, often by cesarean section, and nurses cannot initiate or perform a cesarean birth. One might argue that certified nurse midwives (CNMs) perform amniotomies and they cannot perform cesarean births either, but CNMs often have physician coverage immediately available or even physically present on the unit. Because amniotomy is not a natural event in labor, it is also not a part of normal care provided by CNMs.

Few would argue the need for AROM in order to assess amniotic fluid (volume, color, consistency, odor), to place internal monitoring devices for more accurate assessment of the FHR or to perform fetal blood sampling. However, all of these indications for AROM are usually present in pregnancies where there is additional concern for fetal wellbeing. The assessment of the potentially compromised fetus requires physician presence at the bedside. The physician is the provider trained to assess the amniotic fluid in the potentially stressed fetus. When the meconium or blood are present, immediate interventions might be required. In the presence of a nonreassuring or equivocal FHR tracing, the physician should be physically present to assess not only the fetal status, but also the entire clinical situation. This assessment cannot be accomplished accurately from a remote location.

Whether nurses should be allowed to perform amniotomies should be based in large part on whether AROM is beneficial for women in labor and is an appropriate allocation of resources. Although early amniotomy has been advocated as a component of active management of labor, there are associated risks for the mother and fetus. According to the Cochrane Database of Systematic Reviews (Fraser, Turcot, Krauss, & Brisson-Carrol, 2003), amniotomy is associated with shortened duration of labor by approximately 1 to 2 hours, but this occurs at the expense of an increased risk for cesarean birth, particularly for fetal distress. The Cochrane Reviewers conclude that amniotomy should be reserved for women with abnormal labor progress. Amniotomy is used frequently to electively “speed things up”; therefore, it is concerning that nurses would actively participate in a procedure that potentially increases a woman’s risk for fetal distress, iatrogenic fetal injuries, and cesarean birth.

Because I believe that physicians should be present on the unit during elective amniotomy in order to initiate an emergency cesarean birth if necessary, there seems to be no benefit in delegating this technical task to nurses.

1. risk of immediate complications associated with AROM such as cord prolapse,
2. bleeding due to a lacerated fetal vessel or disruption of a low-lying placenta,
3. the lack of evidence to support routine use of amniotomy for labor induction or augmentation,
4. the increased risks of nonreassuring FHR patterns leading to a cesarean birth, and
5. the inability of RNs to initiate or perform an emergency cesarean birth.

Because I believe that physicians should be present on the unit during elective amniotomy in order to initiate an emergency cesarean birth if necessary, there seems to be no benefit in delegating this technical task to nurses. In my opinion, amniotomy is not an appropriate procedure for staff nurses to perform for these reasons:

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