A Case-Control Study Comparing an Early Amniotomy with A Selective Amniotomy in Women who are in Simple Labour at Term

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Primigravidas, spontaneous, amniotomy, multigravidas, efficacy

Abstract

Background - In many nations, the Caesarean section rate exceeds 20%. Prolonged labor is the primary diagnosis causing the high rate in nullipara. The current review evaluates the outcomes of a policy of early amniotomy with spontaneous rupture of membranes for the treatment or prevention of labor progress delays.

Objectives – A comparison of spontaneous membrane rupture and early amniotomy for accelerating contractions and cutting labor time. To ascertain the efficacy and safety of amniotomy for reducing the length of all spontaneously initiating, uncomplicated labors, the efficacy and safety of amniotomy for effect on the caesarean delivery rate, and the efficacy and safety of amniotomy for influence on mother and newborn outcome.

Materials and Methodology – This investigation was prospective and observational. From December 2017 to June 2019 (18 months), all patients from Satara District who met the inclusion and exclusion criteria were enrolled in the department of obstetrics and gynecology at Krishna Institute of Medical Sciences, Karad. 100 patients who met the eligibility requirements were randomly assigned to one of the two groups. 50 women each were assigned to the AROM and the spontaneous rupture of membranes groups. The length of labor, the frequency of cesarean deliveries, and the impact of these factors on the outcomes of the mother and the baby are compared between the two groups.

Results – Patients' ages ranged from 20 to 40 years. In primigravidas and multigravidas, early amniotomy reduces I stage labor time by 4.86 hours and 2.26 hours, respectively (p value 0.0001). In primigravidas, the mean cervical dilatation occurred at a higher rate in the AROM group (1.69 cm/hr vs. 1.06 cm/hr, a difference of 0.62 cm/hr).

The mean cervical dilatation rate in multigravidas was likewise higher in the AROM group, at 2.08 cm/hr, compared to the SROM group, at 1.24 cm/hr, a difference of 0.84 cm/hr. In the AROM group, there is a marginally statistically insignificant rise in the rate of cesarean sections and instrumental deliveries. Both groups' neonatal outcomes were found to be comparable.

Conclusion – The study demonstrates that the AROM group's labor is shorter than that of the spontaneous rupture of membranes group. Additionally, the color of the liquor provides insight into fetal health, which aids in selecting the route of delivery. Consequently, the practice of early amniotomy appears to be justifiable in a growing nation like ours.

1. Introduction

Labour management's goal is to deliver healthy infants to healthy mothers with the fewest possible side effects (Osuntokun, 2005). This goal is accomplished by carefully evaluating mother and foetal status throughout labour and making the appropriate

interventions as needed. Prior to modern medicine, obstetricians considered that labor was generally unpredictable and subject to vast natural variation. At the National Maternity Hospital in Dublin, where the passive conception of labor was replaced with an

intensive care setting with a focus on early birth, there has been a full break with this tradition.

O'Driscoll and colleagues (1984) at the National Maternity Hospital in Dublin pioneered the idea that a structured, standardized labor management routine decreased the need for cesarean deliveries due to dystocia more than three decades ago. With such control, their overall cesarean delivery rate was 5% in the 1970s and 1980s. These days, the strategy is known as active management of labor. Amniotomy and oxytocin are two of its components that have been widely employed, particularly outside of the United States and in English-speaking nations (Thornton and Lilford, 1994).

According to this procedure, labor is identified when there is complete cervical effacement, a bloody "show," or ruptured membranes. Women who have such results are expected to give birth within 12 hours. For the following three hours, a pelvic examination is done every hour, and then every two hours after that. Amniotomy is carried out if dilatation has not progressed by at least 1 cm each hour. At two hours, progress is once more evaluated, and unless dilatation of at least one centimeter per hour is documented, high-dose oxytocin infusion is initiated. Midwives constantly provide care for women.

There has been substantial debate and safety concerns over active management of labor, which entails a more medicalized and interventionist approach to childbirth, including the use of oxytocin to induce or augment labour.

Higher oxytocin infusion rates, which is a hormone that can cause uterine contractions, first raised questions regarding their safety. Higher infusion rates, however, do not always have a negative impact on the foetus, according to studies. In contrast to the usage of oxytocin, the risk of uterine rupture, a major complication that can occur during labour, appears to be more prevalent in women who have already given birth (i.e., parous uterus).

In fact, prolonged labour can significantly increase the risk of maternal morbidity and mortality, especially in developing nations where access to healthcare may be restricted. Long labours frequently result in problems including haemorrhage and infection, which can have detrimental effects on the mother's and the baby's health.

One technique that is occasionally used to shorten labour and lower the risk of problems is amniotomy, or the artificial breach of the amniotic membrane. This surgery may also permit the use of internal foetal monitoring tools, which can assist medical professionals in identifying symptoms of foetal distress and determining the best course of treatment.

It is crucial to remember that there are dangers and side effects associated with amniotomy. It may also result in changes in the baby's position or presentation, which could make delivery more challenging and raise the risk of infection. Amniotomies may not always be necessary or acceptable, and their benefits in reducing labour time haven't been shown beyond a doubt in every instance.

There has long been debate in obstetrics over whether or when to breach the membranes during childbirth. Others contend that keeping the membranes intact as long as possible can help to protect the infant and lower the danger of infection, while some healthcare professionals hold the opinion that artificial rupture of the membranes (AROM) can help to shorten labour and lessen the risk of problems.

AROM may be linked to shorter labours and a lower risk of needing interventions like oxytocin augmentation or instrumental delivery, according to some data. The potential dangers of this intervention, however, also include a higher chance of infection, a prolapsed umbilical cord, and alterations in foetal heart rate patterns.

Given the debate surrounding AROM, a randomized controlled trial comparing the effects of routine AROM and expectant care (i.e., leaving the membranes intact) would be ideal. However, because to the ethical issues surrounding the possible hazards of AROM and the variety of unique patient conditions, such a trial may be challenging to carry out.

In the end, the choice of when or if to break the membranes in an uncomplicated labor should be taken case-by-case, taking into account the medical history, stage of labor, fetal state, and other pertinent factors for the specific patient. Healthcare professionals should carefully assess the potential advantages and

disadvantages of AROM before recommending a course of treatment to a patient.

Early amniotomy (Cohain, 2013), which can be defined as the elective rupture of foetal membranes early in the active phase of labour, is one of several procedures introduced in labour management without a lot of proof. When the cervical dilatation is 4 cm or more, the labour is considered to be in the active phase (WHO, 2003). One of the most often used techniques in contemporary obstetric practice is early amniotomy, which is intended to speed up labour and prevent dystocia in women experiencing spontaneous labour (Smyth, 2013, Rogers et al., 1997). However, the efficacy of this intervention in increasing labour has not been demonstrated4, thus it is still up for discussion and additional study.

Early amniotomy might be useful for early detection of labour difficulties and for early intervention. For instance, it permits the implantation of electrodes and an intrauterine pressure catheter (Archie et al., 2013) as well as close monitoring of the alcohol. On the other side, because of the increasing frequency of vaginal exams, it may be linked to increased risks of infections, cord prolapse, pains requiring analgesia, caesarean section rates, and irregular foetal heart rates ("ACOG Practice Bulletin No. 107: Induction of Labor," 2009, Goffinct et al., 1997, Busowski and Parsons, 1995). Additionally, the procedure has some relative contraindications for women with HIV/AIDS as part of the protection of vertical transmission of maternal infections (WHO, 2003).

The aim of the current study is to determine whether early amniotomy and labor management are both useful.

2. Materials and Methodology

The department of Obstetrics and Gynaecology at the Krishna Institute of Medical Sciences in Karad conducted a case control study. 100 women who were in labour with an uncomplicated term pregnancy were chosen, separated into case and control groups, and studied from December 2017 to June 2019, for a duration of 18 months.

The inclusion criteria for the study is Primiparous or many pregnancies, spontaneous labor following the completion of week 37, live singleton fetus presenting the vertex maintaining the membranes. There should be no obstetric or medical issues throughout pregnancy.

The exclusion criteria for the study were those who have burst membranes, Patients with obstetric and medical pregnancy difficulties, erroneous presentations a number of pregnancies, pregnancy before 37 weeks, after membrane rupture, cord prolapse and meconium-coloured liquid. Vaginal infections in mothers were the exclusion for the study.

Of the 100 women participating in the trial, 50 were assigned to have artificial membrane rupture and 50 were left with intact membranes.

Procedure -

A thorough history was obtained. Any obstetrical or medical issues, including as diabetes, hypertension, heart disease, post maturity, IUGR, prior LSCS, etc., were disregarded.

A general physical examination was conducted to check the patient's pulse, blood pressure, temperature, nutritional status, and stature. The thyroid and breasts were examined, and the cardiovascular and respiratory systems were examined systemically.

The height of the uterus, presentation, position, lie, engagement, and foetal heart rate were all measured and recorded during the abdominal examination and obstetric palpation. Initial pelvic examinations were performed to verify established labour and to check presentation, position, and pelvic capacity.

The patient was placed in a dorsal posture once the perineum had been prepped. The women who will receive ARM were positioned in a dorsal position with their legs slightly extended. The patients received an explanation of the technique. Kocher's forceps were used to break membranes while taking the necessary aseptic measures. The colour of the liquor was noted when it was allowed to drain away. Prior to and following amniotomy, the foetal heart rate was monitored. Oxytocin was used to speed up labour if the uterine contractions were not strong enough. Until the woman experienced strong uterine contractions, the drip rate was changed. Every fourth hour, the temperature and maternal pulse rate are measured.

The presenting part's descent and the cervix's dilation and effacement were indicators of labour progress.

Either oral fluids or IV fluids were used to keep the patient's fluid balance in check. First, second, and third stage labour durations as well as delivery techniques (FTND, FTND with RMLE, Forceps delivery, and Caesarean section) were recorded.

The APGAR score of new-borns was noted shortly after delivery. Three days after giving birth, patients were monitored and stayed in the hospital. Similar guidelines and techniques were applied to patients when the membranes were left intact and labour was observed. Necessary investigations required for the study were carried out, them being HB%, BT, CT, Urine Routine, Blood grouping and Rh-typing, RBS, HIV, HBSAg, Obstetric Scan.

Data entry and analysis were done using the Windows version of the Statistical Package for Social Sciences (SPSS) version 15.0. Data analysis was done with the goal of treating. At a 95% confidence level, associations were examined using the chi square test for categorical data and the independent t-test for continuous data. Statistical significance was defined as a p-value of 0.05 or lower.

3. Results

The patients who were given the option of having AROM are referred to in the current study as the AROM group, whereas those whose membranes were left undisturbed until full cervical dilatation and, in a few instances, those for whom selected amniotomies were performed are referred to as the selective amniotomy group or spontaneous rupture of membranes.

Table 1: Distribution of Patients According to Age in Primigravida

Age	ARM	Spontaneous Rupture	Chi-square	p-value
<20	1(2%)	1(2%)		
20-25	12(24%)	4(8%)		
25-30	19(38%)	18(36%)	-	
30-35	2(4%)	1(2%)	2.72	0.44
Total	34(68%)	24(48%)		

^{*}significant when P<0.05

50 women were enrolled for spontaneous rupture of the membrane and 50 women were enrolled for ARM. The majority of the cases, 19 (38%) in ARM and 18 (36%) in ARM, included people

between the ages of 25 and 30. Pregnant women in the ARM group had an average age of 21.74 years, whereas those in the spontaneous rupture group had an average age of 22.41 years.

Table 2: Distribution of Patients According to Age in Multigravida.

Age	ARM	Spontaneous Rupture	Chi-square	p-value
20-25	1(2%)	1(2%)		
25-30	11(22%)	16(32%)		
30-35	2(4%)	8(16%)	2.63	0.45
>35	2(4%)	1(2%)		
Total	16(32%)	26(52%)		

The majority of the instances, 11 (22%) in ARM and 16 (32%) in total, involved people between the ages of 25 and 30. The average age of multipara women

in the ARM group was 23.3 years, whereas the average age of those in the spontaneous rupture group was 25.02 years.

Table 3: Distribution of Patients According to ARM & Spontaneous Rupture.

Gravida	ARM	Spontaneous Rupture	Chi-square	p-value
Primigravida	34(68%)	24(48%)		
Multigravida	16(32%)	26(52%)	3.33	0.068

34 primigravida women and 16 multigravida women make up the AROM group. There are 24 first-time mothers and 26 multi-pregnant women in the selective amniotomy group.

Table 4: Spontaneous Rupture Group with Primi & Multi Assessment.

Study Parameters	Primi	Multi	Chi-square	p-value
Intact membranes till full dilation	21(42%)	22(44%)		
Spontaneous rupture of membranes	2(4%)	3(6%)	0.14	0.93
Artificial rupture of membranes	1(2%)	1(2%)		

Out of 50 women in the selective amniotomy group, AROM was performed in 2 cases. In light of the presence of fetal cardiac variation and the fact that spontaneous membrane rupture occurred in 5 cases, it was done to determine the color of the alcohol. For 43 cases, the membranes remained intact till complete dilatation.

The first stage of labor was successfully completed by 21 of the 24 primigravidas in the selective amniotomy group with intact membranes. The membranes spontaneously ruptured in 2 occasions. One woman's membranes spontaneously ruptured at an 8 cm dilation, while another woman's did so at a 6 cm dilation.

One patient required emergency LSCS because to thick meconium-stained liquid, and AROM was performed at 4 cm dilation due to fetal cardiac fluctuation.

The first stage of labor was successfully completed by 22 of the 26 multigravidas in the selective amniotomy group with intact membranes. In 3 cases, spontaneous membrane rupture happened at an 8 cm dilatation, while it happened in 1 case at a 6 cm dilatation.

Table 5: Comparison of Duration of Active First Stage of Labour.

Gravida	ARM in hrs.	Spontaneous Rupture in hrs.	Difference in hrs.	Unpaired t test	p-value
Primigravida	5.6	10.46	4.86	5.995	<0.0001
Multigravida	5	7.6	2.6	3.36	<0.0001

^{*}significant when p<0.05

For both primi and multi, there was a statistically significant difference between the AROM and spontaneous rupture groups (p 0.05). AROM group's I

stage of labor was shorter by 4.86 hours for primigravida and 2.16 hours for multigravidas when compared to spontaneous rupture group.

Table 6: Comparison of Duration of Active Second Stage of Labour.

Gravida	AROM in min.	Spontaneous Rupture in min.	Difference in min.	Unpaired t value	p-value
Primigravida	41.76	47.5	5.74	2.38	0.021
Multigravida	35.93	39.04	3.101	1.034	0.31

With the exception of the multigravida, there was a significant difference between the AROM and spontaneous rupture groups (P 0.05 for primigravida).

The length of the second stage of labor in the AROM and group with selective spontaneous rupture was nearly identical. It was shortened by 3.101 minutes in multigravidas and 5.74 minutes in primi gravidas in the AROM group, which is not significantly different.

Table 7: Comparison of Duration of Active Third Stage of Labour.

Gravida	AROM in min.	Spontaneous Rupture in min.	Difference in min.	Unpaired t- value	p-value
Primigravida	9.85	10.83	0.98	1.44	0.16
Multigravida	10.93	10.38	0.55	0.77	0.45

For primigravida and multigravida, respectively, there was no statistically significant difference between the AROM and spontaneous rupture groups (P>0.05).

In the AROM and spontaneous rupture groups, the

duration of the second stage of labor was nearly identical. It was shortened by 0.98 minutes in primigravidas and by 0.55 minutes in multigravidas in the AROM group, which was not significantly different.

Table 8: Mean Cervical Dilatation During I Stage of Labour.

Gravida	AROM in Cms/hr.	Spontaneous Rupture in Cms/hr.	Difference Cms/hr.	Unpaired t- value	p-value
Primi	1.69	1.06	0.62	3.87	0.0004
Multi	2.08	1.24	0.84	5.96	<0.0001

When compared to the selective amniotomy group, the mean cervical dilatation in primigravidas revealed a higher rate of 1.69 cm/hr in the AROM group, a difference of 0.62 cm/hr, and was statistically significant with p < 0.05.

The mean cervical dilatation in multiples also shown a higher rate of 2.08 cm/hr in the AROM group compared to 1.24 cm/hr in the selective amniotomy group with a difference of 0.84 cm/hr and considered statistically significant with p < 0.05.

Table 9: APGAR Outcome <5

APGAR SCORE	Percentage
AROM	12
SROM	7

Neonatal patients with low APGAR scores made up 12% of the study's sample in the AROM group versus 7% in the SROM group.

Table 10: Mode of Delivery

	AROM		SROM	
Mode of Delivery	Primi	Multi	Primi	Multi
FTND with RMLE	Nil	4(8%)	Nil	2(4%)
FTND with Episiotomy	19(38%)	3(6%)	13(26%)	15(30%)
FTND with Perineal tear	10(20%)	9(18%)	11(22%)	9(18%)
Instrumental Delivery Vacuum Delivery	Nil	Nil	Nil	Nil
	5(10%)			
LSCS	(for cervicaldystocia)	Nil	Nil	Nil

In this study, 4 (8% of the women) in the AROM group and 2 (4%) in the SROM group gave birth normally at full term.

The most common delivery method was FTND with episiotomy for primi 19 (38%) and multi 3 (6%), as well as for primi 13 (26%) and multi 15 (30%) for SROM.

AROM for primi 10 (20%), multi 9, and SROM for primi 11 (22%) and multi 9 (18%) FTND with perineal tear. LSCS was 5 (10%) in just AROM and primi group. Neonatals in the AROM group 3 were admitted to the NICU in primigravidas. One patient required a vacuum-assisted vaginal delivery and had thin, meconium-stained liquid. Other 2 cases, which were delivered via emergency LSCS, had thick meconium-stained liquid. In each case, the neonatal prognosis was favorable.

One infant from a multigravida woman in the SARM group was admitted to the NICU. Vacuum aided vaginal delivery was used to deliver the meconium-stained liquor. Delivery interval for AROM was one hour and 20 minutes. Baby was released the following day.

Two newborns were admitted to the NICU in the selective amniotomy group. The liquid in both cases was heavily meconium-stained. One case was delivered vaginally with vacuum assistance, and the other was delivered with emergency LSCS. Both cases had satisfactory neonatal outcomes.

Number of Pervaginal Examinations

Both the AROM group and the SROM group underwent the same number of pervaginal examinations. In both groups, there are typically 2 vaginal examinations each woman.

4. Discussion

A crucial step in lowering maternal morbidity and mortality, especially in poor nations, is the provision of efficient obstetric care for the treatment of common obstetric disorders. Early amniotomy may be included in the list of such effective techniques, as this study has shown, which may help to explain why it was first included as a component of active management of labor15. Increased uterine contraction efficiency and labour dysfunction prevention have been suggested as the causes of the observed decrease in labour time in the amniotomy group of this study (Smyth et al., 2013, Li et al., 2006). This observation has practical application in low resource countries like Nigeria, which are characterized by high maternal/perinatal morbidity and death. Early amniotomy may therefore be considered as a low-cost accessible strategy to prevent prolonged labour and its associated difficulties.

The results of the sole study from Nigeria that can be identified as being related (Smyth et al., 2013) show that amniotomy significantly reduces the length of labour. The evidence suggests that this straightforward intervention (early amniotomy), when used effectively, may be effective in the larger Nigerian community, while more research on the topic from various demographics of the nation is encouraged.

Additionally, the shortened labour time linked with amniotomy that we found in our study is consistent with data from similar studies conducted outside of Nigeria (Johnson et al., 1997, Fraser et al., 1998, Barrett et al, 1992). It contrasts, however, with the findings of previous relevant studies that found no conclusive link between amniotomy and labour length (Smyth et al., 2013, Abdullah et al, 2010)

The goal of effective labour management is to guarantee a healthy baby's safe birth to a healthy mother. A lengthy labour is one that lasts more than 12 hours for nulliparous women and 8 hours for multiparous women. Foetal hypoxia is highly common and requires surgical delivery when labour lasts a long time.

Length of labour

In the current study, compared to the SROM group, the first stage of labour was shorter in primigravida's by 4.86 hours (292 min) and in multigravidas by 2.6 hours (156 min), both of which are statistically significant differences.

This is comparable with other studies done:

Comparison of duration of shortening of 1st stage of labour in different studies

According to a study by Zhonghua Fuch, an early amniotomy can cut the first stage of labour's 94.90-minute duration 16. JF Barrett and J Savage's study also revealed a significantly shorter first stage of labour (mean 8.3 vs. mean 9.7) (Barrett et al, 1992). Fraser and Sokol's study revealed that the amniotomy group's mean active phase duration was 165 minutes, while the control groups was 216 minutes (p 0.001). A study by Frederic D. Frigoletto supports this and found that active management reduced the average length of labour by 2.7 hours (162 minutes).

Aisha Abdullah and Sadia Saboohi's study revealed that the average labour time was 7.66 hours (459.60 min) in the selective amniotomy group and 6.66 hours (399.9 min) in the amniotomy group, demonstrating a significant reduction of 1 hour (60 min) in labour time (Abdullah et al, 2010). Nina Naseer and Gulfishan Haq's study revealed that the duration of labour was reduced by around 100 minutes in the inactively managed group compared to the expectantly managed group. The median time from randomization to full

dilatation was 136 minutes shorter in the amniotomy group, according to a study by Fraser WD and Marcoux. According to Sara G. Shields and Stephen, an amniotomy with early oxytocin augmentation can cut the first stage of labour by up to 2 hours (120 minutes).

A Cochrane review from 2002 revealed that an early amniotomy policy appeared to shorten labour, with a statistically significant 54-minute drop in the overall length of labour and a 39-minute drop in the first stage (Busowski et al., 1995). A study by Fraser WD, Turcot, Krauss, et al. similarly revealed a statistically significant reduction in the first stage of labour by 39 minutes, with an average labour length reduction between 60 and 120 minutes.11 In a Cochrane research, Wei S. and Wo BL demonstrated that the early amniotomy group's first stage of labour was shorter than that of the expectant management group (mean difference: MD-1.43hours-85.80min) (Wei et al., 2012).

In the current investigation, neither the AROM nor the selective AROM groups had a statistically significant reduction in the length of the second stage of labour. (Difference of 5.74 minutes for the first and 3.101 minutes for the second). Fraser WD and Turcot L found comparable findings that the length of the second stage was the same in a Cochrane analysis. This conclusion is also supported by research by J. F. Barrett and J. Savage, which found no differences in the length of the second stage of labour (Barrett et al, 1992).

Mode of delivery:

In the current study, 96% of women in the AROM group and 64% of women in the SROM group gave birth vaginally.

In this study, 2% of the AROM group's babies were delivered through caesarean section, while 0% of the SROM group were. This demonstrates a statistically insignificant slightly increased risk of LSCS in the amniotomy group.

according to a study by Smyth RMD and Alldred S Kina, women in the amniotomy group had a higher chance of caesarean delivery compared to women in the control group, however this difference was statistically insignificant, (Osuntokun, 2005).

There is a trend toward an increase in the risk of caesarean section related with early amniotomy, according to Fraser WD and Turcot L in the Cochrane review, however this did not achieve statistical significance.

This slightly elevated risk could be the result of earlier meconium detection or earlier internal monitoring use. However, a recent Cochrane analysis by Wei S, Wo BL, et al. in 2009 found that active management is linked to a slight decrease in the rate of caesarean sections (Wei et al., 2012).

According to William Fraser and Francoise Vendittelli, an active policy of augmentation by AROM may lower the risk of caesarean section in the setting of a labour that has been proven to be delayed (Fraser et al., 1998).

APGAR score:

Neonatal patients with low APGAR scores made up 12% of the study's sample in the AROM group versus 7% in the SROM group. However, both groups' neonatal outcomes are comparable. In a meta-analysis, Lawrence Impey and Peter Boylan demonstrated the same idea, demonstrating that active management has no impact on APGAR scores, neonatal unit admission, neonatal or impairments. In a Cochrane analysis, Smyth RMD and Alldred SK found that babies born in the control group were more likely than those born in the amniotomy group to have an APGAR score of less than 5 minutes. This distinction lacked statistical significance.

J F Barrett, J Savage in a randomized trial also proved that there is no difference in the foetal condition at birth and in APGAR score (Barrett et al, 1992) Zhonghua Fu Chan, in his study also supported this that there was no difference in abnormal foetal heart rate at first stage, but there was increased abnormal foetal heart rate at second stage (Li et al., 2006). There were no differences found between the two groups in terms of maternal mortality and morbidity.

5. Conclusion -

Within the limitations of the study, Amniotomy is a useful technique for cutting the length of labour, particularly the early stage. Active labour management has little bearing on the kind of delivery, such as spontaneous vaginal delivery, assisted delivery, or caesarean section.

There is no proof that early amniotomy has harmful effects on the new born. Additionally, it's possible that avoiding protracted labour also lessens the possibility of women going through labour in excruciating pain.

No differences in Caesarean section rates, operative vaginal delivery rates, or new born and maternal outcomes have been reported in randomised controlled trials.

Amniotomy has various benefits, including a shorter labour period and the ability to choose the way of delivery based on the colour of the fluid and the health of the foetus. Consequently, the practice of early amniotomy appears to be justifiable in a growing nation like ours.

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