

Administration of the Third Stage of Labor

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Abstract

The third stage of labor generally is obscured by the enthusiasm of the birth of a baby. Proof demonstrates that administration of this stage can straightforwardly impact vital maternal results, for example, blood loss, need for manual removal of the placenta, and postpartum haemorrhage. Administration of the third stage of labor has been an issue of argument, concern, and continued debate for the past two decades. Regardless of the numerous techniques utilized and the unique ways to deal with care and theories embraced, there has not been a critical, reliable decrease in the postpartum hemorrhage rates described in industrialized nations as of late. This article explores the approaches that have been and are presently being used in an effort to decrease the risk of third stage complications.

Keywords: Labor; Administration; Postpartum Hemorrhage

Introduction

The third stage of labor alludes to the period from the conveyance of the infant until the total conveyance of the placenta and its attached membranes. Moderately, little noteworthiness as far as scholastics, research or instructing has been dedicated to the third stage of labor, as opposed to the first and second stages. Artistic proof from a main North American course reading gives careful consideration to the third phase of work, however essentially more consideration has been paid to the difficulties that may emerge thereof, instantly following delivery. Most of the inconveniences in the creating and created countries, amid the third stage of labor, happen in generally

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safe women; accordingly, caregivers and foundations must have administration methodologies set up, to manage these unforeseen and unheralded results [1]. The insights from United States uncover a death rate of 7 - 10 ladies for each 100,000 live births, which are owing to pregnancy-related maternal mortality and out of these around 8%, are caused by primary postpartum hemorrhage (PPH) [2]. The comparing measurements pass on substantially higher death rates in emerging countries, with a portion of the nation's having maternal death rates in overabundance of 1000 for each 100,000 live births. The reports from the World Health Organization (WHO) propose that 25% of the aggregate maternal passings, representing more than 100,000 maternal passings for each year, are because of PPH. Maternal passings have critical and genuine ramifications for the surviving neonate specifically and for the country all in all [3].

Hemorrhagic anemia initiated as a result of PPH might lead to deprived iron reserves, primary muscle fatigue, prolonged hospitalization, and suspension in initiation of breastfeeding. While blood transfusion could overcome little of the acute indications, its administration is connected to possible risks. All these factors reflect the need for effective simple therapeutic interventions to prevent any incidence of PPH, particularly in developing nations, where maternal anemia is highly prevalent and the loss of even a single drop of blood is invaluable. In routine practice, active administration of the third stage of labor includes prophylactic administration of uterotonic agents before delivery of the placenta, early cord clamping and cutting, and controlled umbilical cord traction. The fundamental downside with the utilization of oxytocin incorporates, decreased power when put away in an imperfect environment [4]. Correspondingly, methylergometrine is additionally not steady at higher temperatures, which are generally experienced in tropical nations like India. Also, oral organization of methylergometrine has been appeared to be ineffectual in decreasing baby blues blood misfortune. These days, misoprostol is broadly utilized as an orally dynamic uterotonic specialist all through the world. There are several benefits with regard to the administration of Misoprostol, as it can be administered through numerous ways, orally, rectally, sublingually or by the vaginal route. Furthermore, it is normally used in developing countries, as it is inexpensive, easy to store, and stable at room temperature. Earlier studies have successfully established the prophylactic use of misoprostol for the reduction of blood loss after delivery, when compared with the conventional uterotonics [5,6]. To lessen maternal mortality, the prophylactic utilization of misoprostol has begun increasing boundless and all inclusive acknowledgment directly after the 2003 Italy Conference for the dynamic administration of the third phase of labor [7]. Similar techniques have additionally been fused and been the piece of the Multicenter WHO Trial, where the prophylactic utilization of misoprostol was abided upon for the counteractive action of conceivable PPH [8].

All women who deliver are in danger of difficulties in the third stage of labor. These complexities incorporate PPH, held placenta, and uterine reversal. Others incorporate conditions that generally show interestingly amid the third stage (e.g. placenta accreta and its variations). The various hazard factors for each of these conditions might be found in articles enumerating these individual inconveniences. Most entanglements of the third stage happen in generally safe ladies; in this manner, parental figures and organizations must have administration techniques set up to manage these issues expeditiously when they emerge.

Signs of placental separation, usually, 4 signs of placental separation are showed [1,9].

- The most dependable sign is the extending of the umbilical cord as the placenta isolates and is pushed into the lower uterine section by dynamic uterine withdrawal. Setting a clasp on the cord close to the perineum makes it less demanding to welcome this extending. Never put traction on the cord without countertraction on the uterus over the symphysis; else, one may botch cord extending because of looming prolapse or reversal for that of uncomplicated placental separation.
- The uterus goes up against a more globular shape and winds up noticeably firmer. This happens as the placenta drops into the lower section and the body of the uterus keeps on withdrawing. This change might be clinically hard to appreciate.
- The uterus ascends in the mid-region. The plummet of the placenta into the lower section, lastly into the vagina, dislodges the
 uterus upward.

A spout of blood happens. The retroplacental coagulation can escape as the placenta slides to the lower uterine segment. The retroplacental clot, for the most part, shapes centrally and avoids following complete separation; notwithstanding, if the blood can discover a way to get away, it might do as such before entire partition and in this way is not a solid pointer of finish detachment. This event is now and then connected with expanded bleeding and a drawn out third stage, with the conveyance of the main edge of the placenta and maternal surface first (Matthews Duncan method), instead of the cord inclusion and fetal surface, which is more typical (Schultze method).

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Preparation

Begin arrangements for the third stage of labor a long time before conveyance of the child. In the antepartum period, discuss with the patient and her accomplice their inclinations for the conveyance procedure with an open discourse in regards to any hazard factors display and what suggestions they may have for the woman. Altogether discuss any worries or varieties from acknowledged practice. It is critical that the patient understand the suggestions and potential dangers included if administration alternatives are restricted.

Physiological versus active administration

The debate encompassing third-stage administration exists between specialists who advocate the physiological, or hopeful, approach and the individuals who advocate the dynamic approach. The fundamental segments of the two administration systems are laid out in table 1. Promoters of physiological administration argue that the natural processes outlined above promote normal separation and delivery of the placenta and lead to less impediments. If PPH improves, it can be effectively managed with available techniques and drugs. Proponents express worry that active administration increases PPH and uterine inversion rates due to cord traction and increases the hazard of engaged placenta due to entrapment produced by uterotonic agents. Delivery of the placenta happens by uterine contractions and maternal expulsive efforts, and cord traction is forbidden. Distress also occurs regarding the case of an undiagnosed second twin if uterotonics are habitually used at the time of delivery. Supporters of active management debate that administering prophylactic uterotonic agents endorses tough uterine contractions and leads to faster retraction and placental delivery. This drops the amount of maternal blood loss and the rate of PPH. They also debate that the more operative uterine activity leads to a decrease in the incidence of retained placenta. Gentle cord footing is just connected when the uterus is very much contracted, and the uterus is physically controlled by the level of the symphysis with countertraction (Brandt-Andrews move). This move is alluded to as controlled cord footing (CCT) [10]. Cord footing must never be connected without countertraction and is connected in the hub of the birth trench. Promoters call attention to that an undiscovered second twin is an inexorably uncommon issue and that clinical evaluation in labor and following conveyance of the main infant can set up the finding before uterotonic organization [11].

	Active Administration	Physiological Administration
Cord clamping	Early	Variable
Cord traction	Application of controlled cord traction* when uterus contracted	None
Uterus	Assessment of size and tone	Assessment of size and tone
Uterotonic	With delivery of anterior shoulder or baby	None or after placenta delivered

Table 1: Physiological Versus Active Management.

*Gentle downward cord traction with countertraction on the uterine body

Seven trials have been the subject of a meta-analysis in the Cochrane Library [12], in which active management showed a reduction in the average risk of maternal primary hemorrhage (more than 1000 mL) at birth and of maternal hemoglobin less than 9 g/dL following birth. No difference was found in the incidence of admission to neonatal units or of infant jaundice requiring treatment. The authors also reported a significant decrease in primary blood loss greater than 500 mL with active management, as well as a decrease in mean maternal blood loss at birth, maternal blood transfusion, and therapeutic uterotonics. Significant increases in maternal diastolic blood pressure, vomiting after birth, after pains, and analgesia use from birth to discharge were reported. Decrease in the infant's birthweight was also found with active management.

Choice of uterotonic agent

Randomized trials have analyzed the utilization of oxytocin alone, ergot alone, misoprostol alone, and Syntometrine in dynamic administration conventions contrasted and physiological administration. Trials have additionally contrasted the different uterotonics with each other in dynamic administration conventions and have been the subject of meta-investigations in the Cochrane Library. Trial discoveries propose that while Syntometrine may have a slight preferred standpoint in lessening PPH by 500 mL or more (RR, 0.74; 95% CI, 0.65 - 0.85) and potentially by 1000 mL or more (RR, 0.79; 95% CI, 0.59 - 1.06), oxytocin alone is exceptionally viable and does not have the unfavorable impact profile related with arrangements containing ergot [13]. Trial comes about recommend that expanding the intramuscular measurement of oxytocin from 5 IU to 10 IU builds the viability of oxytocin. An extra randomized controlled trial found that mixing 80 U or 40 U, rather than the standard 10 U, did not diminish baby blues discharge by and large; in any case, it decreased the requirement for extra oxytocin mixture and of the danger of a decrease in hematocrit of at least 6%. It has likewise been recommended that underlying or proceeded with intravenous organization of oxytocin expands viability. Try not to regulate more than 5 IU of oxytocin as a bolus intravenous infusion [14]. Trials using only oxytocin presented inclined rates of manual removal of the placenta; however, those consuming ergot preparations confirmed increased rates. The slight trend of increased manual removal stated in the Cochrane meta-analysis above was entirely due to the results of the single trial that used intravenous ergot. The increases in nausea, vomiting, and blood pressure are all exclusively observed in the trials using ergot preparations [15].

Misoprostol has demonstrated early guarantee in the treatment of PPH. Moreover, its minimal effort, pill frame, and warmth solidness make it a conceivably amazing operator for prophylaxis in the third phase of work. Shockingly, randomized trials have indicated it to be second rate compared to injectable uterotonics and to not be essentially more viable than fake treatment. Adverse impacts, for example, shuddering and fever, are normal; in regimens utilizing higher dosages, sickness, regurgitating, and looseness of the bowels happen all the more every now and again. Clearly, the nearness of prostaglandin-prompted pyrexia and shuddering in the baby blues period may prompt perplexity in the finding of sepsis [16]. Misoprostol may in any case be a helpful uterotonic in a few settings. A current trial in a low asset setting indicated it to be as powerful as intramuscular oxytocin following vaginal conveyance. Many have additionally called attention to that in low asset settings, regardless of the possibility that misoprostol is to some degree less successful than injectable uterotonics, that it's minimal effort and simplicity of capacity and utilize should order it's far reaching accessibility. Another trial has demonstrated that buccal misoprostol given at the season of cesarean segment diminishes the requirement for the utilization of extra uterotonic operators [17]. Other prostaglandins have not been adequately explored to warrant suggesting them over oxytocin, and they all evoke more unfavorable impacts.

Uterine exploration

Repetitive exploration of the uterus is no longer suggested for normal deliveries or that subsequent previous cesarean delivery. The process is painful and probably raises the hazard of complications, particularly infectious morbidity. Study is justified in patients with bleeding originating high in the genital tract notwithstanding the uterus being well contracted. The cervix must be visualized after all forceps deliveries.

Cord Management

Cord traction is connected amid dynamic administration just when countertraction is connected. Countertraction is performed by catching the body of the uterus over the symphysis pubis and guiding it cephalad and back. Footing is connected in a nonstop, descending way just when the uterus is all around contracted. A deferral happens between the organization of the uterotonic and great constriction of the uterus. A few issues must be considered amid this interim.

Most active administration conventions incorporate early clipping of the cord. Notwithstanding, of the 3 dynamic administration parts, this training appears the slightest imperative in presenting the watched benefits. Early cord clasping might be shown to encourage infant appraisal or revival. Excepting these signs, racing to cinch the cord is superfluous in light of the fact that footing can't be connected until the point when the uterus is all around contracted. Postponing cord cinching until the point that the cord is pulseless, normally 2 - 4 minutes, brings about higher hemoglobin and hematocrit esteems in the infant and, potentially, bring down levels of early youth pallor and more prominent iron stores [18]. These impacts are presumably more significant in preterm babies and may bring about fewer transfusions in the neonatal period and bring down rates of neonatal intraventricular discharge and sepsis [19]. Control these potential benefits against the potential for an rise in newborn polycythemia and jaundice; nevertheless, these hazards might be exaggerated. Current reviews have produced contradictory results with regard to adverse effects but not potential benefits. One meta-analysis suggested that delayed cord clamping did not result in any increase in respiratory distress or statistically significant increases in bilirubin levels or use of phototherapy in new-borns [20]. However, a second meta-analysis did show an increased risk of jaundice requiring phototherapy (RR 0.59, 95% CI, 0.38 - 0.92; 5 trials of 1,762 infants) [21].

Notwithstanding, holding the infant underneath the level of the placenta or milking the cord toward the infant to overstate this exchange is demoralized. Parents may have an inclination with respect to the planning of string bracing and the position of the infant promptly following conveyance. Excepting any contraindication, take after such inclinations. The issues around the planning of cord bracing have not been widely examined, and the act of early string cinching is not situated in solid proof. This perception is particularly valid as for infant suggestions. In the example of a nuchal cord, endeavour to avoid clamping and cutting the cord before delivering the baby may be accomplished by passing the loop(s) of cord from back to front over the baby's head or by delivering the baby through the loop of cord. Though these maneuvers are preferable and usually successful, clamps must be ready in case the maneuver fails or the cord is inadvertently torn. Clamping and dividing a nuchal cord is most problematic when it is followed by a shoulder dystocia. The divided cord prevents what little placental support that might have been existent from reaching the baby. Furthermore, no intrauterine resuscitation can occur if the clinician resorts to a Zavanelli (cephalic replacement) maneuver. At the moment of cord clasping, the cord ought to be singley cinched; a moment clip should then be set after the blood has been drained from the portion of cord between the 2 braces. The string is then isolated between the cinches in a generally bloodless way. Place the clasps a sensible separation from the infant with the goal that the infant guardians can put the string tie or dispensable string clip at the cord place. Endeavoring to instantly put the cord cinch or tie on the infant is for the most part not time well spent. Maybe a quickly put clasp ought to be supplanted if the cord stump is too long or, more awful, may meddle with access to the string vessels or prompt later issues with the site if put excessively near the stomach divider. This training likewise limits the danger of harming fundamental structures in the uncommon instance of variations from the norm at the cord addition site.

Cord blood might be taken after string clipping and division if no indications of placental partition are watched. Practices fluctuate, yet generally taken examples incorporate those for a CBC number, gathering and screen, and, perhaps, blood gas investigation. A few doctors draw the examples from a disconnected bit of cord or from the conveyed placenta and cord following the third stage. The development of fetal undifferentiated organism collecting has made new issues around there. This training ought not trade off the care of the mother or the infant, and the guardian must not wind up noticeably occupied by the system at this basic time. Preferably, an extra assigned individual from the group can play out this system. Cord blood can be proficiently gathered after conveyance of the placenta by having an

aide hold the placenta over the level of the cord. Cord blood harvesting (CBH) ought not defer uterotonic organization. Indeed, uterotonics may build the measure of blood gathered because of placental pressure. CBH has not been appeared to expand the danger of PPH; in any case, there was a pattern to expanded PPH in a current meta-examination. (RR 1.22, 95% CI, 0.96 - 1.55, 5 trials including 2,236 ladies). Further research on the ideal and most secure strategies for CBH at both vaginal and cesarean conveyances ought to be embraced [21]. The potential advantage of totally depleting the cord of blood is hazy. This measure would be performed in the wake of taking cord blood tests or putting aside a braced cord portion for inspecting. A few examiners [22,23] trust that this training advances placental partition. Constrained proof backings this conviction before the approach of Rh D safe globulin prophylaxis, intrigue existed with respect to whether fetomaternal bleeding was diminished by the move, which may along these lines lessen the danger of maternal refinement. Discoveries from little, nonrandomized examines from the mid-1970s proposed a decrease, however additional work has not been performed [24]. Bleeding the string decreases the potential for parental figures being sprinkled with blood in the uncommon instance of cord separation; be that as it may, the normal presentation to this blood amid and after seepage may likewise convey a slight hazard.

Placental Delivery

The placenta more often than not gives the cord addition and the fetal side of the placenta. Guarantee that exclusive the placenta is conveying on the grounds that an uterine reversal has a comparable while more huge appearance. Luckily, most clinicians never encounter this uncommon entanglement. On the off chance that reversal is experienced, leave the placenta connected and speedily supplant the uterus utilizing the last out, first in on a fundamental level as talked about in uterine inversion. The layers trail the placenta, and measures to keep them from tearing incorporate gradually pivoting the placenta about the inclusion site as it dives or getting a handle on the films with a clasp. Appraisal of the placenta and films as they are being conveyed gives a smart thought of whether they are in place, yet postpone in depth examination until the point that obviously the uterus is very much contracted and bleeding is negligible.

Uterine Assessment

The fundus is surveyed promptly following conveyance of the infant, therefore barring an undiscovered twin and giving a standard fundal stature. An uterotonic, ideally oxytocin, is then directed. In the event that twin pregnancy has been already avoided, as is typically the case in the created world, an uterotonic might be managed before fundal appraisal. The fundus is intermittently surveyed to decide when uterine withdrawal happens, at which time CCT is connected. Oxytocin-instigated withdrawals are occasional; when the uterus unwinds, stop CCT until the following constriction. The heading of string footing mirrors that for an instrumental conveyance from the mid depression in light of the fact that the placenta must complete a similar way the birth waterway. Footing ought to at first be descending, at that point parallel to the floor, lastly upward as the placenta conveys. Try not to perform uterine back rub before conveyance of the placenta, and never apply descending fundal weight. Intermittent appraisal of the uterus additionally serves to recognize the indications of placenta partition and to evaluate whether an atonic uterus is getting to be stretched with blood. In the event that uterine indications of placental partition are available, the string has protracted, yet no spout of blood has happened and the placenta remains undelivered, the placenta might be disconnected however stay at the level of the inside os. Blood caught behind the placenta in this position can stretch the uterus, avoiding further withdrawal and improving the probability of PPH. Tenderly running a finger up the string to feel if the inclusion site and the placenta are at the cervix might be useful. On the off chance that the placenta is at this level, it might be conveyed with the guide of maternal expulsive exertion or marginally more forceful CCT.

Fourth Stage

The delivery of the placenta does not spot the end of hazard for bleeding; despite what might be expected, the uterus may tend to unwind somewhat following placental delivery, and this is the time when issues most generally start. The prophylactic utilization of a uterotonic guarantees that the uterus remains to contract and retract, yet the parental figure must stay cautious. Almost every clinician can describe a scene of being quickly occupied now just to have his or her consideration unexpectedly recovered by a cascade of blood.

Subsequent delivery of the placenta, palpate the abdomen to assess and monitor uterine tone and size. At this time, uterine massage is practical, particularly if concern exists concerning uterine tone. Uterine massage may be painful; thus, clarify the reasons to the patient. If intravenous access is in place, a continuous infusion of oxytocin for a period after delivery is practical. On the off chance that progressing concerns exist with respect to uterine tone, at that point begin an oxytocin imbuement or administer a more drawn out acting operator. Reassure early breastfeeding to advance endogenous oxytocin discharge. When great, maintained uterine tone has been built up, the nearness of any seeping from the lower genital tract can be weighed. In the case of bleeding is insignificant, evaluate the placenta for extensiveness. (To begin with, deal with any significant lower genital tract bleeding). Assessment of the placenta before repair of an episiotomy or any lacerations is recommended so as to avoid distracting these repairs if uterine exploration or instrumentation is required. Inspect the fetal side for any indication of vessels coursing to the edge of the placenta and into the membranes. These vessels recommend the existence of a succenturiate placental lobe. If the vessels are torn and the lobe does not exist, it is very likely held and may accordingly prompt bleeding or disease. Turn the placenta over and lay it on a level surface to analyze the maternal side, with unique regard for any imperfection suggestive of a lost, held cotyledon. Note different variations from the norm of the placenta, and consider whether neurotic examination is justified. Societies of the placenta appear to be of little an incentive in the determination or administration of uterine disease. The lower genital tract is inspected utilizing sufficient lighting and proper situating and analgesia. Any episiotomy or cuts are repaired. Amid this time, take note of any continuous blood loss from the upper vagina, and if display, reassess uterine tone and size. Nearly watch the patient for blood misfortune throughout the following hour, with talented evaluation of uterine tone and size no less than at regular intervals. The term of close perception and the nearness as well as length of any uterotonic organization relies upon the hazard factors show and the clinical course.

Complications

The main mutual complication of the third stage of labor is PPH. Active management of the third stage has noticeably been shown to shrink the occurrence of this complication and consequently most likely has a positive influence on maternal mortality and longer-term morbidities such as anemia [25].

Placenta accreta and its variations are not confusions of third-arrange administration but rather are most normally perceived amid the third stage. These perilous variations from the norm of placentation may happen precipitously; be that as it may, they are substantially more typical in circumstances in which the placenta has embedded over a formerly scarred uterus. The standard utilize and enhancing abilities of ultrasound may recommend this analysis in the antepartum period, and the determination ought to be considered in high-hazard circumstances. The likelihood of placenta accreta commands that arrangements for the administration of serious PPH are set up and, if proposed in light of ultrasound discoveries, that aptitude is accessible to manage the intricacies of placenta percreta.

Uterine inversion is extremely uncommon. The danger of uterine reversal is expanded in irregularities of placentation, for example, accreta, and is more probable with fundal string inclusions and any condition that inclines patients to uterine atony and prolapse. String footing ought to never happen without countertraction or without uterine withdrawal. Leave the placenta joined, and concentrate administration on maternal revival and fast return of the uterus to the stomach depression. The fingers are framed into a solitary cone-molded unit and set and no more reliant bit of the jutting mass, which speaks to the reversed uterine fundus. Delicate upward weight is applied in the hub of the birth waterway with the fingers and thumb together to limit the danger of uterine puncturing. The activity has been compared to that of setting the fingers at the toe of a back to front sock and pushing to make the sock right-side out. Following uterine substitution incredible back rub and uterotonic organization ought to attempt. Manual expulsion of the placenta might be performed when the mother's key signs are steady unless concern exists in regards to unusual placentation. Uterine relaxants, for example, nitroglycerin, might be useful.

Retained placenta is characterized in different ways. The most widely recognized definition is maintenance of the placenta in utero for over 30 minutes. This is a subjective definition, and administration is extraordinarily impacted by the clinical evaluation of whether

noteworthy bleeding is happening. This bleeding might be noticeable or may show just by the expanding size of the uterus. Without any confirmation of placental separation, consider the analysis of finish placenta accreta or a variation. This condition might be available with bleeding if just a part of the placenta is strangely embedded. Guaranteeing that the bladder is void may speed the conveyance of the placenta and in any event help in the evaluation and control of the uterus. Preferably, ladies ought to have a vacant bladder at the season of conveyance. This more often than not happens normally as a result of weight from the introducing part and maternal expulsive exertion. Urging the lady to endeavor to void late in the second stage or following conveyance is not nonsensical, in spite of the fact that this might be troublesome. Exhausting the bladder is compulsory before any endeavor at helped vaginal conveyance. Various trials have assessed the part of infusion into the umbilical line in the administration of held placenta in ladies not encountering critical dying. The meanings of held placenta run from 15-a hour without placental conveyance yet are most ordinarily 20 - 30 minutes. Infusions into the string vein have utilized isotonic sodium chloride arrangement (ordinary saline), oxytocin and saline, prostaglandin and saline, misoprostol and saline, and dextran 70 [26].

The extra utilization of intraumbilical infusion of oxytocin may likewise essentially abbreviate the third phase of work and diminish baby blues blood misfortune. A current report noted lower blood misfortune, higher rate of placental conveyance by 15 minutes, and shorter time to placental conveyance in subjects controlled intraumbilical oxytocin contrasted and subjects getting standard dynamic administration alone [27]. The system is done by embeddings a size 10 nasogastric tube into the umbilical vein and propelling it to the placental inclusion site of the line. Resistance is met now. The nasogastric tube is then withdrawn by 3 - 4 cm to guarantee the tip is not in a placental branch. The uterotonic arrangement is then infused and the string is braced with the tube set up. This intercession appears to be sensible in stable ladies with insignificant draining while arrangements for a manual expulsion are being made. The examinations looking at infusion of oxytocin (ordinarily, 10 IU) and saline (regularly, 20 mL) with eager administration (0R, 0.7; 95% CI, 0.48 - 1.02) or saline infusion alone (0R, 0.59; 95% CI, 0.43 - 0.82 and NNT, 8; 95% CI, 5 - 20) propose that this training without a doubt lessens the requirement for manual expulsion of the placenta. A current report contrasting misoprostol 800 mcg with oxytocin 50 IU, each in 30 mL of typical saline, found that misoprostol was essentially more successful in this setting [28].

Manual removal of the placenta is necessary if the above maneuvers have failed to deliver the placenta or if substantial bleeding happens. The retained or partially detached placenta interferes with uterine contraction and retraction and leads to bleeding. The hazard of significant PPH growths the longer the placenta rests in situ and is increased 6-fold if the placenta remains undelivered after 30 minutes [29].

Perform manual expulsion with a level of absence of pain that matches the clinical criticalness of the circumstance. The suspension of an oxytocin imbuement or the organization of uterine relaxants to advance uterine investigation and manual expulsion is of faulty esteem and may prompt expanded dying. Ultrasonography might be valuable in select cases. Whenever possible, an elbow-length glove is worn and consideration is paid to asepsis. The perineum and vagina must be readied. The vaginal hand might be inundated in povidone-iodine arrangement (Proviodine) to encourage simpler passage. The hand is passed into the vagina through the cervix and into the lower section following the umbilical rope. Care is taken to limit the profile of the hand as it enters, keeping the thumb and fingers together in the state of a cone to maintain a strategic distance from harm.

Conclusion

The benefits of the active administration of the third stage of labor result in an abatement in maternal mortality and morbidity. The foundation and facilities of bigger establishments are adequate to manage any dangerous difficulty related with the procedure of parturition, particularly amid the third stage of labor, as various decisions for uterotonics are accessible as well. The absence of such facilities at the periphery and rural health centers orders the accessibility of harmless, compelling, and reasonable price for medications, to make the procedure of parturition harmless, as a minority of deliveries are completed in these focuses, under different wellbeing plans of the

country. In such a situation we require a medication that can be effortlessly utilized by birth specialists and requires insignificant aptitude and outside medicinal help for its administration. We can securely conclude from the perceptions of the present examination that a straight forward response to every one of these difficulties is misoprostol 400 mg, which can be successfully administered through the rectal route, as this route has the best consistence.

Bibliography

- 1. Cunningham FG., et al. "Williams Obstetricsed". New York: McGraw-Hill. Conduct of normal labor and delivery (2001): 320-325.
- 2. Berg CJ., et al. "Pregnancy-related mortality in the United States, 1987-1990". Obstetrics and Gynecology 88.2 (1996): 161-167.
- 3. Abouzahr C. "Antepartum and postpartum hemorrhage". In: Murray CJ, Lopez AD, editors. Health Dimensions of Sex and Reproduction. Boston, Mass: Harvard University Press (1998): 172-174.
- Chua S., et al. "The effect of oxytocics stored at high temperatures on postpartum uterine activity". International Journal of Gynecology and Obstetrics 100.9 (1993): 874-875.
- 5. Gerstenfeld TS and Wing DA. "Rectal misoprostol versus intravenous oxytocin for the prevention of postpartum hemorrhage after vaginal delivery". *American Journal of Obstetrics and Gynecology* 185.4 (2001): 878-882.
- 6. Kundodyiwa TW., et al. "Misoprostol versus oxytocin in the third stage of labor". *International Journal of Gynecology and Obstet-* rics 75.3 (2001): 235-241.
- 7. Tsu VD and Shane B. "New and underutilized technologies to reduce maternal mortality: Call to action from a Bellagio workshop". *International Journal of Gynecology and Obstetrics* 85.1 (2004): S83-S93.
- 8. Hofmeyr GJ., *et al.* "Misoprostol to prevent and treat postpartum hemorrhage: A systematic review and meta-analysis of maternal deaths and dose-related effects". *Bulletin of the World Health Organization* 87.9 (2009): 666-677.
- 9. Sleep J. "Physiology and management of the third stage of labour". Bennett VR, Brown LK, eds. *Myles' Textbook for Midwives*. 12th edition. London, UK: Churchill Livingstone (1993): 216-229.
- 10. Dupont C., et al. "Clinical and pharmacological procedures for the prevention of postpartum haemorrhage in the third stage of labor". *Journal of Gynecology Obstetrics and Human Reproduction (Paris)* 43.10 (2014): 966-997.
- 11. Prendiville WJ., et al. "Active versus expectant management in the third stage of labour". Cochrane Database of Systematic Reviews 3 (2000): CD000007.
- 12. Begley CM, et al. "Active versus expectant management for women in the third stage of labour". Cochrane Database of Systematic Reviews 11 (2011): CD007412.
- 13. McDonald S., et al. "Prophylactic syntometrine versus oxytocin for delivery of the placenta". Cochrane Database of Systematic Reviews 2 (2000): CD000201.
- 14. Tita AT., et al. "Higher-dose oxytocin and hemorrhage after vaginal delivery: a randomized controlled trial". *Obstetrics and Gynecology* 119 (2012): 293-300.
- 15. Elbourne DR., et al. "Prophylactic use of oxytocin in the third stage of labour". Cochrane Database of Systematic Reviews 4 (2002): CD001808.
- 16. Gulmezoglu AM., *et al.* "WHO multicentre randomised trial of misoprostol in the management of the third stage of labour". *Lancet* 358.9283 (2001): 689-695.

- 17. Parsons SM., et al. "Rectal misoprostol versus oxytocin in the management of the third stage of labour". Journal of Obstetrics and Gynaecology Canada 29.9 (2007): 711-718.
- 18. McDonald SJ., et al. "Effect of timing of umbilical cord clamping of term infants on maternal and neonatal outcomes". Evidence-Based Child Health 9.2 (2014): 398-400.
- 19. Mercer JS., et al. "Delayed cord clamping in very preterm infants reduces the incidence of intraventricular hemorrhage and late-onset sepsis: a randomized, controlled trial". *Pediatrics* 117.4 (2006): 1235-1242.
- 20. Hutton EK and Hassan ES. "Late vs early clamping of the umbilical cord in full-term neonates: systematic review and meta-analysis of controlled trials". *Journal of the American Medical Association* 297.11 (2007): 1241-1252.
- 21. McDonald SJ and Middleton P. "Cochrane Update: Effect of timing of umbilical cord clamping at birth of term infants on mother and baby outcomes". *Cochrane Database of Systematic Reviews* 7 (2008): CD004074.
- 22. Jongkolsiri P and Manotaya S. "Placental cord drainage and the effect on the duration of third stage labour, a randomized controlled trial". *Journal of the Medical Association of Thailand* 92.4 (2009): 457-460.
- 23. Asicioglu O., et al. "Influence of Placental Cord Drainage in Management of the Third Stage of Labor: A Multicenter Randomized Controlled Study". *American Journal of Perinatology* 32.4 (2014): 343-350.
- 24. Ladipo OA. "Management of third stage of labour, with particular reference to reduction of feto-maternal transfusion". *British Medical Journal* 1.5802 (1972): 721-723.
- 25. Singh G., et al. "Comparison of sublingual misoprostol, intravenous oxytocin, and intravenous methylergometrine in active management of the third stage of labor". International Journal of Gynecology and Obstetrics 107.2 (2009): 130-134.
- 26. Carroli G and Bergel E. "Umbilical vein injection for management of retained placenta". Cochrane Database of Systematic Reviews 5 (2006): CD001337.
- 27. Gungorduuk K., et al. "Using intraumbilical vein injection of oxytocin in routine practice with active management of the third stage of labor: a randomized controlled trial". Obstetrics and Gynecology 116.3 (2010): 619-624.
- 28. Rogers J., et al. "Active versus expectant management of third stage of labour: the Hinchingbrooke randomised controlled trial". Lancet 351.9104 (1998): 693-699.
- 29. Magann EF, et al. "Timing of placental delivery to prevent post-partum haemorrhage: lessons learned from an abandoned randomised clinical trial". Australian and New Zealand Journal of Obstetrics and Gynaecology 46.6 (2006): 549-551.

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