

The third stage of labour has, for some time, been one of the hottest clinical topics in midwifery. Although both of the major research studies (1, 2) which have been carried out to compare the physiological birth of the placenta with active management suggest that the latter leads to less blood loss and 'better' outcomes, their findings have been challenged by many.

One of those taking issue with the research is Michel Odent, who suggests that it is impossible to compare the two types of management of the third stage without first understanding the positive steps we can take to facilitate physiological third stage (3). I would like to add another observation to this debate; the amount of blood loss in the hours following birth, which I believe may account for the differences reported in the above studies.

My observations arise from a time when I worked on a hospital postnatal ward, where women were admitted from the labour ward a couple of hours after they had given birth. Most of these women had had their third stages actively managed, and their recorded blood loss after the birth was usually around 100-200 ml. I would generally help these women to the bathroom the first time they felt they wanted to get up. Invariably, as I waited outside, women would call me in to inspect blood or clots which they had passed into the toilet or bedpan; they were often concerned about how much blood they had lost. Sometimes almost as much lochia was passed at this point as at the birth itself. Although I reassured the women that this was normal and there was no problem, the pattern started me thinking.

I realised that their blood loss was probably more noticeable to me because I had previously been practising in a situation in which the majority of women chose physiological third stage. After a physiological third stage, the women did not have the pattern of heavy bleeding delayed for a few hours after the birth that I was observing in the women who had had active management in the hospital.

It struck me that this might account for the different amounts of blood lost between women who had physiological and managed third stage. Could the use of an oxytocic inhibit the normal blood loss at birth, but cause the blood to be somehow retained by the woman's body and expelled later? This would account both for the difference in recorded blood loss at birth and the later loss of blood in women experiencing active management.

Physiologically, this would make sense. The use of an oxytocic drug causes a strong and sustained contraction of the uterus. The uterus is too well contracted to release a large amount of blood at this stage, which is why the blood loss is small in most cases. This is seen by many as "a good thing", and cited as one of the advantages of using oxytocics in the third stage.

However, if the woman's body is physiologically adapted to losing more blood, it wouldn't be until the effects of the oxytocic had started to wear off that the uterus would be able to relax sufficiently to achieve this. So it may be that the average amount of blood lost during physiological third stage is "normal", while the lesser amounts of blood lost during active management are abnormally low. If we recorded the amount of lochia lost in the first few hours after birth together with that lost during the birth itself, would the figures for the two types of third stage correlate more closely? Could it be that the total blood loss in women experiencing active management might actually be higher?

We also know that the administration of exogenous oxytocin inhibits the body's own production of endogenous oxytocin (4) which may be another factor in explaining this later blood loss. The effects of the oxytocic drug wear off before a woman's body has time to increase its own supplies of oxytocin to compensate. All midwives are aware of the need to consider the continuation of syntocinon for a while after the birth, because the woman's body may not be able to produce enough oxytocin to keep her uterus contracted. Does the same type of process happen when oxytocics are used in the third stage?

When comparing the outcomes of the two types of third stage, we tend to assume that "less is better". But could it be that, for some women, the use of an oxytocic somehow inhibits the normal bleeding which is meant to occur at birth? Does this account for the slightly higher blood losses in women having physiological third stage? Why is it that, simply because women choosing physiological third stage may have higher blood loss initially, this is automatically viewed as pathological, when we may be causing the real pathology by our intervention in the process? We know that women's blood volumes increase during pregnancy, and some of this blood clearly needs to be released by the body in the first days and weeks after the birth.

Of course there are other issues; we need to understand more about how the third stage works physiologically and ensure we are employing the positive intercessions which assist this before attempting to compare physiological with active management. We need to be very clear about when the amount of blood loss is normal and when it becomes pathological; we also need to reflect upon what the causes of any truly pathological blood loss might be.

There are myriad aspects of the third stage which midwives need to consider and debate.

Perhaps mine is an unusual experience, and others could add to these thoughts. The evidence which relates to this area needs to come from all sources; from midwives' experience and understanding of physiology as well as research trials. Whatever the answers may be, we do not yet have a complete enough picture for us to be able to fully inform the women we work with. And it is they who need to make the final decision about how their third stage will occur.

References

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