ORIGINAL ARTICLE

Sexual intercourse during pregnancy

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ABSTRACT

The **aim** of this review was to investigate if sexual intercourse during pregnancy is safe for mother and foetus. The **method** of this study included bibliography research from both the review and the research literature, mostly in books, professional journals and in 'pubmed data base'

Results: The research showed that Women often wonder about the safety of sexual intercourse while pregnant and also seem not to discuss it openly with their caregivers. The data on the subject are biased as it is based on surveys and interviews that depend on information provided by pregnant women. Sex is a private issue and society generally encourages this approach. Therefore, data collected is biased by women's private issues, the societal biases and their interpretation by these individuals as well as the desire to provide 'the right answer', the researcher is looking for. While it is generally accepted that sex in pregnancy is safe, most health professionals reassure their clients that sex is safe in pregnancy without knowing the evidence this recommendation is based on.

Conclusions: As long as no health issues are involved, sexual intercourse during pregnancy is safe.

Keywords: Sex, intercourse, pregnancy, desire, arousal, frequency of, orgasm.

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INTRODUCTION

Sex during pregnancy: the frequency of sexual intercourse is quite variable but tends to decrease with gestational age. Nevertheless, the average woman engages in sexual activity as often as five times a month in the second trimester. On the contrary, the frequency of intercourse increases only in minority of cases[1,2]. Frequently there are decreased libido and sexual satisfaction attributed often to a sense of decreased attractiveness as well as the usual aches and pains of pregnancy. Typically, as pregnancy progresses, the frequency and length of intercourse decreases as well as the achievement of

orgasm, sexual satisfaction and stimulation. There is also an increase in dyspareunia[2-4]. In order to improve the comfort of sex during pregnancy, some advice would be to apply lubricant as well as pillows under the pelvis and use different positions. Moreover, partner communication would be of great assistance.

Possible complications of sexual intercourse in pregnancy: the risks include bleeding, pelvic inflammatory disease, placental abruption, venous air embolism and uterine rupture. Vaginal bleeding in pregnancy is common and often benign. However, it is associated with spontaneous abortion, preterm delivery and low birth weight. In contrast to common belief, sexual intercourse is not associated to vaginal bleeding in pregnancy as found in a cohort study of vaginal bleeding in the first trimester. Dissimilarly, vaginal bleeding after sex in the second and third trimesters has been associated with placental abruption and antepartum haemorrhage that were related to increased frequency of intercourse[5].

In the setting of placenta praevia, Williams Obstetrics warns that 'examination of the cervix is never permissible unless the woman is in an operating room with all the preparations for an immediate caesarean delivery, for the reason that, even the gentlest vaginal examination can cause *torrential haemorrhage* [6]. Similarly, it has been assumed that penile stimulation of the cervix during intercourse can result in a similar risk of haemorrhage and as a result, women have been advised to abstain while pregnant. However, little evidence exists to support this typical advice, likely because it is an ethically impossible study to perform and most physicians would be too embarrassed to publish a case report. There is one study that demonstrates the safety of trans-vaginal ultrasound probes in the setting of placenta praevia in which they demonstrated a mean angle between the rigid probe and the axis of cervix of 63,8o and concluded that 'it is not physically possible for the vaginal probe, which is fixed and straight, to enter the cervix without being aligned with the cervical canal' and demonstrated no cases of vaginal bleeding[7]. Despite poor evidence, it is probably still safest to advise women with placenta praevia to refrain since the theoretical risk of antepartum haemorrhage could be catastrophic.

Venous Air Embolism (VAE) is a distinct risk of sex in pregnancy in a percentage less that 1:1,000,000. Truhlar et al,.[8] identified 22 cases of VAE associated

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with sex where 20 out of 22 cases occurred during pregnancy or around the puerperium. Fourteen cases occurred with air insufflation of the vagina, while five occurred during sexual intercourse, four of which were during the rear-entering position, and three others using other stimulating techniques. Eighteen of the twenty two women died while four survived and recovered. While uncommon, this is a complication of sex during pregnancy with a very high mortality rate and women should probably be advised to avoid rough sex in which there is a high pressure gradient created, particularly in the rear entry position when the heart is positioned below the level of the distended vaginal vasculature.

Uterine rupture following orgasmic uterine contractions in a uterus is a risk in women with uterine scar. There is only one single case report by Nassar[9] that described such uterine rupture at 18 weeks gestation in a woman with a previous lower segment caesarean section at 8 months.

The risk of preterm labour with sexual intercourse: restriction of sexual intercourse is often recommended for prevention and management of threatened preterm labour (PTL). The mechanisms suggested include: oxytocin release by nipple and/or clitoral stimulation, prostaglandin E in semen ripening of the cervix and increased vaginal colonization of microorganisms.

In general, most of the studies could not find any relationship between frequency of intercourse and PTL[10-15]. However, some studies identified specific risk groups where sexual activity increased the risk for PTL. Such risk factors included: lower genital tract infection [14] and colonization of the vagina with specific microorganisms[10].

The role of intercourse in inducing labour: the relationship between orgasm and oxytocin release has never been documented. Nevertheless, in one study repeated orgasms produced rhythmic uterine contractions that were associated with decorations. This study neither proved oxytocin release nor proved any development to labour pains[16]. In another study there was a link between self reporting of being able to achieve orgasm before pregnancy (supposedly linked to increased frequency on intercourse in pregnancy) was associated with a shorter second stage of labour, less labour inductions, lower oxytocin augmentation rate and lower forceps delivery rate[17].

Cervical ripening: prostaglandin concentrations increased by a factor of

10-50 in the cervical mucus of pregnant women 2-4 hours after intercourse[18]. In a comparative study of 47 women who had intercourse at term compared to 46 who abstained, there was no difference in the Bishop score but the sexually active group delivered on average four days earlier which was not considered to be clinically significant[19].

Induction: in 2001 a Cochrane review assessing sex as a method for induction of labour, found only one trial of 28 women at greater than 39 weeks gestation who were told to have three nights of sex compared to those who were asked to abstain[20]. This study confirmed no change in Bishop score or 5 minute Apgar score and did not provide data on encouraging earlier delivery. In a RCT, 108 term pregnant women were advised to have sex and compared to 102 control group who were not given this advice. The coitus rate was not that different (60% in the intervention group compared to 40% in the control group). The two groups were similar in the rates of spontaneous onset of labour, caesarean section and neonatal outcomes[21- 25.]

Overall, there is no literature to support the theory that sex at term has an effect on Bishop score, spontaneous onset of labour, caesarean section rates or neonatal outcomes. Also, there are not any known harmful consequences. The appropriate advice to pregnant women would seem to be that, if they are interested in having sex, there is probably no harm and there may be a possible benefit.

Sexual intercourse during the postnatal period: there is no data to respond to the most frequent question in postnatal period which is: 'when can I restart my sex life?' In Western European countries and in North America the first postnatal visit is allocated at six weeks. By that time the vagina has usually healed. Women with minimal or no perineal trauma usually recommence sex earlier without any complications in comparison to those who had vaginal trauma usually in the form of third or fourth degrees. These women are not likely to be interested in resuming sex earlier. Most postpartum infectious complications appear within the first 2 weeks after delivery and few people are comfortable enough to start having sex this early, explaining therefore the rarity of these complications.

Conclusions

Whether a woman should have sexual intercourse at any stage of the pregnancy depends, of course, very much on her personal feelings as well as her partners'.

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From a purely medical point of view, there is no data to support the opinion that sexual intercourse should not take place at any time except when explicitly discouraged by a medical professional.

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