

Pregnancy and Delivery on an Intact Hymen at the Kalaban-Coro Reference Health Center, Mali 2022: About a Case

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Abstract

The appearance of a pregnancy without sexual intercourse with vaginal penetration has always given rise to many very lively debates. It is most often described as miraculous by some popular beliefs. In reality, some specific situations can exceptionally lead to a pregnancy without penetration. The authors report the case of a 20-year-old girl who became pregnant without having previously had sex with vaginal penetration. However, she strongly suspected her fiancé of abusing her during his last visit to her home and she had fallen asleep when he left her. After her period was two months late, she decided to have a gynecological consultation, after which an ultrasound concluded that there was a continuous intrauterine pregnancy for 10 weeks of amenorrhea plus 3 days. The parents, informed of the situation, raised awareness and supported her so that she could keep the pregnancy and carry out the prenatal follow-up. The pregnancy progressed normally. She gave birth to a daughter weighing 2600 grams by elective caesarean section to keep her virginity, which she appreciated very much before her marriage to another man.

Keywords: Pregnancy, childbirth, intact hymen, Kalaban-Coro, Mali.

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INTRODUCTION

The question of whether a woman can get pregnant as a virgin is a subject that raises many questions and is the subject of many debates. Some popular beliefs state that it is impossible to conceive a child without having had sexual intercourse, while others maintain that special situations can exceptionally lead to a pregnancy without penetration. It is therefore essential to understand that each situation is unique and that a

medical consultation is necessary to assess the real possibilities of conception [1].

Any sexual relationship during which semen is found near the vagina therefore carries a risk of pregnancy. Even without penetration, the risk of getting pregnant, even if it is very rare, does exist: it is enough that the vulva and vagina have been in direct contact with the spermatozoa (vulvar ejaculation), sperm travel up to the uterus and then into the fallopian tubes. It is

impossible to give exact percentages on the chances of getting pregnant without vaginal penetration [2].

It is very difficult to affirm, or to deny the existence of previous sexual intercourse, whether or not it is consensual in the presence of an intact hymen. The hymen can have a significant elasticity allowing vaginal penetration without defloration. An intact hymen was found in 10.7% of the population who had already had sexual activity, according to the study by J. Lejeune L [3].

The hymen is defined as a dermal fold of the vaginal mucosa present on the entire perimeter of the vaginal orifice and which is perforated by an orifice. It therefore constitutes the theoretical boundary, for a female person, between the external and internal genitalia [4].

The hymen has been seen as evidence of a woman's absence of previous sexual activity in many societies for centuries [5].

The hymen exam is not an accurate or reliable test of sexual activity, including sexual assault. The reality is that there are many factors that do not allow clinicians to properly assess hymen tissue changes at different stages of the life cycle, including genetic, developmental, endocrine, and external influences [6]. The hymen is not an indicator of virginity according to the conclusion of Serbulent Kilic's study in 2022 in Turkey [7].

The medical literature is not sufficiently extensive in relation to this theme of the occurrence of pregnancy on an intact hymen.

We report the case of a young high school student who became pregnant with an intact hymen and who, after agreeing to keep the pregnancy at the request of her parents, proposed a caesarean section of convenience in the ninth month of pregnancy to preserve her virginity.

CLINICAL CASE

A 20-year-old girl, a high school student in her final year of high school and single, was admitted to our department on March 1, 2022 to delay her period by about two months. The day's interrogation did not note any sympathetic signs of pregnancy. The patient had no particular medical-surgical history. She was simply

surprised that she hadn't seen her period for the previous two months; something she finds unusual, hence the consultation. The last date of the period was not known. She told us that she is engaged but that she had never had sex until now, neither with her fiancé nor with another man. However, she told us that the last visit she received from her fiancé was about two months ago. She would be fast asleep when her fiancé left her.

At the entrance examination she was in good general condition with well-coloured conjunctivae and pregnancy-like breasts (congestion, areolar hyperpigmentation, presence of Montgomery's tubercles). Vulvar inspection (with Dickinson's method) did not note any defloration of the hymen that day. The vaginal examination was not performed; however, the rectal revealed a globular uterus.

Thus, in the face of all these signs found above, pelvic ultrasound was requested, performed and concluded with a normal progressive intrauterine monoembryonic pregnancy of 10 weeks plus 3 days.

The girl was engaged to her maternal cousin who did not admit to being responsible for the pregnancy. As a result, she broke off the engagement to the latter, whom she described as a liar. She wanted to terminate the pregnancy but in the face of the advice given by her family, she finally gave in and accepted the follow-up of the pregnancy until term. No vaginal examination during the pregnancy follow-up was carried out to preserve the virginity to which she was deeply attached and which she would like to keep for her future husband.

Thus, the pregnancy went normally. The examination at the ninth month concluded that there was a normo-progressive single-fetal pregnancy with the fetus in cephalic presentation on a pelvis not clinically explored in the presence of a hymen remaining intact. The estimated fetal weight on ultrasound was 2750 grams. The patient and her parents opted for a caesarean section of convenience in order to preserve virginity. The preoperative assessment and the pre-anesthesia visit came back without any particularity.

The caesarean section was performed at 39 weeks and gave birth to a daughter weighing 2600 grams. Post-caesarean vaginal removal was carefully performed by intravaginal electric suction using cannula N°7 with respect for the integrity of the hymen. The post-caesarean section aftermath was simple.



Figures I, II: Hymen remaining intact after caesarean

NB: the patient opted for artificial breastfeeding of the child who was raised by her parents while she herself went to do her higher education abroad.

The question that remained unanswered for this clinical case is how she became pregnant (victim of sexual abuse with vulvar ejaculation or by actual vaginal penetration through an elastic hymen during induced and deep sleep)?

Consideration of the matter

The occurrence of pregnancy on an intact hymen is a rare but possible situation. This clinical case is the 1st recorded since the opening of our health center in July 2013. This rarity has also been pointed out by Pia de Reilhac, who states that it is impossible to give exact percentages on the possibilities of becoming pregnant without vaginal penetration [2].

It is the periovulatory vulvar ejaculation without vaginal penetration following touching that we have retained for this clinical case as the most plausible hypothesis that can explain the occurrence of this pregnancy on the intact hymen. According to Pia de Reilhac The risk of getting pregnant without penetration, even if it is very rare, does exist, it is enough that the vulva has been in direct contact with the spermatozoa following a vulvar ejaculation so that they go up to the uterus and then into the fallopian tubes [2, 8].

Vaginal penetration on the elastic hymen was not retained in view of the absence of a history of sexual intercourse and especially in the absence of the impossibility of not being awakened during the act of vaginal penetration. However, Lejeune J [3], in his study, noted that an intact hymen was found in 10.7% of his population who had already had sexual activity.

This clinical case is a form of gender-based violence that did not receive forensic care due to the family ties between her and her alleged guilty fiancé. The victim, after agreeing to keep the pregnancy until delivery, has benefited from the continuous support of her family and health workers. These supporters made her forget the psychological shock (feelings of shame, depressed mood, anger) she had had after the diagnosis of the pregnancy. The occurrence of this psychological shock has also been described by Mélodie C. in her publication [9].

The caesarean section was the way of delivery due to the patient's desire to preserve her virginity. As a reminder, no vaginal examination was performed during the prenatal follow-up so as not to deflower the hymen). Loupe B [10] in his publication also spoke of caesarean section as a route of delivery for a pregnancy conceived without vaginal penetration but in a context of congenital anomaly where the vaginal canal could not allow the passage of a Hegar candle number 3. Caesarean section was also the route of delivery of a 38-week pregnancy on a microperforated hymen in a 21-year-old primigest in parturient, according to Kenji G [11].

CONCLUSION

The occurrence of pregnancy on an intact hymen is a rare but possible situation. It can be secondary to vulvar ejaculation or actual vaginal penetration through an elastic hymen. Destabilizing psychological shock is most often associated if it occurs in the absence of vaginal penetration. The mode of delivery depends on the anatomical context and the choice of the pregnant woman.

Ethical consideration: All procedures performed in this study were in line with ethical standards.

Conflict of Interest: None

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