Vulnerability in adolescence: a case report of attempted abortion and sexual violence

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Abstract

Introduction: Abortion, even when provided by law in cases of sexual violence, continues to be practiced in an insecure way, since women who suffer violence are not reported or guarded by social, institutional or age vulnerability, as in adolescence.

Objective: Describe the clinical consequences of unsafe abortion, report this experience as well as sexual violence in situations of social and age vulnerability.

Methods: It is a clinical case report, with the consent of the patient, in the year 2016, of a 16-year-old female adolescent with a personal history of sexual violence by an intimate aggressor. Admitted to the health service with diagnosis of acute abdomen and induced abortion using antibiotic therapy.

Results: Laboratory tests revealed altered C reactive protein and presence of leukocytosis, ultrasound showed heterogenic mass, computed tomography showed presence of cylindrical foreign body in vaginal cavity, surgical interventions, sepsis, clinical complications (pulmonary thromboembolism) and prolonged hospitalization.

Conclusion: The history of violence portrayed in this study reveals an attempt of abortion with self harm, revealing negative clinical repercussions and the health problems of the adolescent. This person has committed an abortion that does not fit into the abortion criteria provided by law. It also revealed the need for further discussion on the topic, highlighting health promotion practices against unsafe abortion.

Keywords: abortion, sexual violence, adolescence, septic abortion.

INTRODUCTION

The World Health Organization (WHO) shows an increase in rates of unwanted pregnancies, unsafe abortions, sexually transmitted diseases and neonatal repercussions in women who are sexually abused1. In Brazilian public health, this has a negative effect on the economy, which can vary up to 2% of GDP (gross domestic product)2, as well as maternal consequences related to the morbidity and mortality of our women3-5.

Unsafe abortion appears as an alternative to unwanted pregnancies1,6,7, mainly in cases related to physical violence, sexual violence, usually caused by an intimate or known partner. In such cases, abortion would be provided by law in some countries1,6, but patients who suffer violence do not report or hide for various vulnerabilities – age, social and institutional8-10.

Sexual abuse11 during adolescence is a traumatic experience that complicates young women’s psycho-social development at the threshold of adulthood2, resulting in consequences associated with sexually transmitted diseases, pregnancy followed by violence, unwanted pregnancies, psychosocial repercussions and negative sequelae that compromise reproductive health and sexual1.

The association between violence and unsafe abortion causes a risk of death2,5 in young women, related to infections, 40% of which reaches the upper genital tract12 and sepsis3,4. Studies show the importance of early inter-

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vulnerability and the interdisciplinary approach in health services to reduce the harm caused\textsuperscript{13}.

Thus, reinforcing the importance of health promotion practices, the article reports a case report of a teenager with a personal history of sexual violence who performed an unsafe abortion and aims to describe the clinical consequences of unsafe abortion, report this experience as well as sexual violence in situations of social exclusion and vulnerability of age.

\textbf{CASE REPORT}

Identification: 16-year-old female, brown, born and raised in São Paulo - SP, incomplete high school, single and lives with her mother.

Main complaint and duration: Patient referred from the outpatient for Victims of Sexual Assault to the Gynecology Discipline, Hospital das Clínicas, Medicine School, São Paulo University, because of abdominal pain for 10 days.

Previous history of the current medical condition: Patient reporting abdominal pain in the hypogastric region for 10 days, dysuria and diarrhea with soft stools with no change in color and no bleeding associated. At the time of initial care, she was on antibiotic therapy (norfloxacin) for 6 days, without clinical improvement. She denied fever, nausea, vomiting or polyuria.

Family history: No heart diseases, neoplasia, gynecopathies, chronic or infectious diseases were reported.

Personal history: No previous surgeries, clinical admissions, preexisting diseases, cardiopathies, neoplasia, gynecopathies, chronic, infectious diseases and sexually transmitted diseases were reported.

Habits: Smoking, alcoholism, drug use or medication were denied.

Gynecologic background: Menarche at 11 years old. First sexual intercourse at 12 years. Sexual abuse from the stepfather (husband of her mother) when she was 13 years old, follow up with an interdisciplinary approach with psychologists and infectologists. No use of contraceptive method. At the moment, she mentioned only consented sexual intercourse, last sexual intercourse 2 years ago.

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{Figure_1}
\caption{Pelvic ultrasonography: heterogeneous mass with 227 cm$^3$ volume}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{Figure_2}
\caption{Pelvic Ultrasonography: Heterogeneous mass with peripheral vascularization to Doppler study}
\end{figure}

\textbf{General admission physical examination:} Regular general condition, flushed, hydrated, feverish (axillary temperature: 37.8°C), tachycardic (heart rate: 124 beats per minute - bpm), normotensive, euphonic. Cardiac and pulmonary auscultation with no relevant findings. Abdomen discretely distended, diffusely painful, especially in left iliac fossa, without worsening of pain to sudden decompression (negative Blumberg sign).

\textbf{Gynecological exam:} Genitalia with female appearance, trophism and pilification suitable for the age, without lesions. Specular examination was difficulted by patient’s pain, identified only yellowish and fetid secretion with the presence of an injury in the proximal third of the vagina, which precluded the visualization of the cervix. At the bimanual vaginal examination, a lesion was noticed in the proximal third of the vagina, possibly stenosing, that precluded palpation of the cervix. There was important pain on the palpation of the fornices, cervix mobilization and adnexal assessment.

\textbf{Complementary diagnostic tests:} Full blood count, C reactive protein, serology for syphilis, hepatitis B and C and HIV, urinalysis, urinary examination of pregnancy, pelvic ultrasonography and pelvic tomography were requested.

\textbf{Diagnostic hypothesis:} Infectious acute abdomen and Self-induced and insecure abortion.

\textbf{Therapeutic plan:} Due to sepsis and acute inflammatory abdomen, patient was hospitalized for broad-spectrum intravenous antibiotic therapy (clindamycin and gentamicin) for 10 days, clinical support and diagnostic elucidation.

\textbf{Results of laboratory tests:} The exams showed leukocytosis and presence of toxic granulations, elevated C reactive protein; serological tests for syphilis, HIV, hepatitis B and C were negative. Urinary examination was negative for pregnancy.

\textbf{Results of imaging tests:} Pelvic ultrasonography (transabdominal technique, since transvaginal study was not possible due to patient’s pain) showed a large heterogeneous mass, containing cystic areas with debris of perforation, occupying hypogastrum and left iliac fossa (Figure 1), measuring about 8.6 x 5.5 x 9.2 cm (227 cm$^3$ volume), with peripheral vascularization to the Doppler study (Figure 2); uterus and ovaries could not be characterized.
Computed tomography of abdomen and pelvis showed a cylindrical foreign body located in the vaginal cavity, of low attenuation and with a component of internal metallic attenuation that presents intimate contact with the cervix of the uterus, about 5.0 cm long and 3.0 cm maximum diameter. In addition, a voluminous multi-septate collection with walls that undergo post-contrast enhancement, located in the left adnexal region, extended to the umbilical scar, in contact with the vagina, uterus, ovaries and urinary bladder, shifting them, measuring about 12, 2 x 11.6 x 9.7 cm. These findings could probably represent salpingitis and left oviduct abscess (Figure 3A, 3B, 3C, 3D, 3E and 3F).

Figure 3 (3A, 3B, 3C, 3D, 3E and 3F sequences) - Computed tomography of abdomen and pelvis: a cylindrical foreign body in the vaginal cavity, a metal attenuated component that presents close contact with the uterine cervix, 5.0 cm of extension and 3.0 cm of maximum diameter; Voluminous multi-septate collection with walls that undergo post-contrast enhancement, located on the left adnexa.
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The patient has up to 37.7°C and slightly tachycardic (up to 115 bpm); because of unsatisfactory clinical response, antimicrobial scheme was modified for ceftriaxone and metronidazole and surgical approach was indicated.

**Surgical approach:** Patient was submitted to dissolution of vaginal stenosis and removal of foreign tissue (Figure 4) via the vagina, in a surgical room, on the third day of hospital stay, under spinal anesthesia, without complications. All tissue removed was referred for histopathological analysis. Pathologic analysis revealed Malpighian mucosa with extensive acute inflammatory infiltrate, ulcerated, extending to the submucosa, associated with granulation tissue, fibrin and necrosis.

Due to the age of the patient and, until then, absence of clinical worsening, conservative management was attempted and percutaneous drainage of pelvic abscess through interventional radiology was programmed. However, on the first postoperative day, there was worsening of tachycardia (125 bpm) and lowering of the level of consciousness, characterizing severe sepsis, as well as signs of peritonitis (Blumberg positive signal) (Figure 4).

Antibiotic therapy was modified for piperacillin / tazobactam and vancomycin and xploratory laparotomy was indicated. Mild infraumbilical laparotomy was performed under general anesthesia on the fourth hospitalization day. Inventory of the cavity: purulent free liquid in the abdominopelvic cavity, where four abscess stores were found, the largest in tuboovarian topography on the left, with multiple adhesions with omentum, small intestine, colon and ovaries. The abscesses were drained, the capsules were resected and the cavity was repeatedly washed with saline solution. Due to the degree of impairment, it was necessary to resect part of the omentum contiguous to the abscess capsule. At the end of surgery, a suction drain closed system (Portovac) was left. All removed material was referred for histopathological study, which identified: acute supplicative inflammatory process with exuberant granulation tissue in connective and adipose tissue on the abscess capsule; and exuberant acute supplicative inflammatory process in adipose tissue on the omentum.

**Immediate postoperative period:** In the immediate postoperative period, the patient was referred to the intensive care unit, due to the possibility of hemodynamic instability and necessity of vasoactive drug, a central venous catheter was placed in left subclavian vein.

**Intensive Care Unit:** The patient evolved with hemopneumothorax, drained without complications, and acute renal failure. The dose was corrected perserum levels of vancomycin. She required norepinephrine and hemotransfusion (red blood cells) to maintain hemodynamic stability for one day, evolving with partial clinical improvement. Abdominal and thoracic drains evolved with reduction of flow, thoracic drainage was removed after three days; diet acceptance and laboratory parameters for infection improved. After eight days in the Intensive Care Unit, she was referred to the ward.

**Ward:** followed in with intravenous antibiotic therapy and with physical therapy support. After four days, the patient evolved with progressive worsening of the respiratory pattern and underwent chest angiotomography, which revealed: failure to fill the right inferior lobar artery and its proximal basal segmental branches, compatible with acute pulmonary thromboembolism, and laminar and subsegmental atelectasis in the low pulmonary lobes. Full anticoagulation was performed with enoxaparin and warfarin until INR adjustment. Finally, she evolved with important clinical improvement.

**Hospital discharge:** After 42 days of hospitalization, the patient was discharged asymptomatic, taking warfarin and scheduled outpatient clinic (gynecology, gynecology, and psychiatry).

**Outpatient clinic follow-up:** After 20 days of hospital discharge, the patient returned to the Gynecology outpatient clinic in good clinical conditions and adequate warfarin until INR adjustment. Finally, she evolved with important clinical improvement.

In private, alone in the office, the patient informed the medical staff that she herself inserted the foreign body for induction of abortion, because she had a delayed menstrual period and feared being pregnant. She also mentioned the absence of sexual activity. The patient will return for periodic clinical and psychological assessment.

### DISCUSSION

The article reports a clinical case of adolescents with a history of sexual violence, that performed an unsafe abortion causing damages and health problems. The consequences were surgical interventions, generalized infections (sepsis), clinical intercurrences such as pulmonary thromboembolism and prolonged hospitalization.

Post-abortion hospital admission rates are high and make abortion unsafe as a public health problem in Brazil\(^{14,15}\) and it accounts for 13% of maternal mortality worldwide\(^{16}\). About half of women who had abortions received care in the health system and were hospitalized for complications\(^{16,17}\). Considered a persistent and preventable pandemic worldwide\(^{6,15,16}\), unsafe abortion\(^{17}\) places women at risk in...
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The legalization of abortion in Brazil is a controversial issue and is linked to aspects of religion and culture, hindering the search for health services and bringing harmful consequences to adolescent health. However, social vulnerability is present in this context, where economic and educational levels interfere with access to safe and legal abortion.

The incidence of septic abortion varies widely among developing and developed countries and is also related to adolescence. Serious infections resulted from unsafe abortion practices with consequent sepsis or severe hemorrhages may have a definitive repercussion on reproductive life, such as hysterectomy and sepsis in cases of foreign body insertion. In our case, the patient developed severe pelvic infection, pelvic abscess, severe sepsis and needed intensive care.

The conservative management - preservation of the uterus - was timely, based on the patient’s age and obstetrical history, to preserve her fertility and, in the future, provide an opportunity for a properly planned pregnancy. Uterine perforation, hemorrhage, visceral injury, sepsis and shock after unsafe abortion can lead to death due to delayed presentation for appropriate medical treatment. In our case report, the outcome was favorable for the patient due to the structure of care in a specialized environment in women’s health and complexity level of high health service.

This case report helps guide clinical practice and reflects on the impact of veiled sexual violence and unsafe abortion on adolescent lives and on the health system.

CONCLUSION

The history of violence portrayed in this study reveals an attempt of abortion with self harm, revealing negative clinical repercussions and the health problems of the adolescent. This person has committed an abortion that does not fit into the abortion criteria provided by law. It also revealed the need for further discussion on the topic, highlighting health promotion practices against unsafe abortion.

Competing interests

The authors declare that they have no competing interests.

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Authors’ contributions

ATMS, ESFF, GDS, CML, WSP, JMSJ, ECB and ICES participated in the acquisition of data and revision of the manuscript.

ATMS, GDS and ICES performed the data analysis and carried out a bibliographical review.

ESFF and ICES reviewed the manuscript and carried out a bibliographical survey.

All authors read and gave approval for the version submitted for publication.
REFERENCES


Resumo

Introdução: O aborto, mesmo quando previsto por lei nos casos de violência sexual, continua a ser praticado de maneira insegura, uma vez que as mulheres que experimentam essa violência não a relatam ou velam por vulnerabilidade social, institucional ou etária, como na adolescência.

Objetivo: Descrever as consequências clínicas do aborto inseguro e relatar essa experiência vivenciada bem como a violência sexual em situações de vulnerabilidade social e etária.

Método: Trata-se de relato de caso clínico, com consentimento da paciente, ocorrido no ano de 2016 de uma adolescente, sexo feminino, 16 anos com antecedente pessoal de violência sexual de agressor íntimo. Admitida em serviço de saúde com diagnóstico de abdome agudo e aborto induzido em uso de antibioticoterapia.

Resultados: Laboratoriais revelaram proteína C reativa alterada e presença de leucocitose, ultrassonografia apresentou massa heterogênea, tomográfica computadorizada evidenciou presença de corpo estranho cilíndrico em cavidade vaginal, intervenções cirúrgicas, infecções generalizadas, complicações clínicas.

Conclusão: A história de violência retratada nesse estudo revela uma tentativa de aborto com autolesão, desvelando repercussões clínicas negativas e os agravos à saúde da adolescente. Esta que cometeu um aborto que não se insere nos critérios de aborto previsto por lei. Revelou ainda a necessidade de maior discussão sobre o tema, destacando as práticas de promoção da saúde contra o aborto inseguro.

Palavras-chave: aborto, violência sexual, adolescente, aborto séptico.