Introducing colposcopy and vulvovaginoscopy as routine examinations for victims of sexual assault

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Summary

Victims of sexual assault require appropriate care, follow-up and information regarding their legal rights. Clinicians are faced with the challenging responsibility of identifying victims and providing effective interventive and preventive counselling.

The most pressing medical task is to confirm the assault and to undertake correct documentation and exhibition of biological traces. Performing colposcopy and vulvovaginoscopy does not allow us to diagnose a sexual assault trauma, but it can help us to identify those microscopic lesions (due to the enhanced visualization and the higher resolution under which the genital areas are examined) that may not be seen during a normal clinical examination.

The colposcopic and vulvovaginoscopic examination starts from the vulvar region looking for superficial lacerations and ecchymosis; the labia majora and minora are examined scrupulously, then the posterior forchette, the perineum and the hymen where it is possible to report microulcerations, contusions and even possible scars due to a precedent defloration.

Recent advances in clinical forensic medicine show that trained examiners using colposcopy obtain evidence of genital trauma in 87% to 92% of rape victims. Colposcopy and vulvovaginoscopy must be performed within 48 hours from the sexual assault, because most of the lesions heal rapidly. Colposcopy and vulvovaginoscopy may be seen as a stressful invasion of a woman who is already vulnerable and at risk of the rape trauma syndrome. Prior information about colposcopy may reduce the level of anxiety experienced by many women undergoing this procedure.

Incorporating colposcopy and vulvovaginoscopy into the routine assessment of sexual assault victims could be a valid way of identifying genital injuries; moreover the medical report will be more detailed and precise.

Key words: Colposcopy and vulvovaginoscopy; Sexual assault.

Sexual assaults against women are endemic worldwide. The most recent official data on this phenomenon (published by ISTAT in 1999) refer to those reported in 1997 which give 3,339 denunciations of rape and 390 of sexual assaults on minors, with an incidence rate of 10: 100,000, but it is evident that this data is widely underestimated.

From a survey carried out by ISTAT between September 1997 and January 1998 on citizen's safety, it was seen that only 32% of women report a rape and this percentage drops to only 1.3% for attempted rape [1].

On a worldwide scale it has been calculated that one out of three women has been beaten and/or sexually abused and that one out of four has been a victim of some form of violence during pregnancy.

In the U.S.A. more than 680,000 women are victims of sexual assaults every year [2]. Only a low percentage, about 30%, report the assault or seek medical help due to fear, shame or fear of not being believed.

Medical and paramedical staff, gynaecologists and obstetricians who are often the first to come into contact with a victim of sexual abuse must know the correct procedure, how to carry out a complete examination, write up a report, which preventive measures to take (emer-

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gency contraception, antibiotic prophylaxis, etc.) and how to collaborate with social services in the district which fortunately today actively exist demonstrating that this is a widely recognized and very common problem.

However, data collection of data can be extremely heterogeneous and the medical staff who are responsible for giving both medical and psychological assistance and who also have the important task of getting legal advice may seem disorientated and find difficulty in compiling a medical report which plays a fundamental role in the medical-legal outcome [3, 4].

Faced with a victim of sexual assault the medical staff must handle the case effectively and carefully so that a diagnosis of sexual aggression can be reached as soon as possible thus permitting both clinical-therapeutic and legal procedures.

It must not be forgotten that sexual assault, as in fact any enforced sexual act carried out without the consent of the victim, is contrary to the principle that any sexual act must be founded on the consent and respect of the partner and is therefore considered a criminal offence, a serious crime against persons [5].

The medical staff must not only offer the victim valid medical assistance, but also give psychological help and moreover collect data for a medical-legal report.

Any eventual lesions of the genital area consequent to the aggression must be scrupulously looked for, if necessary using technical instruments which give a higher resolution of the genital area to be examined [6, 7].

In victims of sexual assault genital lesions are not always obvious during a normal clinical examination and therefore a negative clinical examination does not exclude sexual violence, showing the importance of the use of specialistic technical instruments [6-8].

It is of the utmost importance that any invasive clinical and instrumental examination is explained previously to the victim and that her consent is given before they are carried out, otherwise further stress may be caused. In fact after an experience of aggression without the patient's consent there is the risk of provoking a violent trauma syndrome [9].

The specialist must get the victim's trust, overcome any personal prejudice, be prepared to listen to her and inform her of her rights and choices.

Colposcopy associated with vulvovaginoscopy offers a partial clarification and higher resolution for many clinical and medical-legal problems related to sexual violence [7]. Even if they do not allow us to diagnose or evidence signs of certain violence, colposcopy and vulvovaginoscopy can help us identify the lesions by giving a clear and valid description of these, going beyond the macroscopic aspect [6].

This instrumental procedure completes the clinical examination of the body with a more precise and detailed description of the eventual injuries due to the various possible enlargements.

The colposcopic and vulvovaginoscopic examination starts from the vulvar region looking for superficial lacerations and ecchymosis; the labia majora and minora are then examined scrupulously, then the posterior forchette, and finally the hymen where it is possible to report microulcerations, contusions and even possible scars due to a precedent defloration, and ruptures of the vascular reticle.

All these signs can supply important elements, even from a chronological point of view, because these are lesions that heal within a few days and can therefore confirm or not the woman's story [7].

In the case of lacerations of the hymen present for more than ten days, no hypothesis can be made about the date when the scar under observation originated; it could have existed for only a few weeks or it could even be several years old.

The examination then procedes with the observation of the perineum, the peri-anal region and the anus; the edges of the anus are carefully examined. Finally the vaginal walls and the uterine cervix are examined.

In the case of anal penetration, the examination must be completed with rectal exploration and anoscopy in order to assess the possible presence of bleeding, erythemas, lacerations of the mucous membranes or haematomas.

Combining colposcopy and anoscopy increases the

number of positive cases of sexual assault from 61% to 72% [14].

Moreover colposcopy, due to its characteristics of enlargement and higher illumination, can help the gynae-cologist perform cervical and vaginal tampons, together with rectal tampons, in the search for spermatozoa and for the screening of sexually transmitted diseases; in fact the risk of infection consequent to sexual violence is estimated to be 5-10% [3].

All the clinical and instrumental data collected throughout the examination must be carefully reported in order to give the competent medical-forensic examiner a clear and precise documentation of the patient's complete examination [10].

The sensibility and specificity of the instrumental examination is increased by taking photographs of the genital areas visualized during colposcopy and vulvovaginoscopy. The photographs can then complete the written documentation [11].

Up to now in our country, colposcopy and vulvovaginoscopy are not part of the routine examination performed at the Casualty Department, in contrast to the U.S.A. and Australia [7, 12].

The vulvovaginoscopic examination performed opportunely, within 48 hours from the aggression, can help us chronologically, because most of the lesions heal rapidly. In this way we can obtain evidence of genital trauma in 87% to 92% of rape victims [7, 12, 13].

We believe that a larger employment of this procedure, easy to perform, not invasive, of low cost and good resolution would be desirable for women who seek a gynaecologist's advice to report sexual violence.

It is therefore evident that an act of sexual violence, because of the psychological effects it has on a woman, requires the total commitment and active involvement of a gynaecologist who, making use of all available methods, such as colposcopy and vulvovaginoscopy investigations, can make an important contribution to the early recognition of any lesions and the drama they represent.

References

- [1] Curiel P., Dubini V.: "Il ginecologo ed il problema della violenza sulla donna". Atti della SIGO, 2001, 77, 9.
- [2] Holmes, Resnick et al.: "Follow-up of sexual assault victims". Am. J. Obstet. Gynecol., 1998, 179, 2, 336.
- [3] Lukic A., Barbarino P., Prosperi Porta R. *et al.*: "Il ruolo del ginecologo di Pronto Soccorso nei casi di violenza sessuale". *Minerva Ginecologica*, 51, 11, 453.
- [4] Grassi A., Fiorani F., Ferrero S. *et al.*: "Proposta di una cartella clinica da utilizzare nei casi di violenza carnale". *Minerva Ginecologica*, 1997, 49, 521.
- [5] Lukic A., Prosperi Porta R. et al.: "Violenza sessuale: esperienza del SS di accettazione e pronto soccorso del II Ist. di Cl. Ost. e Gin.". Giorn. It. Ost. e Gin., 1998, 10, 447.
- [6] Lenahan L. C., Ernst A., Johnson B.: "Colposcopy in evaluation of the adult sexual assault victims". Am. J. Emer. Med., 1998, 16 (2), 183.
- [7] Slaughter L., Brown C. R. V.: "Colposcopy to establish physical findings in rape victims". Am. J. Obstet. Gynecol., 1992, 166, 83.
- [8] Bowyer L., Dalton M. E.: "Female victims of rape and their genital injuries". Br. J. Obstet. Gynaecol., 1997, 104 (5), 617.

- [9] Patel H. C., Courtney G. M. etc.: "Colposcopy and rape". Am. J. Obstet. Gynecol., 1993, 168, 1334.
- [10] Petter L. M., Whitehill D. L.: "Management of female sexual assault". Am. Fam. Physician., 1999, 1, 59 (5), 1122.
- [11] Slaughter L., Brown C. R.: "Cervical findings in rape victims". Am. J. Obstet. Gynecol., 1991, 164 (2), 528.
- [12] Bowyer L., Dalton M. E.: "Female victims of rape and their genital injuries". Br. J. Obstet. Gynecol., 1997, 104, 617.
 [13] Slaughter L., Brown C. R. V. et al.: "Patterns of genital injury in
- [13] Slaughter L., Brown C. R. V. et al.: "Patterns of genital injury in female sexual assault victims". Am. J. Obstet. Gynecol., 1997, 176, 609.
- [14] Ernst A. A., Green E., Ferguson M. T., Weiss S. J., Green W. M.: "The utility of anoscopy and colposcopy in the evaluation of male sexual assault victims". *Ann. Emerg. Med.*, 2000, *36* (5), 432.

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