VULVAR LESIONS AT RISK

Prevention, clinical methodology and therapy

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SUMMARY

In confronting the problem of prevention and early diagnosis of vulvar lesions at risk, the diagnostic methodology for their recognition, and the therapeutic measures best taken are discussed. Through the use of routine, ambulatory screening tests, it is possible to detect and recognize those pathological situations which may evolve towards neoplasia. Among these, the vulvar dystrophies, some viral infections and sexually-transmitted diseases are particularly at risk. Patients with oncologic precedents are also at risk as well as patients receiving immunosuppressive therapy.

The current knowledge of the epidemiology and the natural history (1), along with the introduction of new diagnostic methods has led to a remarkable reduction in the incidence of invasive forms of the vulva, or at least, to a considerable increase in the number of pre-neoplastic lesions diagnosed by the recognition of diseases and pathologic situations that are often associated with or precede, vulvar neoplasias. In specialized centers, in fact, the use of a specific diagnostic protocol permits the detection of precancerous states which, treated in time and carefully followed, leads to remarkable results in terms of tumor prevention.

In the diagnostic itinerary that should be followed, the use of screening examinations is indispensable as the tests constitute fundamental instruments for the correct diagnosis of vulvar pathology at risk, and consist essentially of vulvar cytology (2), chromoscopic tests, and target biopsy (3, 4).

Since the symptoms in vulvar disease are very aspecific and not alarming, every clinical and symptomatologic manifestation should be considered and studied thoroughly. In this regard, the necessity of systematic and accurate inspection of the vulvar region must be emphasized, since a gynecological examination cannot be considered complete otherwise; likewise, a careful examination of the external genitals cannot be considered complete without exploration of the entire genital system. The use of a magnifying lens with good light conditions will reveal even very small lesions. On the other hand, the presence of subjective symptoms, even of limited importance, constitutes a salient factor which should not be under-estimated. Pruritus, a burning sensation and dyspareunia are the two most frequent symptoms reported by patients with vulvar disease, and are indifferently associated with diseases having different pathogeneses and severity, so that, for example, vulvo-vaginal inflammation, vulvar dystrophy and carcinoma may all present the same symptomatology. For this reason, the appearance of only subjective symptoms requires evaluation of the cause.

In order to exclude possible causes of inflammation such as the vulvovaginites of microbial or parasitic origin, complementary examinations are necessary, as colpocytology, examination of fresh flora and in culture; in addition the search for parasites in the feces allows exclusion of other causes of genital-anal pruritus. In order to rule out irritative or exogenous causes, it is necessary to consider the hygienic habits of the patient (use of soaps and deodorants), the use of underwear made of synthetic fabrics, and eventual allergic tendencies. The adoption of hygienic and therapeutic measures based on the results of these examinations will lead to the disappearance of symptoms and thus exclude the presence of possible lesions at risk.

In this way, primary prevention is in fact obtained, since a chronic state of inflammation and irritation may represent a condition predisposing to dystrophic states, which constitute a pathology at risk for vulvar tumor onset.

The persistence of symptoms or the absence of positive findings in the tests performed calls for further investigation with vulvar screening tests. Likewise, the presence of even minimal vulvar lesions that cannot be attributed to inflammatory or irritative factors (excluded by complementary tests) or a definite dermatological disease requires target biopsy, which enables histologic identification.

The vulvar dystrophies represent a group of diseases that frequently strike the vulvar region and the adjoining skin areas. This term, used generally to indicate chronic alteration in vulvar growth and cutaneous trophism, includes all those lesions also defined as leukoplachia, leukoplastic vulvitis, craurosis, scleroatrophic lichen, and neurodermatitis. A histological analysis of these alterations enables

an anatomo-pathological distinction into atrophic, hyperplastic and mixed (co-existence of atrophic and hyperplastic features) forms.

Vulvar dystrophies involve more or less extended areas of the vulvar skin, and although their malignant potential for evolution has been recently revised, they still constitute lesions at risk for neoplasia, especially the hyperplastic and mixed forms. In addition, in over 50% of the cases, they are associated with dysplastic or frankly neoplastic lesions, often masking them. The finding of dystrophic vulvar lesions on complementary tests, therefore, determines the continuance of the diagnostic itinerary with vulvar cytology, chromoscopic tests, and target biopsy.

When histological examination discloses a vulvar dystrophy without cellular atypia, it is best to begin suitable treatment, for the most part with topical hormonal therapy (corticosteroids, androgens, progesterone) in order to eliminate or at least reduce the chronic irritation related to the pruritus, which is almost constantly present and intense, and favour at least partially the reconstitution of healthy vulvar tissue (5). In the case instead of distrophy with cellular atypia it is best, especially in cases of moderate or severe dysplasia, to excise the entire lesion, which should be examined on serial sections to exclude the presence of more important lesions. Vulvar dystrophies should be examined annually; if dysplasia was found. this period should be shortened to every six months.

The use of demolitive surgery, such as simple vulvectomy, which many workers still hesitate to abandon, in the presence of extended dystrophic lesions must be absolutely discarded, because the practice of multiple biopsy and periodic control allows a confident evalution of the possible evolutive tendency of the dystrophic lesion.

It should in fact be recalled that only 1-2% of the dystrophies undergo neo-

SECONDARY PREVENTION OF VULVAR CARCINOMA

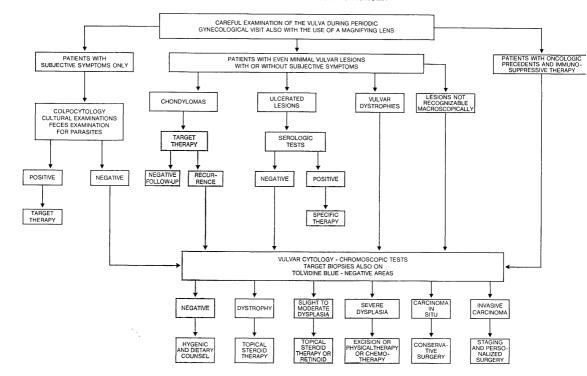


Fig. 1.

plastic transformation (6). Moreover, recourse to demolitive surgery does not change the symptomatology since the incidence of dystrophic lesion recurrence in surgically treated patients is very high. Therefore, periodic control also by means of biopsy, and the elimination of the pruritus and all the irritative factors constitute a valid instrument against neoplastic evolution, or for early diagnosis.

Other disease processes held capable of neoplastic evolution, and therefore considered pathologies at risk are the venereal viral infections, such as chondylomatous (7, 8, 9) and herpetic lesions (10), and venereal lymphogranuloma. Acuminate chondylomas or benign squamous papillomas, whose etiologic agent, papilloma virus homini, belongs to the group of the papova viruses, appear as mutiple, iso-

lated or confluent wart lesions. They grow rapidly during pregnancy and during the use of oral contraceptives and immunosuppressive therapy. The treatment for this infection, along with the elimination of situations favoring its growth (vaginal inflammation, oral contraceptives, immunosuppressive therapy) and its possible re-establishment (eventual treatment of the partner), consists in the topical application of a 25% tincture of podophyllin when the lesions are not very extended, and when the patient is not pregnant, due to the drug's toxic effect; diathermocoagulation after local anaesthesia without pre-operatory trichotomy to prevent dissemination, and the use of an ointment with a 5-fluorouracyl base are also efficacious.

When chondylomatous lesions present atypical aspects or tend to recur, they must be biopsied. Likewise, the presence of post-menopausal chondylomatous lesions should raise the suspect of wart carcinoma, and therefore requires biopsy. Periodic follow-up should be planned in these patients as well.

While herpes virus type 1 and 2 have implications similar to papillomavirus in determining tumoral lesions, from an etiological point of view they are mostly related to carcinoma of the portio. Nonetheless, in view of the frequent association of vulvar tumors with cervical carcinoma, it has been presumed that the same etiological factors are responsible for the tumor in both sites; in addition, it has been reported that the increase in vulvar herpes infections is equal to the figures for intraepithelial tumors. Herpes virus infections manifest as small confluent ulcerations, or in the early phase as minute bollous formations, with a tendency to recur. The search for the virus is carried out by culture examination, or more simply, by the indirect method of contact vulvar cytology, which demonstrates the presence of the giant polynucleated cells and intranuclear inclusions characteristic of viral infection. In this case, it is best to verify the presence of virus also in the vagina and portio.

To reduce the occasionally intense symptoms, represented essentially by a sense of burning pain, and to inactivate the virus in order to avoid frequent recurrences and secondary infections, various therapies have been proposed, but results are not always satisfactory. These consist of photodynamic therapy, autoimmune sera, 5-iodo-2-deoxyuridine, topical cytosine arabinoside, and more recently, methysoprinol applications. Accurate examination and careful follow-up are therefore necessary when dealing with these lesions.

Venereal lymphogranuloma is another viral infection that is held responsible for

possible neoplastic evolution. This disease, which strikes mostly black women, manifests initially with a papula which successively breaks, leaving an excavated gray ulcer. The initial lesion is painless and often is not noted. In time, the infection spreads via the lymphatics and determines a tumefaction in the regional lymphnodes which frequently suppurate. Reports of cancer evolution of this ulcer are numerous. A possible neoplastic evolution has also been described for the syphilitic ulcer.

Therefore, every time an area of epithelial destruction with ulcer characteristics is found in the vulvar zone, the evaluation of its etiopathogenesis is imperative, and is carried out by means of serologic testing for lues, fresh examination in a dark field for treponema, Frei test for lymphogranuloma, cytology with Papanicolau staining for the presence of intranuclear inclusions, and the isolation of possible viral particles. If these examinations are negative, it is best to carry out target biopsy in order to exclude neoplasia. It is worth adding that vulvar ulcerations may be consequent to other rare diseases, such as tuberculosis (usually secondary to bone localization), Behcet's disease, Crohn's disease, and soft ulcer. If the epithelial lesion is consequent to diseases as lymphogranuloma, syphilis, and herpes virus infections, periodic follow-up should be planned. Preventive vulvar screening examinations should be scheduled annually also for patients with oncologic precedents. In fact, the association of vulvar tumors with primary malignant lesions of other organs, especially the portio, vagina, colon and breast, is frequent and varies from 18-55%, depending on the case series (11). Without doubt, the therapy administered to these patients for the treatment of the primary lesions plays an important role in determining these associations. Similarly, patients receiving immunosuppressive therapy and presenting even minimal vulvar disease must undergo

periodic examination, because of their high exposure to malignant tumor onset also at the vulva. The actuation of this diagnostic itinerary and the consequent application of scrupulous clinical procedures have provided a valid guarantee of the proper evaluation of vulvar lesions; on one hand this leads to early and correct therapy of the lesions and benign disease, on the other, to the recognition, proper treatment and periodic follow-up of the situations at risk.

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