

EARLY DIAGNOSIS IN VULVAR NEOPLASIAS

A. AMBROSINI, L. BECAGLI,
P. RESTA, N. D'ANTONA (*)

Department of Obstetrics and Gynecology,
University of Padua

(*) Department of Obstetrics and Gynecology,
University of Siena

While malignant tumors of the vulva develop in a region that is readily accessible to common methods of diagnosis, they are nevertheless among the gynecological neoplasms that are diagnosed at a very late stage. In 60 % of cases, diagnosis is formulated after about 10 months following the presence of a neoformation which is often treated medically and biopsied only after three or more months (^{1, 2, 3}).

The causes for this delay are essentially:

- patient's reluctance to undergo gynecological examination;
- absence of severe and alarming symptoms;
- poor attention to the symptoms;
- incorrect knowledge regarding age for onset of vulvar carcinoma;
- incorrect clinical evaluation of vulvar lesions;
- physician's reluctance to carry out vulvar biopsies.

In order to achieve an early diagnosis of vulvar tumors, it is necessary that:

- causes of delay are reduced by making patients and physicians more aware of the problem;
- specialized centers in vulvar pathology are established in which the pathologist, dermatologist, gynecologist and oncologist work in close collaboration, thus allowing for more accurate evaluation of the vulvar lesions and remarkable reduction in the incidence of diagnostic errors;

— a diagnostic protocol is correctly followed with the use of specific methodologies such as colorimetric test which allow mapping of the vulvar lesions where target selective biopsies may be taken.

Control of vulvar lesions based on clinical indications is often insufficient for a correct diagnosis, given the large surface to be examined, and the multifocal character of the lesions themselves.

— Patients with pathology and risk are followed-up for long periods.

SUMMARY

The possibility of achieving early diagnosis of vulvar neoplasias is conditioned by several factors, among which, the establishment of specialized centers.

The diagnostic procedure which should be applied to the patients includes a series of controls whose careful observance associated with periodic and long-term follow-up will allow detection of initial neoplastic degeneration.

Lecture at the International Meetings on Gynecological Oncology - Venice, 23-27 april 1979.

Table 1. — *Diagnostic protocol.*

- a) *History*
 - metabolic diseases
 - skin diseases
 - allergies
 - chronic vulvo-vaginal inflammation
- b) *Objective examination*
- c) *Complementary tests*
 - fresh smear
 - colpocytology-colposcopy
 - vulvar-vulvoscopy cytology
 - cultures
- d) *Colorimetric tests*
 - Toluidine blue test
 - T.I.F.T.
- e) *Biopsy*
- f) *Follow-up*

The diagnostic approach to the patient should include (table 1):

a) Medical history with specific regard for metabolic diseases (diabetes), dermatologic diseases (psoriasis, predisposition towards skin infections), allergies, vulvo-vaginal inflammation and neuroses. Habits

of personal hygiene should be noted as well as soaps, deodorants, and the use of underwear containing synthetic fabrics.

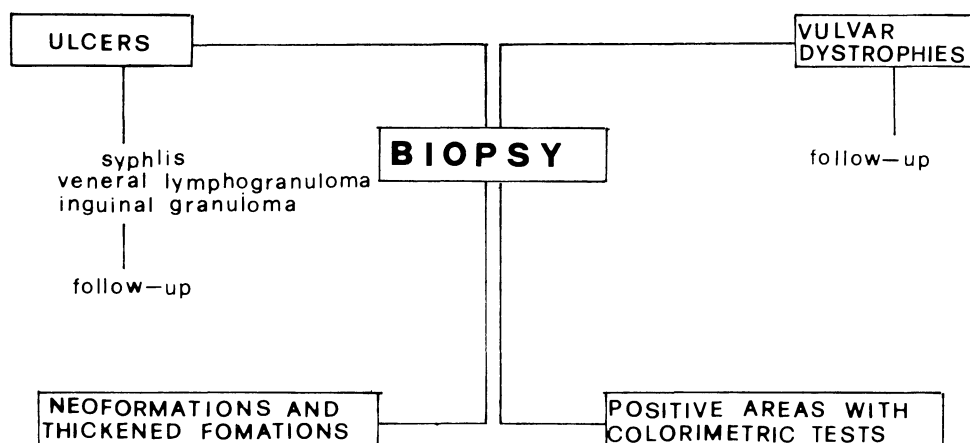
b) Objective examination that evaluates carefully the presence of ulcers (which may be luetic, from venereal lymphopathy, inguinal lymphogranuloma or neoplastic); neoformations, projecting lesions, and vulvar dystrophies.

Dystrophic lesions, in particular hyperplastic forms, acuminate condylomas and inguinal lymphogranulomas constitute a high risk pathology (^{4, 5, 6, 7}).

c) Complementary examinations that include fresh examination of the secretions (for the evaluation of vulvo-vaginal inflammations), colpocytology and colposcopy, vulvar citology and vulvoscopy and culture examination (^{8, 9, 10}).

Vulvar citology has had a limited use, because of the ease with which vulvar lesions may be biopsied, and the difficulties encountered in obtaining sufficient material for diagnosis. In order to obtain significant cytological pictures, it is necessary to employ a sampling technique that imbibes the tissue so that more material may be removed. The incidence of false negatives that characterize this method is thus reduced.

Table 2. — *Indication of vulvar biopsy.*



Vulvar cytology does not have a role comparable to that of colpocytology in the screening of uterine neoplasms, but nevertheless, it is a valuable complementary method, in consideration also of its ease of execution and absence of trauma which make it acceptable to the patient⁽⁹⁾.

d) Colorimetric tests which demonstrate even lesions that are not clinically evaluable, and allow mapping of the lesions so that target biopsies may be obtained^(11, 12). The toluidine blue test stains the areas of pathological epithelium with a more or less intense blue colour which persists even after application of an acetic acid solution unlike the situation in normal epithelium. Areas with persistent staining do not always indicate neoplastic areas, since the test is also positive in the presence of inflammatory infiltrates.

The tetracycline fluorescence test is based on the use of tetracyclines which induce a persistent yellow green fluorescence in neoplastic tissues.

Fluorescence is observed employing a Wood light lamp⁽¹³⁾. However T.I.F.T. will give false-negative results (4 %), while the toluidine blue test presents a high incidence of false-positives (3-28 %)^(12, 13).

e) Biopsy should follow all the above testing, and represents the fundamental examination in the diagnosis of vulvar pathology. All suspect clinical lesions and areas indicated by colorimetric testing should be biopsied (table 2).

f) Follow-up is extremely important since only with periodic controls, initial neoplastic degeneration of the various forms of pathology at risk can be detected.

Follow-up should be carried out in all patients:

- viral infection (acuminate condyloma, herpes simplex);
- venereal lymphogranuloma;
- vulvar dystrophy;
- patients with gynecological neoplasia;

— patients treated with radiotherapy for pelvic neoplasia;

— patients treated with immunosuppressors.

PERSONAL EXPERIENCES

In the period 1972-1978 we detected 12 intraepithelial carcinomas and 32 invasive carcinomas, while in the period 1968-1971 one single case of intraepithelial carcinoma was detected and 19 cases of invasive carcinomas.

Scrupulous observance of these expedients has allowed the detection of one intraepithelial carcinoma and one micro-invasive form in 254 patients undergoing periodic controls.

In qualified centers of vulvar pathology, strict observance of this diagnostic protocol has led to the early diagnosis of a growing number of intraepithelial neoplasias, whose incidence in some case series^(2, 14) has reached the level of the invasive forms.

BIBLIOGRAPHY

- 1) Rutledge F., Smith J.P., Franklin E.W.: *Am. J. Obst. Gyn.*, 106, 1117, 1970.
- 2) Japaze H., Garcia-Bunuel R., Woodruff J.D.: *Obst. Gyn.*, 49, 404, 1977.
- 3) Wharton J. T., Gallager S., Rutledge F.: *Am. J. Obst. Gyn.*, 118, 159, 1974.
- 4) Di Paola G.R., Balina L.N.: *Enfermedades de la vulva*. Ed. Medica Panamericana Buenos Aires, 1970.
- 5) McAdams A. J., Kistner R.W.: *Cancer*, 11, 740, 1958.
- 6) Underwood P. C., Hester L.: *Am. J. Obst. Gyn.*, 15, 849, 1971.
- 7) Krupp P., Bohm J. W., Lee F. Y. L., Collins J. H.: *Cancer*, 38, 587, 1976.
- 8) Forney J., Morrow C. P., Townsend D. E., Disaia P. J.: *Am. J. Obst. Gyn.*, 127, 801, 1977.
- 9) Ambrosini A., D'Antona N., Becagli L., Ramondo N.: *Atti LVI Congr. Naz. Soc. Ital. Ost. Gin.*, Padova, 1974.
- 10) Broen E.M., Ostergard D.R.: *Obst. Gyn.*, 38, 775, 1971.