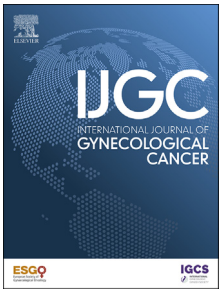
SOCIETY STATEMENT

Vulvar inspection at the time of cervical cancer screening: European Society of Gynaecological Oncology (ESGO), International Society for the Study of Vulvovaginal Disease (ISSVD), European College for the Study of Vulval Disease (ECSVD), and European Federation for Colposcopy (EFC) consensus statements



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ABSTRACT

Background: Vulvar squamous cell carcinoma incidence is increasing, especially among women under 60, largely attributed to human papillomavirus infections. Precursor pre-invasive vulvar lesions are frequently underdiagnosed. Routine vulvar inspection during cervical cancer screening could offer an opportunity for the detection of these lesions.

Objective: To emphasize the importance of integrating routine vulvar inspection during cervical cancer screening procedures and to raise awareness about the early detection of vulvar squamous cell carcinoma and its precursors to reduce the diagnostic delay of vulvar pathologies.

Methods: A multidisciplinary task force comprising experts from 4 international scientific societies was formed. A focused literature review was conducted, and consensus statements were developed through a structured voting process to ensure clinical relevance and comprehensiveness.

Results: The consensus defines key elements of normal vulvar anatomy, identifies potential pre-cancerous dermatoses, and highlights risk factors for vulvar malignancy. The consensus statements promote the integration of vulvar inspection into cervical cancer screening procedures, urging health care professionals across various levels to receive training and guidance in vulvar examinations and enhancing patient education. Health care providers are recommended to gather a brief history of vulvar symptoms, conduct comprehensive inspections of the vulvar area, and report any abnormalities. For patients with positive human papillomavirus or Pap tests, they should closely monitor vulvar findings, encourage self-examinations, and discuss risks for intra-epithelial or invasive neoplasia.

Conclusions: Establishing standardized practices in vulvar inspection during cervical cancer screening procedures along with public awareness, could significantly impact early detection and timely interventions of vulvar pathologies at cancer risk ultimately reducing the burden of vulvar cancers.

Keywords:
Vulvar inspection; Cervical cancer screening; Vulvar cancer; Awareness; Healthcare providers

BACKGROUND

Inspection of the female external genitalia is considered a routine procedure before speculum insertion at the time of screening test for cervical carcinoma. Epidemiological data indicate that early diagnosis of vulvar cancer remains a significant challenge, which could be due to insufficient attention paid to vulvar inspection at the time of cervical cancer screening.[1] In Italy, for instance, where organized programs for cervical cancer screening started in the late 1980s, vulvar squamous cell carcinoma incidence has increased in women aged <50 to 60 years, with an estimated +1.20% annual change from 1990 to 2012.[2] In Denmark, Finland, Norway, and Sweden, data were collected from 1943 to 2016, indicating a consistent incidence rate at approximately 2 per 100,000 women per year.[3] The increasing incidence of vulvar cancer, particularly in younger women, may be attributable to human papillomavirus (HPV) infections and thus the trend may continue until the impact of HPV vaccination starts to be evident.[4]

With these premises, a comprehensive understanding of normal vulvar anatomy is imperative to achieve early diagnosis, at the intra-epithelial phase or early invasive disease. Unfortunately, the definition of "normality" is not well established in scientific literature,[5] and a lack of knowledge about the “normal vulva” is common among women. Moreover, only in part, do women practice vulvar self-examination and infrequently report any detected anomalies to their primary care physician or gynecologist.[6] Therefore, the diagnosis of vulvar squamous cell carcinoma is often delayed, and this results in a more advanced stage of the disease at the time of diagnosis.[7] This impacts not only survival,[2] but it also has tremendous physical and psychological consequences due to more extensive surgery, scarring, and distortion of anatomy, as well as an eventual need for adjuvant treatments.[8] Identifying an opportunity to perform vulvar examination in the general population would be valuable and could have a significant impact on the incidence and prognosis of vulvar pathologies: cervical cancer screening could represent the ideal chance for it, involving, in most settings, women aged 25 to 65 years.

The aim of this joint paper of 4 scientific societies (European Society of Gynaecological Oncology [ESGO], International Society for the Study of Vulvovaginal Disease [ISSVD], European Federation of Colposcopy [EFC] and European College for the Study of Vulvar Disease [ECSVD]) is to raise awareness among all screening health care providers of the unique opportunities associated with cervical cancer screening: to increase the early diagnosis of vulvar tumors or pre-invasive lesions that are not eligible for organized screening.

METHODS

The ESGO Prevention Committee, chaired by Prof Murat Gultekin, approved a co-operative project between the ESGO, ISSVD, ECSVD, and EFC on vulvar inspection at the time of the cervical cancer screening, appointing Prof Mario Preti as project leader. The 4 societies' executive councils nominated their representatives from their membership bodies. These were selected as specialists with well-recognized expertise, clinical and research activity in the field of vulvar disease, and with continuous efforts to improve the quality of care for women. Each segment was prepared by a group of designated authors, for which a focused bibliographic search was performed. The final document was reviewed by all authors, who agreed on its content, including the consensus statements. A first round of binary voting (agree/disagree) was carried out for each potential statement. The chair then analyzed the results of this first round of voting and revised the statements if necessary. The group achieved consensus on 7 statements. Three external independent reviewers reviewed the final manuscript.

Epidemiology of Vulvar Carcinomas, Vulvar Intra-Epithelial Neoplasia, and Associated Dermatoses at Risk

Vulvar cancer is a rare disease, with approximately 47,336 cases diagnosed worldwide in 2022.[9] Most cases occur in older women, but the incidence is increasing, especially in women under the age of 60 years.[10,11] Around 90% of all cases are squamous cell carcinomas, and the remaining 10% include basal cell carcinomas, vulvar melanomas, adenocarcinomas, Bartholin's gland

carcinomas, and sarcomas.[4] The incidence rate of vulvar squamous cell carcinoma is around 3 per 100,000 women per year.[12] The main risk factors for vulvar squamous cell carcinoma, aside from age, smoking, and immunodeficiency, are HPV infection and inflammatory dermatoses.[13] The precursors of vulvar cancer are known as vulvar intraepithelial neoplasia (VIN), which is diagnosed in around 3.8 per 100,000 women each year.[14] VIN may be HPV-associated (vulvar high-grade squamous intra-epithelial lesion) and HPV-independent (differentiated VIN [dVIN]).[15] Around 10% of VIN is thought to be dVIN and around 90% vulvar high-grade squamous intra-epithelial lesion.[16] Vulvar high-grade squamous intra-epithelial lesion affects 3.85 per 100,000 women per year,[14,17] and its incidence is rising,[14,18] with a median age in a cohort of over 1000 Dutch women of 49.2 years (range; 16.1-95.4).[14] The increase in incidence over the last few decades has been skewed, with a disproportionate increase in younger women, including those under 50 years.[18] Vulvar high-grade squamous intra-epithelial lesion 10 years-risk of progression is between less than 5% to 9.7%.[14,19–21]

dVIN is usually secondary to chronic dermatoses of the vulva, in particular lichen sclerosus and probably lichen planus. dVIN affects 0.13 per 100.000 women per year[14] and the 10-year risk of progression is almost 50%.[14]

Lichen sclerosus is a chronic dermatosis that affects around 14.6 per 100,000 women per year,[12] and appears to have a multifactorial pathophysiology, including genetic, autoimmune, and environmental factors. It typically presents with pruritus, burning, or pain, although some patients may be asymptomatic. Lichen sclerosus can affect any area on the external genitalia, although of note, the vagina and cervix are typically spared, and a small number may also have extragenital involvement. The risk of transformation into vulvar squamous cell carcinoma is reported to be around 2% to 5%,[22–24] and persists in a long-term follow-up. There was a 33.6-fold increased standardized incidence ratio for vulvar cancer in 1 study in Finland[25] and 17.4-fold increased incidence ratio in 1 study in Italy.[23] Lichen planus is a vulvar dermatosis, its incidence in the general population is unknown but occurs in an estimated 3% to 6% of patients seen in vulva specialty clinics.[26] The contribution of lichen planus to vulvar cancer is still debatable[24]; 1 study found no significant association between lichen planus and vulvar squamous cell carcinoma, although lichen planus was underdiagnosed and undertreated in this cohort.[27]

Vulvar cancer, and its pre-cancerous associated states including vulvar high-grade squamous intra-epithelial lesion and dVIN, is often a delayed diagnosis.[13,16] This may be due to multiple reasons, including stigma from women not wanting to present with vulvar symptoms, lack of physician awareness of the nature of these lesions, and lack of a formal screening process.[28,29] Due to its rarity, it is unlikely that a screening program purely dedicated to the detection of VIN or vulvar cancer would be cost-effective. However, where national screening programs for cervical cancer already exist, it facilitates opportunistic inspection of the vulva.[30] Cervical cancer screening typically begins around age 25 to 30 years and extends at regular 3- to 5-year intervals until around age 65 years. Based on the median age of vulvar high-grade squamous intra-epithelial lesion diagnosis, screening of this age group is the ideal timing to facilitate earlier diagnosis of VIN. The mean age of onset of symptoms of lichen sclerosus has been reported to range from 45 to 55 years,[31] which would also be captured within the cervical screening window, even if it is less optimal than vulvar high-grade squamous intra-epithelial lesion.

Cervical cancer screening is organized into 2 levels: the first level, a territorial one, involves the collection of Pap smears and/or HPV tests and it is performed usually by midwives or general practitioners. Women with positive results are referred to the second level, a specialized clinic for lower-genital tract pathologies, where colposcopy with eventual biopsies and/or treatments are performed by providers with advanced colposcopy training. Both settings can be optimal chances for a vulvar examination in conjunction with cervical-vaginal screening, enabling a timely diagnosis of early neoplastic or preneoplastic pathologies. Opportunistic vulvar inspection at the time of cervical screening would not only consent to earlier identification of VIN but may also allow women with other vulvar conditions, such as lichen sclerosus, to receive treatment and be referred to a vulvar specialist in a timely manner.

Variations in the Normal Anatomy: Considerations for Vulvar Inspection and Self-Examination

An essential initial step toward identifying abnormal vulvar anatomy and manifestations of the disease involves a comprehensive understanding of the "normal" vulvar anatomy. The term "vulva" encompasses the entirety of the external female genital organs[32] with different anatomical structures.[33] Hair-bearing skin appears on the pubic mound, lateral aspects of the labia majora, and the perianal region, while non-hair-bearing skin covers the inner regions of the labia majora, the entire labia minora, and the clitoris. The vestibular area progressively thins toward the vaginal introitus. Research findings suggest that vulvar anatomy exhibits not only inter-individual variability but also intrapersonal, contingent upon factors such as age, parity, ethnicity, body mass index, and hormonal influences.[34,35]

Two main physiologic anatomical variations of the vulva that can mimic disease are sebaceous glands hyperplasia and vestibular papillomatosis. The first, commonly known as Fordyce spots, is the most prevalent variation and it presents as small yellowish papules, ranging in size from 1 to 3 mm, typically located on the labia minora.[36] (Fig. 1A) Vestibular papillomatosis has been reported in the literature to range between 1% and 33%.[37] It is characterized by the presence of multiple frond-like mucosal papillae arranged in a linear and symmetric distribution within the vulvar vestibule and inner labia minora. Vestibular papillomatosis can be differentiated from condylomas based on specific key features such as separate and distinct bases of the projections of vestibular papillomatosis and their symmetrical distribution within the confines of the inner labia minora and vestibule[38] (Fig. 1B).

Issues on Vulvar Self-Examination

The variations of the normal structures of the vulva are not present in most contemporary anatomy textbooks: this may lead to inadequacies in health care professionals' understanding of anatomy and thus in providing accurate information for women to conduct self-vulvar examinations.[39,5] Literature data show that patients' knowledge of vulvar anatomy is quite limited; It seems that 6 out of 10 women are unfamiliar with the meaning of "vulva," and only 1 in 7 women demonstrates the ability to accurately depict the

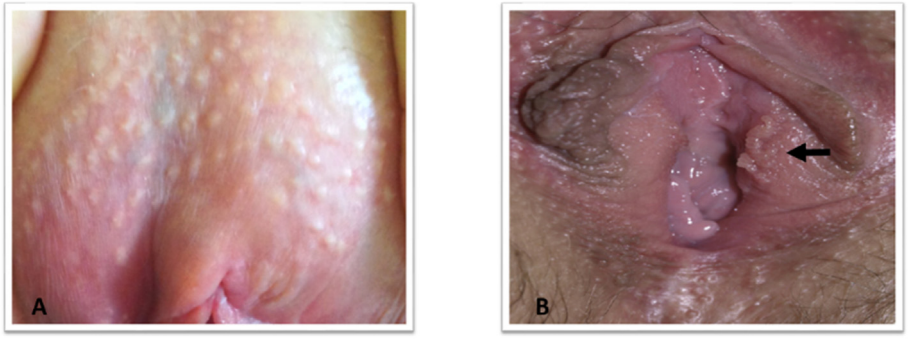

Figure 1 **A.** Fordyce spots: small yellowish papules formed by the hyperplasia of sebaceous glands. **B.** Vestibular papillomatosis: each papilla having a separate implant in the area indicated by the arrow.

anatomy of the vulva and approximately one-third of women think that there is no inter-individual variability in female genitalia.[6] Women should be informed about the various manifestations of different diseases and the wide variability of the vulva,[40] as education about vulvar anatomy and vulvar self-examination may lead to earlier diagnosis of vulvar cancers and pre-invasive lesions.

A vulvar self-examination is an easy tool that should be performed periodically (about once every 3 months), starting from 30 years old, as it may help to find changes if done correctly and regularly. The main aim of vulvar self-examination is the early detection of relevant changes in this area so that a referral for a gynecologic exam can be done earlier than routine visits.[39,41–43] Vulvar self-examination necessitates thorough physician instructions to explain basic vulvar anatomy and to teach women how to recognize significant changes. It is very important that the physician explains to the patient that most anomalies are not cancer or pre-cancer and that there is no place for panic in the setting of very small lesions. Most women are unaware of vulvar self-examination or do not know how to perform it. Unfortunately, many women feel embarrassed about touching or looking at their genitalia and seek gynecologic care only for very bothersome symptoms or after experiencing symptoms for an extended period. It could be important to encourage patients to have photos taken with their personal devices when they find an anomaly, for 2 reasons: first to monitor the evolution between initial finding and clinical follow-up, additionally, it can assist the specialist in determining the urgency of scheduling an appointment.

Vulvar self-examination has different implications in patients already treated for lower-genital tract pre-malignant lesions (HPV-related high-grade intra-epithelial lesion of the cervix, vagina, vulva, anus, and those related to dVIN and/or lichen sclerosus), assuming a much more pivotal role. In the Supplementary Material, we have included a guide for patients on performing vulvar self-examination and a handbook to assist health care professionals in teaching vulvar self-examination.

How to Inspect the Vulva: The Warning Signs

Vulvar inspection, meaning the exact clinical assessment of the vulva, should be a mandatory and standard procedure when performing a gynecologic examination.[44,45] Often it is not conducted thoroughly, thus leading to the non-diagnosis of significant pathology, including pre-invasive or even invasive conditions. These conditions may range from asymptomatic to symptomatic, but the patient may omit its presence due to embarrassment or for presumed lack of relevance.[16,46] Even though vulvar symptoms have low specificity in identifying any vulvar pathology, it is still important to highlight the importance of local symptoms that should systematically lead to a vulvar examination with a special focus on the very area of the symptoms. The exam must be performed keeping in mind several individual characteristics, including age, hormonal status, obstetric history, family history, ethnicity, systemic conditions, previous surgeries, and medication, among others.[47] It should be performed after informing the woman that it will be done and what the rationale for that is, and prior to the insertion of the speculum.

The practitioner should be sitting for a proper examination, with his/her face not standing too high in relation to the level of the woman's genitalia. Vulvoscopy should at first be performed with the naked eye under good lighting directed at a nearly 90° angle and in the lithotomy position.[44,48,49] In detail, the inspection should not only include the vulvar area but also the perineum and the peri-anal area as well as the urethral meatus.[44,49] To guarantee accurate diagnostics and avoid overlooking any suspicious areas or changes, this should be performed systematically including all the following: the mons pubis, both labia majora and labia minora as well as the inter-labial sulci, with 2 gloved hands. If possible, the clitoral hood should be gently retracted.[24,47] The exam of the vulva and peri-anal area adds a few seconds to the exam and does not add significant discomfort.[44,49] The aim is to identify any lesions that are generally characterized as changes in color, any loss of substance, atrophic areas, ulcers, and surface changes such as swelling or structural change.[16,49,44] The epidemiology, symptoms, localization, and clinical description according to the 2011 ISSVD recommendations,[45] along with additional clinical features of vulvar diseases that are at risk of developing or that already are pre-invasive or invasive lesions are reported in Table 1.[2,4,9,11,12,14,45]

Some findings can be of concern and cannot be ignored, especially if in a field of lichen sclerosus/lichen planus if the woman has or has had high-grade squamous intra-epithelial neoplasia in other locations of the anogenital tract, or if immunosuppressed (women living with HIV, solid organ transplant). The same principle applies to women with longstanding symptoms of vulvar pruritus, burning, or pain.[19]

The lesions that should raise suspicion for a possible pre-invasive/invasive disease include: tumors (especially if not covered by normal-looking skin); hardened lesions or areas (even if

Table Characteristics of Lichen Sclerosus, Lichen Planus, and Pre-Invasive and Invasive Vulvar Lesions.[2,4,9,11,12,14,45]

Characteristics	Lichen sclerosus	Erosive lichen planus	Vulvar HSIL	dVIN	Paget disease	Melanoma	Squamous cell carcinoma
Epidemiology	• 14.6 per 100,000 women-years • 30 per 100,000 woman-years in women >55 years • All age groups, including children. • Mean age of onset is in the mid to late 50s, with only one third of cases in women <50 years	• Prevalence unknown • Most patients are between 40 and 60 years	• 3.85 per 100.000 women/year • More common in heavy smokers, immunosuppressed and younger women (<65 years)	• 0.13 per 100.000 women/year • <10% of all VIN • More common in older women (>65 years)	• Incidence 0.6 per 100,000 person per year (Europe) • >80% of EMPD are vulvar	• 6% to 10% of vulvar malignancies • 3% of all melanomas • The majority are diagnosed in post-menopausal women (median age 68 years)	• 2.5 per 100,000 women per year • Increases by 0.7% every year in all races and in all ages • Background of lichen sclerosus, dVIN or vHSIL
Symptoms	• Rarely may be asymptomatic • Soreness • Pruritus • Burning • Dyspareunia	• Rarely may be asymptomatic • Burning • Pruritus • Soreness • Dyspareunia • Dysuria	• Often asymptomatic • Pruritus • Burning	• Rarely asymptomatic • Pruritus • Burning	• Rarely asymptomatic • Pruritus • Burning	• May be asymptomatic • Bleeding	• Rarely asymptomatic • Bleeding • Local pain • Pruritus • Burning • Mass • Lymphadenopathy
Localization	Vagina and hair-bearing skin are usually spared. Peri-anal involvement common	Vagina often involved (sometimes obliterated). Peri-anal involvement uncommon	Usually found in non-hair-bearing skin. Frequently located in the perineal zone	Frequently located in the peri-clitoral zone, can occur anywhere affected by lichen sclerosus or lichen planus	Labia majora are often involved (could involve labia minora, clitoris, inguinal folds, urinary meatus). It can also affect the peri-anal skin.	Can affect any part of the vulva. May be more common in the clitoris and labia majora	Can affect any part of the vulva, more common mucosal non-hair bearing skin
2011 ISSVD Classification	• Color: White • Surface: Flat • Margination: Regular, not well defined • Configuration: oval or annular • Elemental lesion: patch or plaque	• Color: Red • Surface: Flat or crusty, could be eroded • Margination: Regular, well-demarcated • Configuration: irregular • Elemental lesion: patch or plaque, could be eroded	• Color: VHSIL could be skin-colored, red, white or dark-colored, dVIN are usually whitish • Surface: Rough, scaled • Margination: can be either regular or irregular • Configuration: multiple configurations often oval • Elemental lesion: papule, nodule, patch, plaque, could be eroded		• Color: Red • Surface: Flat and/or crusty • Margination: irregular • Configuration: variable • Elemental lesion: patch or plaque, could be eroded	• Color: dark-colored, could be skin-colored or red in the amelanotic type • Surface: Flat or elevated • Margination: Irregular • Configuration: oval or irregular • Elemental lesion: patch, plaque, papule or nodule	• Color: Skin-colored, red, white • Surface: Elevated, rough, hard texture • Margination: Irregular • Configuration: Variable • Elemental lesion: nodule, papule, plaque, could be eroded
Additional clinical features	• Atrophy and/or fusion of the labia minora • Sealing of the clitoral hood • "Figure of 8" or keyhole sign" with peri-anal involvement • Cigarette paper wrinkling • Hypopigmentation • Introital stenosis • Fissures, Synechiae	• Synechiae • Wickham striae at edge • Atrophy and/or fusion of the labia minora • Phimosis • Inflammatory discharge if vaginal involvement (sometimes superimposing a dermatitis)	• Synchronous or metachronous HSIL in another anogenital location (multicentric) • Multifocal • Lesions of variable size	• Found in a background of lichen sclerosus (or lichen planus) • Usually small lesions • Usually unifocal	• "Icing cake effect", looks macerated • Crusty appearance • Irregular borders • The disease often extends beyond the macroscopic margins	• Can be multifocal • Asymmetric borders • Usually >6-7 mm in diameter	• Easy bleeding with contact • Usually single lesion

Abbreviations: dVIN, differentiated vulvar intraepithelial neoplasia; HSIL, high-grade squamous intraepithelial lesion; EMPD, Extramammary Paget Disease; ISSVD, International Society for the Study of Vulvovaginal Disease.

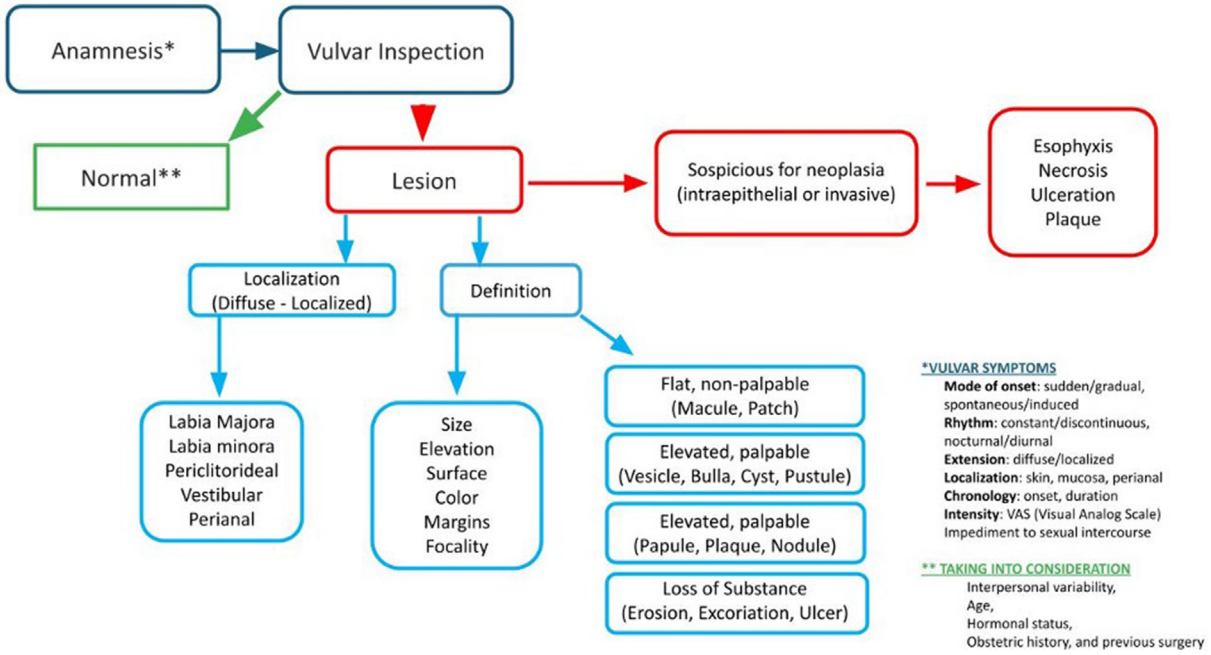

Figure 2 Vulvar inspection algorithm.

perceived only by palpation); ulcers, especially if lasting more than 1 month; raised plaques (brownish, white, red); brown, black, or variegated papules; bleeding lesions (spontaneous or upon touch); painful chronic lesions of any nature; presence of non-tender inguinal adenopathy[16,50]

The algorithm shown in Figure 2 provides a scheme of the risk stratification of the vulvar inspection of a patient who is referred for cervical cancer screening tests. Even if the patient has no history of symptoms, careful vulvar inspection must be performed. In the event a lesion is identified, it is advised to use straightforward and consistent terminology[45] to describe it and assess the likelihood of intra-epithelial or invasive neoplasia, facilitating prompt referral to the reference center and ensuring clear communication with the hub center.

It is fundamental that vulvar inspection is performed by individuals experienced in vulvar diseases in referral centers.[48] If magnification is necessary, a colposcope or magnifying lens can be used, starting with the lowest magnification whereas a higher magnification can also be used if there is suspicion of pre-cancerous lesions or invasion.[44,19,49,51] Physiologic saline solution or 5% acetic acid can be applied for diagnostic purposes,[44,49,51] but the routine use of acetic acid in the vulva is not recommended as the aceto-white findings are less pronounced on the vulva[49] and have less specificity than on the cervix.[51] In contrast, after the application of acetic acid to vestibular mucosa, acetowhite areas may develop, and acid-white surfaces can be distinguished which is not a sign of disease. Acetic acid is important in some cases of vulvar high-grade squamous intra-epithelial lesion diagnosis, but it should be used only by experienced colposcopists. The threshold for biopsy must be kept low when a pre-invasive or invasive vulvar condition is suspected. While the previously mentioned signs raise the suspicion, none is pathognomonic.[16] Even if the patients report having had a previous biopsy of a suspicious lesion, a re-evaluation by an expert and/or a repeated biopsy may be warranted.

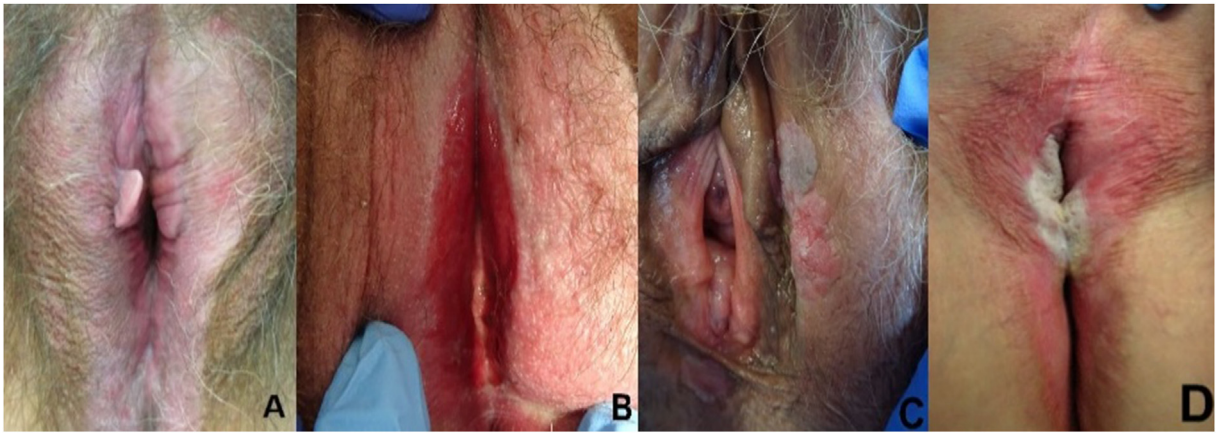

Figure 3 **A**, Lichen sclerosus. **B**, Lichen planus. **C**, Vulvar high-grade squamous intraepithelial lesion, **D**, Differentiated vulvar intraepithelial neoplasia.

How to Recognize Dermatoses Associated With Oncologic Risk, HPV-Associated, and HPV-Independent VIN

Dermatoses as Vulvar Cancer Precursors

Vulvar lichen sclerosus is more common than vulvar lichen planus with the main symptom being itch, which can be severe. However, soreness and dyspareunia related to fissures can occur.[52] Nevertheless, it can also be asymptomatic. Follow-up and treatment are warranted, regardless of the presence or absence of symptoms.[46] The lichen sclerosus classic sign is white sclerotic change on the inner aspects of the labia majora with areas of purpura and lichenification in a "figure of 8" (involving the inter-labial sulci and peri-anal area) (Fig. 3A). The normal anatomy of the vulva can change with resorption of the labia minora, tethering and then sealing of the clitoral hood and fusion in the midline reducing the size of the introitus. Lichen sclerosus does not affect the vagina.

Lichen planus has different sub-types.[53] The most common type affecting the vulvar area is erosive lichen planus (Fig. 3B) which usually presents with soreness and dyspareunia.[54] Erosions are seen at the vestibule and can involve the vagina. This involvement can be noticed during the speculum examination (inflammatory discharge, enanthem of the cervix and vaginal walls, synechiae, and in extreme cases, vaginal obliteration) (Table 1[2,4,9,11,12,14,45]). Other mucosal sites can be affected. Hypertrophic lichen planus is rare but is important as this is the type which can be related to malignancy. It presents with severely itchy nodules, more frequently on the outer labia majora. While not pre-invasive itself, lichen sclerosus is the field where dVIN develops and thus it is one of the strong reasons why the diagnosis cannot be missed, as treatment and adequate follow-up of lichen sclerosus markedly decrease the risk of vulvar squamous cell carcinoma.[55] While more controversial, the same possibly also applies to lichen planus.[24] Given the age range for cervical cancer screening and that at which vulvar cancer peaks, the finding of the latter will be exceptional. However, the identification of lichen sclerosus/lichen planus and referral for adequate treatment and follow-up will significantly reduce the risk of development of dVIN and vulvar cancer.[55]

Vulvar High-Grade Squamous Intra-epithelial Lesion and dVIN

There are 2 precursors of vulvar cancer: HPV-associated VIN and HPV-independent VIN (ie, dVIN). The leading symptom of the 2 precursors of vulvar cancer is itch followed by pain, but some patients are asymptomatic.[56–58] The diagnosis is suspected via visual inspection and confirmed by biopsy. Vulvar high-grade squamous intra-epithelial lesion (Fig. 3C) can occur anywhere on the vulva[56,59] and usually presents as well-demarcated, raised, warty, white patches.[58] However, the color can vary from white and gray to pink or red.[55,57,58] Vulvar high-grade squamous intra-epithelial lesion is often solitary but can be multifocal.[58,59] HPV-related lesions on other locations of the genital tract (cervix, vagina, or anus) are also common either as a preceding or simultaneous diagnosis with vulvar high-grade squamous intra-epithelial lesion.[56,58–62] Application of acetic acid may aid in the diagnosis of vulvar high-grade squamous intra-epithelial lesion in non-keratinized areas of the vulva, but for frequent non-specific reactions, its use should be restricted to expert hands.[16]

The clinical picture of dVIN may resemble that of vulvar high-grade squamous intra-epithelial lesion (Fig. 3D) but dVIN presents most often as a white patch or plaque.[57] There may be areas of erosion or ulceration, and a background lichen sclerosus is frequent.[14,16,57–62] It is usually unifocal but there may be many foci simultaneously.[57] dVIN can also arise without previous lichen sclerosus.[14,16,57–62] Acetic acid plays no role in the diagnostic process of dVIN.[52] In patients with lichen sclerosus, persisting symptoms and lesions despite conventional treatment should raise a suspicion of dVIN.[63]

Vulvar Inspection: Role of Health Care Team in Cervical Cancer Screening

Vulvar inspection must be integrated as a part of a routine examination in all cervical cancer screening programs, both at the first and second level: it is essential that all health care professionals receive appropriate training. This includes physicians, midwives, and specialized nurses. Cervical cancer screening programs are not always carried out by physicians; depending on the country, women may be examined exclusively by midwives or specialized nurses. There could be a lack of knowledge in vulvar pathologies[64,65]: this is why appropriate training programs are mandatory among all health care professionals in order to give patients the best standard of care.

Table 2 Consensus Statements

Consensus statement	Agreement
All the healthcare providers dealing with cervical cancer screening are recommended to:	
1. Take a short history of women's vulvar symptoms before cervical cancer screening procedures.	94.4%
2. Inspect the skin of the vulvar region from the pubis to the perianal area and from one genito-crural fold to the other.	100%
3. Inspect the vulvar vestibule from the sub-clitoral area to the navicular fossa.	100%
4. Report any abnormal findings to the respective hub centre for vulvar diseases if no expertise to manage them.	94.4%
In patients with positive screening test (HPV test or Pap test) all the healthcare providers dealing with cervical cancer screening are recommended to:	
1. Search with increased attention for any vulvar abnormal findings, in particular in between the inner parts of the labia majora where VHSIL, HPV related, is more frequent.	100%
2. Explain and recommend patients to practise VSE and to report any abnormal findings among two different sessions of follow up for positive cervical cancer screening procedures.	94.4%
3. Discuss with all the patients treated for cervical or vaginal intraepithelial neoplasia or cancer their increased risk for intraepithelial or invasive vulvar neoplasia.	94.4%

HPV, Human Papillomavirus; VHSIL, Vulvar High grade Squamous Intraepithelial Lesion; VSE, Vulvar Self-Examination.

We underline again that prior to the cervical cancer screening test, it is fundamental to collect an appropriate history of vulvar symptoms and their localization. Even if the patient is asymptomatic, it is mandatory to perform a standardized vulvar inspection in order to minimize the risk of missing abnormalities. The health care professional should educate the patient about vulvar self-examination, teaching her how to perform it, and its frequency according to the risk of vulvar disease.[6] Furthermore, it is fundamental that the patient refers to her trusted health care professional any abnormality detected, as soon as possible.

Leaflets are available for download in 15 different languages (German - French - Turkish - Italian - English - Spanish - Polish - Dutch - Portuguese - Ukrainian - Russian - Romanian - Chinese - Arabian - Serbian) on the ESGO, ISSVD, EFC, ECVD websites and in the Supplementary Material. Below are the consensus statements with the agreement percentages of the working group, as shown in Table 2.

Patient Consent for Publication Patient consent for publication has been collected and is maintained by the authors.

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