YOUR VULVOVAGINAL DRYNESS CHECKLIST

WHAT IS VULVOVAGINAL DRYNESS?

VULVOVAGINAL DRYNESS

≥1 in 5 women
Not only menopause, can occur across life stages[1,2]

Up to 1 in 2 women during menopause[1,2]

Rarely discussed[1,3] with doctors, pharmacists or partners

High impact[3,4] comfort, intimacy, quality of life

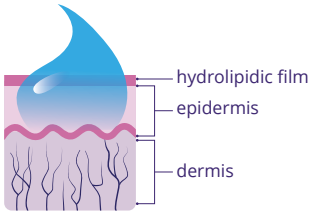
VULVOVAGINAL DRYNESS:

A **feeling of lack of moisture** in the **vulva and/or vagina,** which may cause **discomfort, irritation, burning, itching sex, reduced lubrication** or **pain during sex**[2]. It is often linked to **low-estrogen states,** but **not exclusively.**

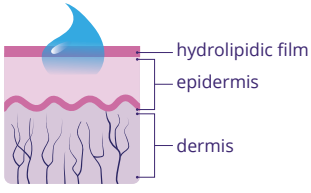
HYDRATION *versus* LUBRICATION

Hypoestrogenic atrophy ≠ Lack of arousal

HYDRATION
A **continuous, deeper process** that helps tissues **retain water** [2,5]
→ *daily comfort*

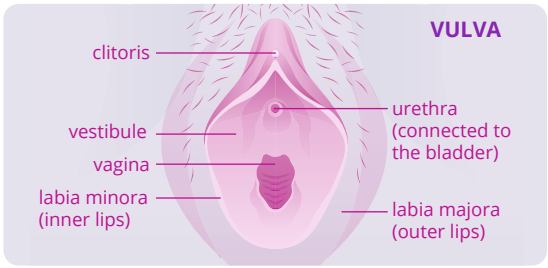


LUBRICATION
Surface fluid produced with **sexual arousal** [2,5]
→ *less friction during sex*



What to tell the patient?

VULVA ≠ VAGINA

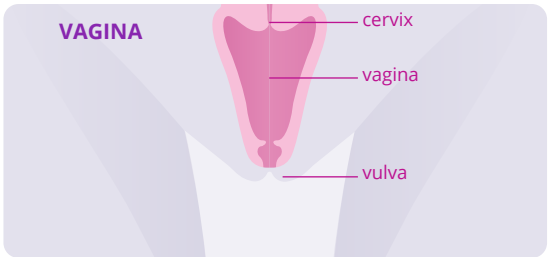


Vulva = "Outside"

The **vulva** is the **external genital area**, from the mons pubis to the anus. It includes the **labia majora/ minora, clitoris,** and **vulvar vestibule,** where the **urethral and vaginal openings** are located.

Vestibule

The **vestibule** is the **area between the vulva and the vagina,** surrounding the **vaginal and urethral openings**. Its surface is **more delicate and mucosal**, closer to the vagina than to the outer vulvar skin.



Vagina = "Inside"

The **vagina** is the **internal muscular canal** that extends from the **vaginal opening** to the **cervix**. Its lining is **highly responsive to hormones**, especially **estrogen**.

Sources: 5, 6

YOUR VULVOVAGINAL DRYNESS CHECKLIST

WHICH POPULATION?

Vulvovaginal dryness can occur throughout life, not only in menopause

Genitourinary syndrome of menopause / vulvovaginal atrophy[2, 4, 7]

Hormone-related causes[2, 4] primary ovarian insufficiency, iatrogenic, cancer patient...

Postpartum / breastfeeding[2, 4, 8]

Hormonal contraceptives/ medications[2, 4, 9] antidepressants, antihistamines, acne treatments

Gender-affirming care[10] testosterone-associated genital symptoms...

Other causes[2, 9] dermatologic, neurologic or autoimmune conditions...

WHAT SYMPTOMS MAY OCCUR WITH DRYNESS?

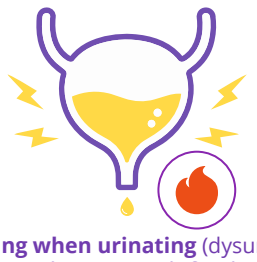
Genital symptoms

Soreness, itching, burning, irritation, **inside (vagina)** and **outside (vulva)**, in addition to dryness

Sexual symptoms

Reduced lubrication, discomfort or **pain during sex** (dyspareunia), **avoidance of intimacy**

Urinary symptoms



Pain or **burning when urinating** (dysuria), **urgency, recurrent urinary tract infections** (UTIs)

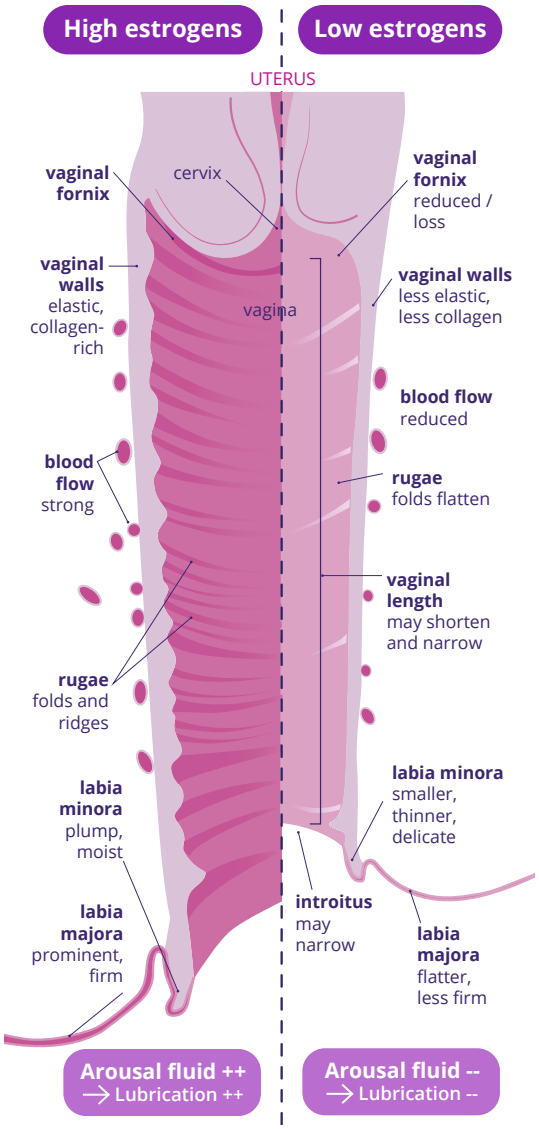
Sources: 3, 4, 7, 11

YOUR VULVOVAGINAL DRYNESS CHECKLIST

WHAT HAPPENS TO THE VULVA AND VAGINA?

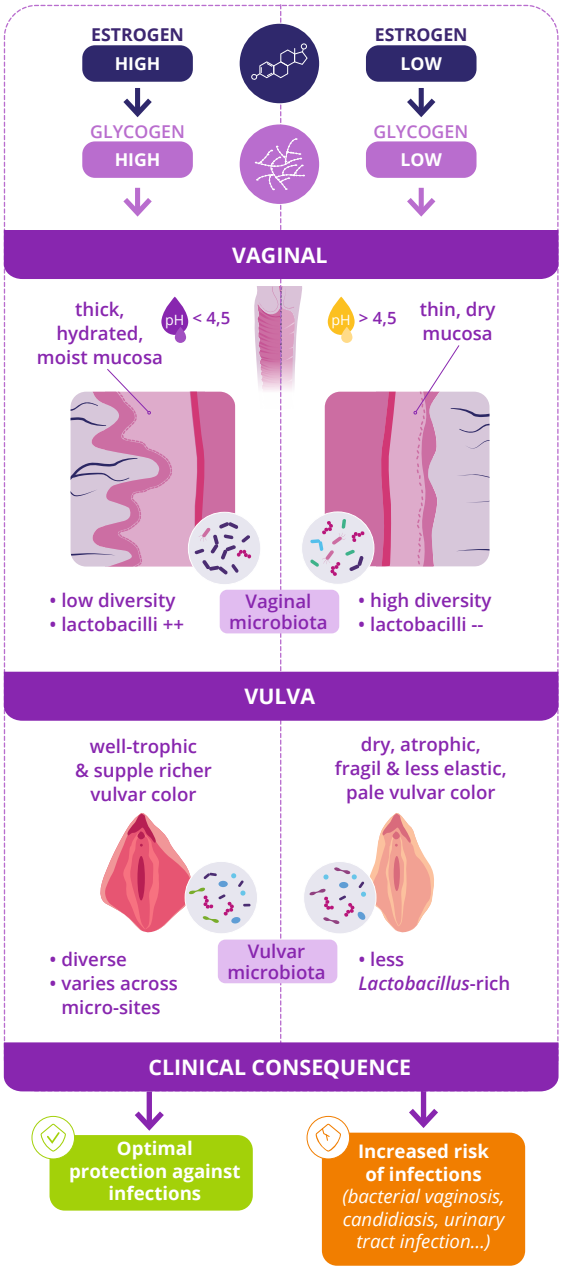
Estrogens support **tissue integrity** and **microbiota balance**.

Aging and **low-estrogen states** may lead to **dryness**, **tissue changes** and **microbiota shifts**.



Sources: 3, 4, 7, 11, 12, 13, 14

VULVOVAGINAL MICROBIOTA UNDER HORMONAL INFLUENCE?



Sources: 4, 13, 14, 15, 16, 17, 18

YOUR VULVOVAGINAL DRYNESS CHECKLIST

HOW TO MAKE A CONFIDENT DIAGNOSIS ?

"Vulvovaginal dryness" is a clinical sign that can reflect **different causes** → diagnosis starts with **history + targeted exam.**

Clinicians should ask sensitively about sexual comfort and intimacy, alongside dryness, pain, itching or irritation.

FOCUSED HISTORY

- ☑ **Location:** inside (vagina) and outside (vulva)
- ☑ **Onset & course:** acute vs chronic; since when; intermittent vs persistent
- ☑ **Triggers/exposures:** spontaneous vs provoked; sex-related; locally applied products; medications
- ☑ **Associated symptoms:** itching (pruritus), burning, fissures/cuts, discharge/odor, bleeding after sex, urinary symptoms
- ☑ **Treatment used:** what have you tried?

FOCUSED EXAM

EXAMINATION	VAGINA	VULVA
dry	○	○
pale & atrophic	○	○
decrease moisture & elasticity	○	○
epithelium or tissue thinning	○	○
narrowed / retracted vaginal orifice (introitus)	○	○
loss of labia minora volume (labial atrophy)		○
vaginal walls smooth with loss of rugae	○	
fragility ± fissures	○	○
± petechiae	○	○
± erythema	○	○
hypopigmented with tears ± ulcerations	○	○
clitoral atrophy		○

Sources: 4, 7, 11, 19, 20

WHAT ARE THE WARNING SIGNS TO BE EXCLUDED?

RED FLAGS

- ☑ Infectious disease
  If too red → think candidiasis
- ☑ Irritant or allergic vaginitis/vulvitis
  (if red after rolling out candidiasis)
- ☑ Vulvar dermatosis (lichen sclerosus, lichen planus, eczema, psoriasis, lichenification)
  If white/shiny plaques
  → think lichen sclerosus
- ☑ Vulvodynia/vestibulodynia
  (neuropathic symptoms)
- ☑ Chronic disease (diabetes...)

OPTIONAL TESTS
(not mandatory for every patient)

- **Vaginal pH** for suspected bacterial vaginosis
- **Swab** (vulva & vagina) if infection is suspected or symptoms are recurrent
- **Urinalysis ± culture:** if dysuria, urgency, or recurrent UTI symptoms

EXPERT "DO & DONT'S"

- Examine before labeling as dryness
- Avoid empiric steroids / antifungal–steroid combos
- Normal exam + persistent pain
  → consider vulvodynia
- Before menarche: think irritants/dermatoses
- Postmenopause: *Candida* less likely unless risk factors

Sources: 4, 7, 11, 19, 20

YOUR VULVOVAGINAL DRYNESS CHECKLIST

WHAT ARE THE GENERAL MANAGEMENT CONCEPTS?

EDUCATE AND ADVISE ON HYGIENE AND LIFSTYLE

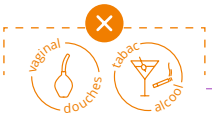

external cleansing with gentle cleanser


healthy diet


pelvic floor health


help maintain an optimal vaginal microbiota


if comfortable, sexual activity/stimulation helps maintain vaginal blood flow and elasticity



MANAGING VULVOVAGINAL DRYNESS

Goal: relieve symptoms and distress

Non-hormonal *baseline for all patients*

- **Moisturizers** (hyaluronic acid...) = regular use for vulva & vagina
- **Lubricants** = before/during sex
- **Vulvar emollients** = external skin barrier support

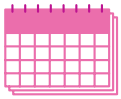
Hormonal *assess the full menopause picture before choosing local vs systemic options*

- Local: low-dose vaginal estrogen or DHEA/prasterone
- Systemic: if broader menopausal symptoms coexist
- Other options: e.g. ospemifene, according to local availability

Breast cancer history:
discuss hormonal options with oncologist or gynecologist

Sources: 4, 7, 11, 15, 16, 19, 20

WHEN TO SCHEDULE FOLLOW-UP CARE?



Reassess after 4–8 weeks
to evaluate response and tolerance

Ensure long-term follow-up
(chronic condition) and adapt treatment based on patient preference, usability, and adherence

REFERENCES

1. Waetjen LE *et al.* Factors associated with developing vaginal dryness symptoms in women transitioning through menopause: a longitudinal study. *Menopause*. 2018;25(10):1094-1104.
2. Wilhite M. Vaginal dryness. In: Rakel D, ed. *Integrative Medicine*. 4th ed. Elsevier; 2018:592-599.e2.
3. Nappi RE *et al.* Vulvar and vaginal atrophy in four European countries: evidence from the European REVIVE Survey. *Climacteric*. 2016;19(2):188-197.
4. The NAMS 2020 GSM Position Statement Editorial Panel. The 2020 genitourinary syndrome of menopause position statement of The North American Menopause Society. *Menopause*. 2020;27(9):976-992.
5. Bohbot JM *et al.* Vulvar Care: Reviewing Concepts in Daily Hygiene. *Healthcare (Basel)*. 2025;13(13):1523.
6. Graziottin A. Maintaining vulvar, vaginal and perineal health: clinical considerations. *Womens Health* (Lond). 2024;20:17455057231223716.
7. Nappi RE *et al.* Addressing vulvovaginal atrophy/genitourinary syndrome of menopause for healthy aging in women. *Front Endocrinol* (Lausanne). 2019;10:561.
8. Perelmuter S *et al.* Genitourinary syndrome of lactation: a new perspective on postpartum and lactation-related genitourinary symptoms. *Sex Med Rev*. 2024;12(3):279-287.
9. Bohbot JM. Mise au point: étiologies et prise en charge de la sécheresse vaginale. *Gynecol Obstet*. 2011;14:434-439.
10. Krakowsky Y *et al.* The effect of gender-affirming medical care on the vaginal and neovaginal microbiomes of transgender and gender-diverse people. *Front Cell Infect Microbiol*. 2022;11:769950.
11. Simon JA *et al.* Genitourinary syndrome of menopause: recommendations from the Fifth International Consultation on Sexual Medicine. *Sex Med Rev*. 2026;14(1):qeaf055.
12. Jin J. Vaginal and urinary symptoms of menopause. *JAMA*. 2017;317(13):1388.
13. Chen YC *et al.* The vaginal microbiome: associations with vaginal pH, menopause and metabolic parameters. *Microorganisms*. 2025;13(6):1317.
14. Brotman RM *et al.* Association between the vaginal microbiota, menopause status, and signs of vulvovaginal atrophy. *Menopause*. 2014;21(5):450-458.
15. Ferrando ML *et al.* Aging in women: the microbiome perspective. *Ageing Res Rev*. 2026;113:102950.
16. Andrews RAF *et al.* Investigating the effects of probiotics during the menopause transition: a systematic review and meta-analysis. *Clin Nutr ESPEN*. 2025;69:241-256.
17. Pagan L *et al.* The human vulvar microbiome: a systematic review. *Microorganisms*. 2021;9(12):2568.
18. Mieremet A *et al.* Taxonomic and functional profiling of the vulvar microbiome indicates variations related to ecological signatures, aging, and health status. *Front Microbiol*. 2025;16:1633147.
19. Kaufman MR *et al.* The AUA/SUFU/AUGS Guideline on Genitourinary Syndrome of Menopause. *J Urol*. 2025;214(3):242-250.
20. Trémollieres FA *et al.* Management of postmenopausal women: CNGOF and GEMVi clinical practice guidelines. *Maturitas*. 2022;163:62-81.

This document was created in collaboration with
Dr Clarence De Belilovsky, *(Paris, France), Dermatologist & Venereologist*
Dr Isabelle Dehaene, *(Ghent, Belgium), Obstetrician/gynecologist*
Dr Brigitte Letombe, *(Paris, France), Gynecologist & Sexologist*
Prof. Rossella Nappi, *(Pavia, Italy), Obstetrician/gynecologist*

Pharmacy counter scenarios

At the pharmacy

think of vulvovaginal dryness when you meet:

A **menopausal woman** reporting burning, irritation, soreness when walking or pain during sex

A **breastfeeding/postpartum woman** with discomfort or fear of resuming intimacy

A woman on drying medication reporting dry skin/lips/ eyes and new intimate discomfort *(acne treatments, antidepressants, some contraceptives, antihistamines, anticholinergics,...)*

What to ask?

- Check for menopause clues: age, period changes, hot flushes/night sweats, sleep changes, and current prescriptions.
- Do you also have itching, unusual discharge, odour or bleeding?
- Do you feel dryness or discomfort mainly in the vulvar (outside) or vaginal area (inside), or both?
- Are you breastfeeding?
- Did you have stitches, an episiotomy or persistent pain?
- Have you resumed sexual activity, or are you worried about it?
- Did the dryness start after a new medication?
- Do you also feel dryness in your eyes, mouth, skin or lips?
- Is intimacy more uncomfortable than usual?
- What have you tried?

At the pharmacy

talking about it is already a first step toward care

What to say?

After menopause, lower estrogen can make vulvovaginal tissues thinner, drier and more fragile. This can cause burning, irritation, pain during sex and sometimes small fissures. It is common, and there are solutions.

Dryness and discomfort can happen after **childbirth**, especially during **breastfeeding**, because estrogen levels are lower. If you had stitches or an episiotomy, healing can also contribute to discomfort.

Some **medications can dry mucous membranes**, including the intimate area. It is worth discussing if symptoms started after a new treatment.

Clean only the outside with a gentle cleanser; avoid vaginal douching, perfumes and irritating products, tight clothing if irritating.

WHAT TO ADVISE?

- ☑ Moisturizer for regular comfort
- ☑ Lubricant during sex
- ☑ Gentle external hygiene
- ☑ Avoid vaginal douching/irritants

WHEN TO REFER?

- bleeding
- suspicious lesion
- severe pain
- abnormal discharge/ odour
- persistent itching
- urinary symptoms with fever
- no improvement

What to tell the patient?

Vulvovaginal dryness
Can happen at any age depending on several factors, it is often associated with low-estrogen state, the "typical" example is menopausal status. Similar changes can occur in postpartum, when using contraception, due to cancer therapy or specific conditions, etc.

Vaginal dryness
A sensation of insufficient vaginal fluid—patients may report it as irritation, itching, or burning outside sexual activity, and most commonly as reduced lubrication during sexual activity, potentially leading to painful sex.

Vulvar dryness
A feeling of dry, tight, or fragile skin on the external genital area (vulva), often with irritation, burning or itching, and sometimes worsened by friction, soaps, or pad use.

Hydration of vulvovaginal tissues
The water content/"wetness" of vulvovaginal epithelium and surface, baseline moisture retained by the tissue which helps comfort and barrier function.

Vaginal lubrication
The moisture that increases with sexual arousal and facilitates comfortable intercourse; many women interpret "dryness" as a perceived reduction in lubrication during sexual activity.

Dryness ≠ Lack of arousal
Dryness and lubrication are not exactly the same. You may feel dry or irritated in daily life, even if lubrication occurs during arousal. Vaginal and vulvar comfort depends on hormones, blood flow, tissue elasticity, nerves, brain function, aging, and microbiota — all of which can change, especially after menopause.

During menopause
Estrogen levels decline, and this can be associated with a loss of vaginal moisture, leading to vaginal and vulvar dryness. This can cause soreness and itchiness in the vagina and pain during sexual intercourse.

Discomfort
An unpleasant genital feeling — sore, sensitive, or "not feeling normal" — that may be mild, come and go, and occur with dryness.

Irritation
A feeling of local soreness or sensitivity often triggered by friction, inflammation, irritating products, or skin barrier changes.

Burning
A stinging or hot sensation in the vulva or vagina. It may happen with dryness, irritation, or inflammation.

Itching (pruritus)
An unpleasant feeling that makes you want to scratch. It may be felt on the vulva, inside the vagina, or both.

Pain
Pain in the vulva or vagina may happen **at rest** or when the area is touched, for example during **sex, examination,** or **tampon insertion**.

Dyspareunia
Genital/pelvic pain associated with sexual intercourse (superficial/insertional or deeper). Often associated with vulvovaginal dryness and GSM-related tissue changes.

Urinary urgency
Sudden, uncontrollable need to urinate (pee)

Pain when urinating
Pain, burning, or discomfort when passing urine (dysuria). It can feel like a burning sensation.

The vaginal microbiota is the community of bacteria naturally living in the vagina. When balanced, it is often dominated by protective bacteria called Lactobacillus, which help maintain an acidic pH, support the mucosal barrier, and limit the growth of harmful microorganisms.

Hormones are important, but they are not the only factor. The vaginal microbiota can also be affected by antibiotics, stress, hygiene habits, smoking, some medications, and sexual activity.

Antibiotics can sometimes disturb the balance of bacteria, including in the vaginal area. That is why repeated or unnecessary antibiotics should be avoided when possible.

Excessive vulvar washing or vaginal douching can disturb the natural protective balance. Gentle external cleansing with a mild, well-tolerated cleanser, rinsed with water, is enough.

Semen is more alkaline than the vagina, so intercourse can temporarily change vaginal pH. For some women, this may trigger irritation or symptoms.

A change in the vaginal microbiota is not a sign of poor hygiene.

When vaginal microbiota balance is disturbed — by low estrogen, antibiotics, stress, smoking, some medications or excessive intimate hygiene — protective lactobacilli may decrease and pH may rise, contributing to dryness, irritation or recurrent infections.

Probiotics or prebiotics may be considered as adjunctive support when recurrent vaginal dysbiosis, bacterial vaginosis, candidiasis or urinary infections coexist; benefits depend on the specific strain, formulation and clinical context.

Sexuality/sexology
Take your time during intimacy: arousal and natural lubrication often need time. Foreplay and a suitable lubricant can help reduce friction and discomfort. When lubrication difficulties affect desire, pleasure, or the relationship, speaking with a sexologist can be very helpful.

Perineum awareness/pelvic floor care
Pelvic floor health matters for intimate comfort. A well-functioning pelvic floor supports bladder control, sexual comfort, and pelvic tone. Gentle pelvic floor exercises and good body awareness, can help prevent urine leakage and improve confidence during intimacy.

For urogenital symptoms, application site matters, consider the vaginal entrance and urethral area—not only deep vaginal application—when appropriate and according to product guidance.

A vaginal and vulva moisturizer is used regularly, not only during sex. It helps keep the vaginal tissues hydrated and more comfortable over time. It can help reduce the feeling of dryness in daily life.

A lubricant is used during sexual activity to reduce friction. It can make intimacy more comfortable and help reduce pain or irritation linked to dryness.

Sources: 2, 3, 4, 5, 7, 11, 13, 14, 15, 16

BIOCODEX Microbiota Institute

For more information about the microbiota go to www.biocodexmicrobiotainstitute.com

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