

External Genital Warts (EGW) in Men: A Practical Approach

Diagnostic and Treatment

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Clinical aspects

Typical acuminate warts



Acuminate warts on urethral mucosa



Warts or fibroepithelial polyps?



Parafrenular papules with wart on the frenulum



NORMAL ASPECTS

Hirsutoid papules on the corona glandis: pearly penile papules



Normal parafrenular papules



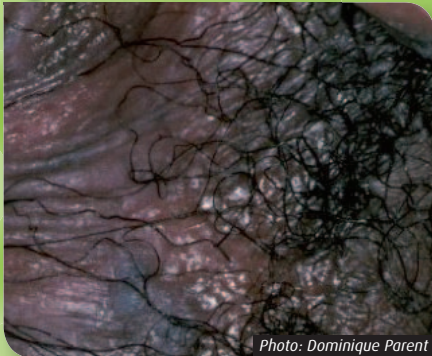
Leukoplakic acuminate warts



Scattered penile warts



Pigmented acuminate warts



Extensive penile warts in an immunocompromised patient



Sebaceous glands on the penis: Fordyce spots



Sebaceous glands on the penis: Fordyce spots



Differential Diagnosis

Penile warts



AND Molluscum contagiosum



Penile warts



AND Lichen planus



**Giant condyloma acuminatum
(Buschke-Löwenstein)**



AND HPV associated carcinoma



Penile pigmented warts



AND Pigmented intraepithelial neoplasia



Penile warts



AND Bowen's disease



Lymphangioma

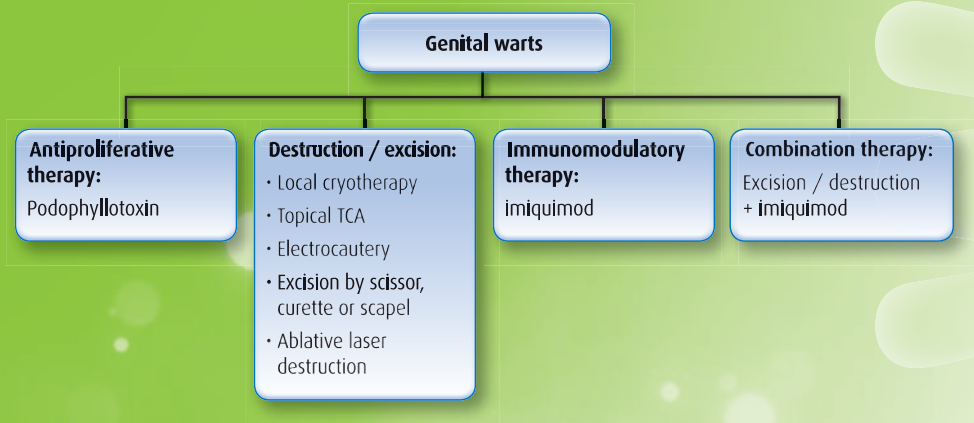


Mucous plaque of syphilis



EGW Treatment Decision Tree

THERAPEUTIC OPTIONS (included immunosuppressed patients)

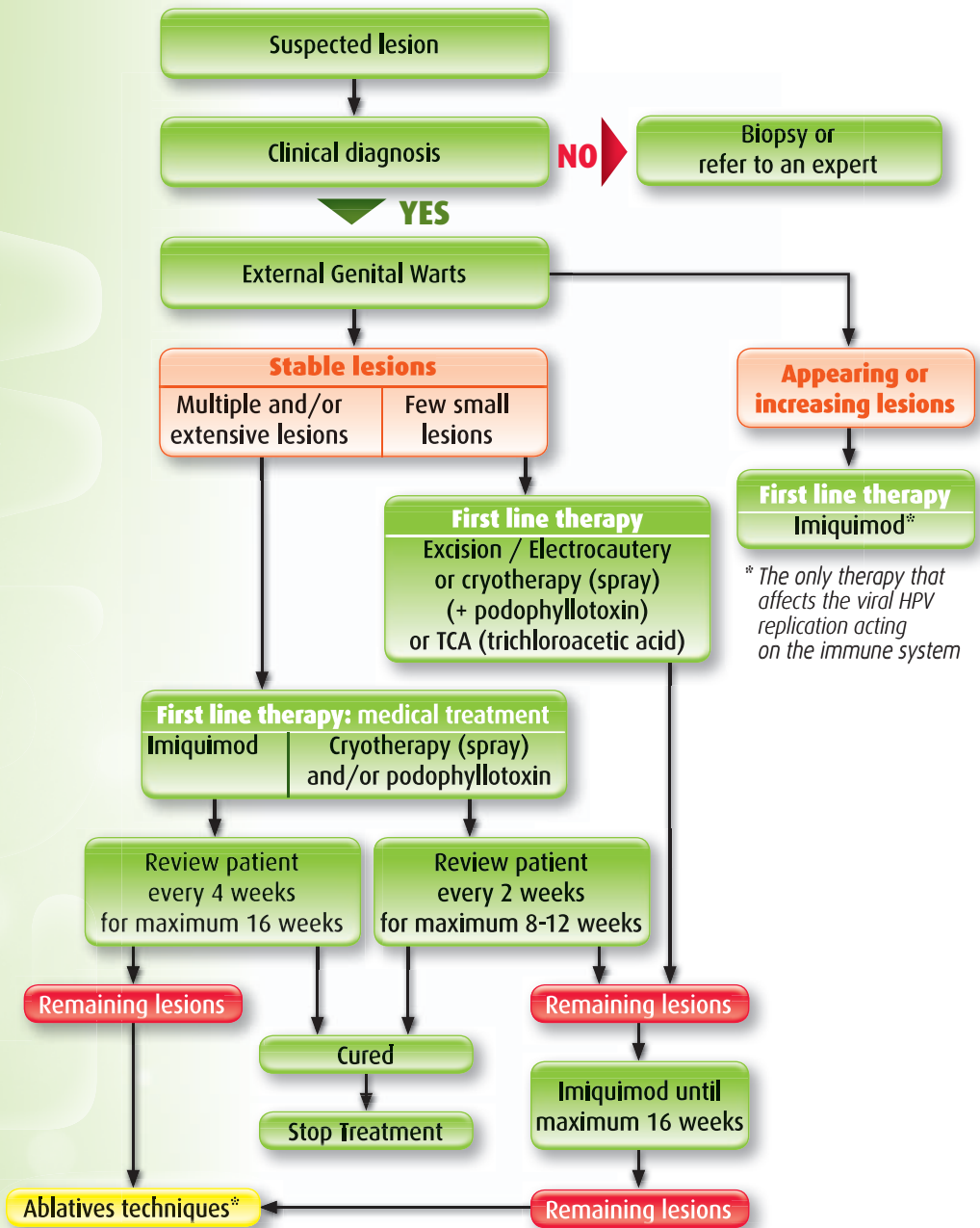


REMARKS

- In Germany, laser ablation seems also to be considered as first line therapy.
- No treatment is 100% effective. The combination of them is logical in order to achieve higher efficacy.
- Except for imiquimod (recurrence rate after 3 months = 9% to 14%), there is no evidence that the other therapies are significantly different in term of recurrence rates after 3 months = 25% to 75% ².
- Imiquimod can safely be used by immunosuppressed patients including those who take immunosuppressive therapy.
- All treatments, except imiquimod, indiscriminately destroy normal and HPV-infected keratinocytes.

Ref: 1. Schöfer H et al. *Eur J Dermatol* 2006; 16, 6: 642-648

2. Donders G, Parent D *Benign genital HPV infections* (2010): 95 (Artoos Communicatiegroep)



* **Sequential therapy reduces recurrence rates**

After 6 months, imiquimod application following surgical treatment (especially laser) diminishes the recurrence rate from 26.4% for ablative technique alone to 8.5% for the sequential therapy.¹

HOW TO USE MEDICAL TREATMENT?

Treatment	Self-application	Washing (water + soap)	Application time	Application frequency	Treatment duration
Imiquimod (Aldara®)	Yes	Yes	6 to 10 hours	3 days per week	Until 16 weeks
Cryotherapy (spray)	No	No	ND	Every 2 weeks	4 to 6 weeks or more
Podophyllotoxin (0,15 % cream or 0,5% solution)	No	Yes	2 to 8 hours (Gradually increase)	Every 2 weeks	4 to 6 weeks or more
Trichloroacetic acid solution (33 to 50%)	No	No	ND	Weekly	4 to 6 weeks or more

HOW DOES IMIQUIMOD WORK?

Imiquimod is an **immune response modifier** which:

- Stimulates the innate immune response by activating immune cells via Toll-like receptors and cytokines induction
- Stimulates the adaptive immune response by migration of Langerhans' cells and by IFN- α mediated promotion of Th1 cells
- Induces apoptosis in transformed cells

HOW TO MANAGE SKIN REACTIONS TO IMIQUIMOD?

The mode of action of imiquimod leads to **erythema, sometimes severe**. This reaction is a sign of therapy efficacy. Furthermore, **the erythema indicates the area where the HPV may be present**.

Patient needs to wash and dry carefully the treatment area after 6-10 hours of imiquimod application.

In case of mild to moderate erythema, a thin layer of moisturizing cream can be recommended.

In case of severe erythema (see figure bellow), the patient has to stop the treatment for at least one week and to resume treatment at the same regimen (1 daily application, 3 times a week for maximum 16 weeks).



Photo: Colm O'Mahony



Photo: Colm O'Mahony

Avoid topical steroids to reduce any adverse reaction as this will undo the effective immune response.