

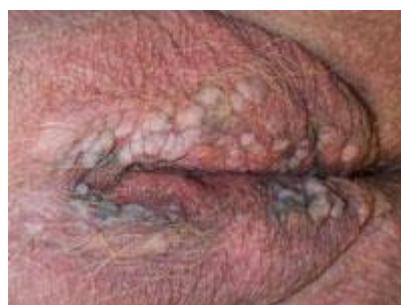
Cancer Association of South Africa (CANSA)



Fact Sheet on Bowenoid Papulosis

Introduction

Bowenoid Papulosis (BP) was described in 1977 by Drs Kopf and Bart as papules on the penis. Bowenoid papulosis is now most commonly known to occur on the genitalia of both sexes in sexually active people. Bowenoid papulosis is manifested as papules that are induced virally by human papillomavirus (HPV) and demonstrate a distinctive histopathology (bowenoid dysplasia).



[Picture Credit: Female Bowenoid Papulosis]

Many bowenoid papulosis lesions appear to run a benign course, although a number of case reports associate bowenoid papulosis with malignant invasive transformation (becoming cancerous).

[Picture Credit: Male Bowenoid Papulosis]



Bowenoid papulosis (BP) is a distinct clinicopathologic entity characterised by multiple, small skin-coloured to reddish brown papules, primarily occurring on the genitalia of young adults. BP is strongly associated with human papilloma virus (HPV) infection and is difficult to differentiate clinically and histopathologically from squamous cell carcinoma *in situ*. It is often considered as low grade *in situ* carcinoma. (Shastry, *et al*).

Bowenoid Papulosis (BP)

Bowenoid Papulosis (BP) is considered as a Pre-malignant condition. Other terms used to describe the condition are: Erythroplasia of Queyrat, Squamous cell carcinoma *in situ* and Bowen's disease.

Chamli, A. & Zaouak, A. 2020.

“Bowenoid papulosis (BP) is an uncommon sexually transmitted condition. It was first described in 1977 by Kopf and Bart as penile papules. However, it occurs at both sexes. It tends to affect young sexually active people. This condition was also termed “vulvar intraepithelial neoplasia (VIN)” in the

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vulva and termed penile intraepithelial neoplasia (PIN) in the penis. The classification of this disease was confusing and including three clinical entities: BP, Bowen's disease, and erythroplasia of Queyrat. Now it is recommended that these three entities not be used to describe lesions in the anogenital area. But, dermatologists still recognize BP as a distinct clinical variant. In fact, BP is induced virally by human papillomavirus (HPV) and presents as solitary or multiple skin-colored papules in the anogenital area. It can last from two weeks to several years. Clinically BP is assimilated to genital warts while histologically it has a close resemblance to squamous cell carcinoma in situ (Bowen's disease). Treatment is generally conservative. BP lesions are generally considered benign with a spontaneous regress leaving no sequelae in immunocompetent persons, although a small number may transform into invasive squamous cell carcinoma."

Chamli, A. & Zauak, A. 2020. Bowenoid papulosis. In: *StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan. 2019 Apr 10.*

"Bowenoid papulosis (BP) is an uncommon sexually transmitted condition. It was first described in 1977 by Kopf and Bart as penile papules. However, it occurs at both sexes. It tends to affect young sexually active people. This condition was also termed "vulvar intraepithelial neoplasia (VIN)" in the vulva and termed penile intraepithelial neoplasia (PIN) in the penis. The classification of this disease was confusing and including three clinical entities: BP, Bowen's disease, and erythroplasia of Queyrat. Now it is recommended that these three entities not be used to describe lesions in the anogenital area. But, dermatologists still recognize BP as a distinct clinical variant. In fact, BP is induced virally by human papillomavirus (HPV) and presents as solitary or multiple skin-colored papules in the anogenital area. It can last from two weeks to several years. Clinically BP is assimilated to genital warts while histologically it has a close resemblance to squamous cell carcinoma in situ (Bowen's disease). Treatment is generally conservative. BP lesions are generally considered benign with a spontaneous regress leaving no sequelae in immunocompetent persons, although a small number may transform into invasive squamous cell carcinoma."

Hoekstra, R.J., Trip, E.J., Ten Kate, F.J., Horenblas, S. & Lock, M.T. 2019.

OBJECTIVE: To determine the incidence of penile intraepithelial neoplasia in the Netherlands using a nationwide histopathology registry and to discuss the nomenclature of premalignant penile lesions.

METHODS: Data from patients in the Netherlands diagnosed with a premalignant penile lesion between January 1998 and December 2007 were collected from the nationwide histopathology registry (PALGA); this database covers all pathology reports of inhabitants in the Netherlands. The premalignant lesions included were erythroplasia of Queyrat; Bowen's disease; bowenoid papulosis; mild, moderate and severe dysplasia; and carcinoma in situ of the penis. The terminology used in the pathological reports was translated to penile intraepithelial neoplasia. The grading was made analogous to that of vulvar premalignant lesions.

RESULTS: The PALGA database enrolled 380 patients with premalignant penile lesions. Severe premalignant lesions, penile intraepithelial neoplasia III, were found in 254 patients (67%), penile intraepithelial neoplasia II in 84 (22%) and penile intraepithelial neoplasia I in 42 patients (11%). Most lesions were located on the prepuce (45%), followed by glans (38%) and shaft (3%). The median age of patients with penile intraepithelial neoplasia was 58 years. Progression to malignant disease occurred (2% for penile intraepithelial neoplasia I vs 7% for penile intraepithelial neoplasia III) in 26 patients.

CONCLUSIONS: Penile intraepithelial neoplasia is a rarely diagnosed condition. Because of the wide variation of terms used for premalignant intraepithelial neoplasia of the penis, we recommend restricting this nomenclature to penile intraepithelial neoplasia.

Incidence of Bowenoid Papulosis in South Africa

The outdated National Cancer Registry (2017), known for under reporting, does not furnish any information about the incidence of Bowenoid Papulosis in South Africa because it is not a cancerous condition in itself, although it may become cancerous.

At Risk Population

Sexually active people may be at risk of getting Bowenoid papulosis (BP). As in genital warts, HPV transmission is most often passed through direct skin-to-skin sexual contact. So partners of patients with BP should be screened for other forms of intraepithelial neoplasia (cervical, penile, vulvar and anal).

Men and women are equally at risk and the peak incidence is in sexually active persons under 30 years of age.

Diagnosis of Bowenoid Papulosis (BP)

Bowenoid papulosis is initially diagnosed based on the appearance of the affected area. A Biopsy will then be performed to confirm the diagnosis and rule out other, similar-appearing conditions.

Ferreira, J.CB., de Paula, H.M., Caixeta, G.N. & Mendonca, E.F. 2020.

“Bowenoid papulosis (BPap) is an uncommon skin disorder linked to human papillomavirus (HPV) infection and characterized clinically by the presence of scattered papules or small plaques, multiple and pigmented, that involve the stratified squamous epithelium. Bowen disease (BD) is recognized as the main differential diagnosis of BPap. An 80-year old white woman was referred for the evaluation of multiple, brown verrucous papules measuring 3 to 4 mm in diameter on the right maxillary gingiva. Histopathological analysis revealed disturbed epithelial maturation with papillary stratified squamous epithelium, koilocytic dysplasia, parakeratosis, acanthosis, basal double-layer, loss of cellular polarity, nuclear hyperchromatism and pleomorphism, scattered mitosoid bodies, and a high degree of cytologic atypia. An immunohistochemical investigation for p53 and Ki67 showed staining of the basal and suprabasal layer, while p16 was strongly expressed in the nuclei of epithelial cells and Bcl-2 was positive only in mitosoid bodies and the lymphocytic inflammatory infiltrate. In situ DNA hybridization was negative for HPV. Oral BPap is an uncommon lesion in which the diagnostic process includes clinical, histopathological, and molecular correlations due to the similarity to aggressive behavior lesions such as BD.”

Treatment of Bowenoid Papulosis (BP)

Treatment options for Bowenoid Papulosis may include:

- surgery
- laser surgery
- cryosurgery
- topical chemotherapy (given as a cream which is applied to the skin)
- topical biological therapy
- curettage and electrodesiccation

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Che, O., Li, J., Wang, J., Wang, Q., Jiang, L., Li, Z., Liu, H., Zhang, M. & Zeng, K. 2020.

Background: Bowenoid papulosis is a polymorphic papular disease that occurs on the external genital area. We investigated the efficacy of 5-aminolevulinic acid-mediated photodynamic therapy in the treatment of Bowenoid papulosis.

Methods: We investigated 200 Bowenoid papulosis cases from the Department of Dermatology and Venereology of Nanfang Hospital in 2016-2018. Biopsies were performed from Bowenoid papulosis lesions before treatment. The patients were divided into two groups: 100 patients each in the 5-aminolevulinic acid-mediated photodynamic therapy and control groups (radiofrequency cauterisation, microwave ablation, and surgical resection groups). Differences in lesion clearance, recurrence rate, and patient satisfaction after treatment were evaluated.

Results: Photodynamic therapy sessions for multifocal Bowenoid papulosis were more frequent than those for monofocal lesions. All lesions in the 5-aminolevulinic acid-mediated photodynamic therapy group were cleared after photodynamic therapy, with no recurrence at the 1-year follow-up; however, 20 (20.0 %) patients in the control showed recurrence after 1 year. Only 5 patients in the photodynamic group were unsatisfied with the treatment cost and 34 patients in the control group experienced short-term pain and scarring. The recurrence rate was significantly lower ($P < 0.05$) and patient satisfaction was higher ($P < 0.05$) in the 5-aminolevulinic acid-mediated photodynamic therapy group than those in the control. The recurrence rate was significantly lower ($P < 0.05$) and patient satisfaction was higher ($P < 0.05$) in the 5-aminolevulinic acid-mediated photodynamic therapy group than those in the surgical resection group. The recurrence rate of lesions was significantly lower in the surgical resection group than that in the rest of the control group ($P < 0.05$). There was no difference in recurrence rate and patient satisfaction between the radiofrequency cauterisation and microwave ablation groups.

Conclusions: 5-aminolevulinic acid-mediated photodynamic therapy for Bowenoid papulosis results in a low recurrence rate and high satisfaction.

About Clinical Trials

Clinical trials are research studies that involve people. They are conducted under controlled conditions. Only about 10% of all drugs started in human clinical trials become an approved drug.

Clinical trials include:

- Trials to test effectiveness of new treatments
- Trials to test new ways of using current treatments
- Tests new interventions that may lower the risk of developing certain types of cancers
- Tests to find new ways of screening for cancer

The [South African National Clinical Trials Register](#) provides the public with updated information on clinical trials on human participants being conducted in South Africa. The Register provides information on the purpose of the clinical trial; who can participate, where the trial is located, and contact details.

For additional information, please visit: www.sanctr.gov.za/

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Female Bowenoid Papulosis

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Male Bowenoid Papulosis

<http://www.dandermdk/atlas/9-15.html>

Medscape

<http://emedicine.medscape.com/article/1131696-overview>

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