

Treatment Results of Vulvar Intraepithelial Neoplasia in 16 Women✉

Cüneyt Eftal TANER¹, İrem ŞENYUVA², Şevki Göksun GÖKULU¹

İzmir, Turkey

OBJECTIVE: Clinical outcome after surgical treatment of vulvar intraepithelial neoplasia (VIN).**STUDY DESIGN;** 16 women with vulvar intraepithelial neoplasia were reviewed. Histologic diagnosis was based on classification of the International Society for the Study of Vulvovaginal Diseases (ISSVD).**RESULTS:** All cases had unifocal lesions in vulvar examination. In 13 cases (81,5%) lesions were white, in 2 cases (12,5%) lesions were papillary in appearance and in a case (6%) there was an ulcerative lesion. In all cases diameter of the vulvar lesions were less than 2 cm. Local excision was performed for VIN 1 lesions. VIN2 and VIN3 lesions underwent simple vulvectomy. Imiquimod therapy was preferred for a case with VIN3 lesion who refused surgery. In a case with VIN3 lesion squamous cell carcinoma in situ diagnosed after vulvectomy operation. Recurrence of disease has not yet been diagnosed during the follow up period.**CONCLUSION:** VIN lesions should be surgically treated and careful long term surveillance is mandatory.**Key Words:** Lesion, Premalign, Vulva*Gynecol Obstet Reprod Med;14:3 (186 - 188)*

Introduction

Vulvar intraepithelial neoplasia (VIN) is characterized by an abnormal proliferation of cells with an increased nucleocytoplasmic ratio, nuclear hyperchromasia and pleomorphism. The grading of VIN is based on histology and reflects the extent of replacement of the epithelium by the abnormal, dysplastic cells. In VIN1 the abnormal cellular changes are confined to the lower third, in VIN2 lesion extend into the middle third of the epithelium whereas VIN3 means full thickness dysplasia.¹ Although the incidence of vulvar cancer has remained unchanged the incidence of VIN has been thought to be increasing by up to three fold.²⁻³ This could be a real increase in incidence or just better diagnostic procedures. True incidence of this rare condition is unknown and accurate assessment of its malignant potential is difficult. In this study we reviewed clinical features and prognosis of 16 women with vulvar intraepithelial neoplasia.

Material and Method

During 1997-2006 16 women with vulvar intraepithelial neoplasia were reviewed. Women with vulvar lesions or women with chronic vulvar symptoms such as pruritus, soreness or women with asymptomatic lesions were diagnosed by vulvar biopsies. Histologic diagnosis was based on classification of the International Society for the Study of Vulvovaginal Diseases (ISSVD).⁴ Cases of invasive vulvar carcinoma diagnosed within one year of the diagnosis of VIN accepted as missed invasion. Women with VIN are followed with vulvoscopy, biopsy of suspicious lesions and cervical cytology at 6 month interval for at least 2 years after the last treatment and thereafter at least annually. Clinical features of the patients, macroscopic appearance of the lesions, management and prognosis of the cases were reviewed. This clinical study was approved by our hospitals ethic committee.

Results

During a 10 years period we had 16 women with vulvar intraepithelial neoplasia and 36 women with squamous cell carcinoma of the vulva.

Mean age of the women with VIN was 50,6 ±13,9 (23-68). Eight cases were older than 50 years and 3 cases were older than 60 years. All cases had unifocal lesions in vulvar examination. In 13 cases (81,5%) lesions were white, in 2 cases lesions were papillary in appearance and in a case there was an ulcerative lesion. In all cases diameter of the vulvar lesions were less than 2 cm. Local excision was performed for VIN 1 lesions. VIN2 and VIN3 lesions underwent simple vulvec-

¹Ministry of Health Aegean Maternity Research and Education Hospital
İzmir

²Ministry of Health Biga State Hospital, Çanakkale

Address of Correspondence: İrem Şenyuva
Ministry of Health Biga State Hospital
Çanakkale
iremsenyuva@yahoo.com

Submitted for Publication: 24.07.2008

Accepted for Publication: 29.09.2008

✉: This study was presented as a poster in the '2008 - 11. International Congress on Gynecology and Oncology in Antalya, Turkey

tomy. Imiquimod therapy was preferred for a case with VIN3 lesion who refused surgery. In a case with VIN3 lesion squamous cell carcinoma in situ diagnosed after vulvectomy operation. Mean follow up of the group was 4,4±3,5 years (1-9 year) and still going on. Recurrence of disease has not yet been diagnosed during the follow up period.

Discussion

The clinical manifestation of VIN are varied, ranging from warty lesions on vulva to erythematous or ulcerated areas or slightly raised lesions.⁵ The range of symptoms in these patients is wide and includes pruritus, soreness and the presence of lump. Many asymptomatic patients are also reported.^{6,7} There is growing evidence that HPV infection is involved in the development of VIN in younger women. In this group multifocal lesions are common.⁸ The modern management of VIN is mainly surgical and there has been a trend away from radical surgery. One of the reason this trend is the high recurrence rate of VIN following primary surgical excision. Hrod et al reported 48% recurrence rate in 133 women treated for VIN.⁹ Because of the risk of malignant transformation long term follow up for these cases is mandatory. The potential psychological sequela from this chronic condition possibly requiring repeated surgical procedures must not be underestimated. Conservative management of VIN following diagnosis regular colposcopic examination and biopsies of areas suspicions of invasion. Clear 1 cm margin around the lesion is recommended for local excision of the lesions, where the excision margins are not clear the recurrence rate increases.^{5,10}

Malignant transformation from VIN to vulvar cancer is poorly understood. Most authors have estimated the risk to be around 5%.^{2,11} The possibility of transition to malignancy based on involvement of the resection borders or not is doubtful. Inversion et al reported that 8 of their 16 patients who later developed cancer had free resection borders at the time of primary surgery for VIN.² They also reported that the median time between intraepithelial neoplasia and invasive cancer diagnosis was 2 years with a range of 1 to 11 years and suggested that age was a strong significant prognostic factor. 28% of their study group were younger than 40 years of age.² In our study 12,5% of our cases were younger than 40 years.

Vulvectomy operation for these cases can be accepted as overtreatment but possibility of invasion and poor continuing case of these patients should be considered. Jones et al⁶ reported that treated VIN has a high rate of recurrence and untreated VIN in women over 30 years has an appreciable invasive potential. Hillemanns et al reported that vulva preserving treatment methods for VIN have high recurrence rate especially in patient with HPV infection and multifocal disease.¹² Non - excisional methods of treatment such as laser ablation and topical 5-fluorouracil are not commonly recommended

since they prevent histologic examination are associated with high recurrence rates up to 70%.^{9,13} In our study we preferred imiquimod therapy for a women with VIN 3 lesion who refused surgical therapy and she has been under follow up for a year. In a study reviewing 40% women with VIN the authors reported that 36% of their cases were asymptomatic and 84% of the cases had multifocal lesions.⁶

Regression after diagnostic biopsy occurred in 47 women who at diagnosis of VIN ranged in age from 15 to 45 years (mean 24,6 years). They demonstrated a striking association of VIN with sexually transmissible infections and advised sexual health screening, cervicovaginal cytology and colposcopy assessment for continuing case of women with VIN.⁶

Conclusion

We concluded that VIN lesions should be surgically treated and careful long term surveillance is mandatory.

16 Olguda Vulvar İntraepitelyal Neoplazi Tedavisi Sonuçları

Vulvar intraepitelyal neoplazilerin cerrahi tedavi sonrası klinik sonuçları.

Vulvar intraepitelyal neoplazi saptanan 16 olgu araştırıldı. Histolojik tanıda Uluslararası Vulvovajinal Çalışma Grubu Topluğu sınıflaması kullanıldı.

Tüm olguların vulvar muayenesinde unifokal lezyon saptandı. Lezyonlar 13 olguda (%81,5) beyaz, 2 olguda (%12,5) papiller, bir olguda (%6) ülseratif olarak gözlemlendi. Tüm vulvar lezyonların çapı 2 cm'den küçük idi. VIN 1 saptanan lezyonlara lokal eksizyon, VIN2 ve VIN3 saptanan lezyonlarda basit vulvectomy uygulandı. VIN3 saptanan ve cerrahi tedaviyi reddeden bir olguda Imiquimod tedavisi uygulandı. VIN 3 saptanan ve cerrahi tedavi uygulanan bir diğer olguda vulvectomy sonrasında insitu karsinom saptandı. Tüm olguların takip periyodunda rekkürens gözlenmedi.

Vulvar intraepitelyal neoplaziler cerrahi tedavi edilebilir. Uzun dönem takiplerinin dikkatle yapılması gereklidir.

Anahtar Kelimeler: Lezyon, Premalign, Vulva

References

1. A.cheson N,Ganesan R,Chann KK.Premalignanat vulvar disorders.Current Obstetrics and Gynecology. 2000; 10: 12-7.
2. Iversen T, Tretli S. Intraepithelial and invasive squamous cell neoplasia of the vulva: trends in incidence, recurrence, and survival rate in Norway. Obstet Gynecol. 1998; 91 (6):969-72
3. Sturgeon SR, Brinton LA, Devesa SS, Kurman RJ. In situ and invasive vulvar cancer incidence trends (1973 to

- 1987). *Am J Obstet Gynecol.* 1992;166(5):1482-5
 4. Wilkinson EJ, Kneale B, Lynch PJ. Report of the ISSVD Terminology Committee. *J Reprod Med* 1986;31:973-4.
 5. Friedrich EG, Wilkinson EJ, Fu YS. Carcinoma in situ of the vulva: a continuing challenge *Am J Obstet Gynecol.* 1980;136(7):830-43
 6. Jones RW, Rowan DM, Stewart AW. Vulvar intraepithelial neoplasia: aspects of the natural history and outcome in 405 women. *Obstet Gynecol.* 2005;106 (6):1319-26
 7. Husseinzadeh N, Newman NJ, Wesseler TA. Vulvar intraepithelial neoplasia: a clinicopathological study of carcinoma in situ of the vulva. *Gynecol Oncol* 1989; 33 (2):157-63
 8. Junge J, Poulsen H, Horn T, Hørding U, Lundvall F. Human papillomavirus (HPV) in vulvar dysplasia and carcinoma in situ *APMIS.* 1995;103 (7-8):501-10.
 9. Herod JJ, Shafi MI, Rollason TP, Jordan JA, Luesley DM. Vulvar intraepithelial neoplasia: long term follow up of treated and untreated women. *Br J Obstet Gynaecol.* 1996; 103 (5): 446-52
 10. Joura EA, Zeisler H, Lösch A, Sator MO, Müllauer-Ertl S. Differentiating vulvar intraepithelial neoplasia from non-neoplastic epithelial disorders. The toluidine blue test. *J Reprod Med.* 1998; 43(8): 671-4
 11. Iversen T, Abeler V, Kolstad PS. Squamous cell carcinoma in situ of the vulva. A clinical and histopathological study. *Gynecol Oncol.* 1981;11 (2): 224-9.
 12. Hillemanns P, Wang X, Staehle S, Michels W, Dannecker C. Evaluation of different treatment modalities for vulvar intraepithelial neoplasia (VIN): CO(2) laser vaporization, photodynamic therapy, excision and vulvectomy. *Gynecol Oncol.* 2006;100 (2): 271-5.
 13. Jayne CJ, Kaufman RH. Treatment of vulvar intraepithelial neoplasia 2/3 with imiquimod. *J Reprod Med.* 2002; 47(5): 395-8
-