



## Squamous cell carcinoma of the vulva in pregnancy : case report and review of literature

Zutshi Vijay, Mehta Sumita, Sachdeva Poonam, Khara Nidhi, Gandhi Gauri, Batra Swaraj

The Department of Obstetrics and Gynaecology, Lok Nayak Hospital, Bahadur Shah Zafar Marg, New Delhi - 110 002, India.

**Key words:** carcinoma vulva, pregnancy

### Introduction

Carcinoma of the vulva has predominantly been a disease of the post menopausal age. Although occasionally it occurs in women under the age of 40 years, it has been rarely diagnosed during pregnancy<sup>1</sup>. Only a few cases have been described till date. We report a case of stage II vulvar cancer with pregnancy. Radical vulvectomy was done for this patient at 32 weeks. Patient is free of disease 4 years after surgery. So, early histological diagnosis and individualized treatment is mandatory in the management of suspicious vulvar lesions in pregnancy.

### Case report

A 25 year old gravida 2, para 1 presented to the antenatal clinic with complaints of amenorrhea for 7 months and vulvar growth since 3 months. This growth was associated with pruritis, discharge and post coital bleeding. Past history was insignificant. Her husband gave history of promiscuity.

Abdominal examination confirmed a viable pregnancy of 28 weeks. Examination of vulva showed a 5x5 cm ulcerative lesion with areas of necrosis and hemorrhage involving the right labia majora and right labia minora. Left labia majora had areas of discoloration but no obvious growth. The lesion did not involve the urethra or anus. There was no inguinal lymphadenopathy. Histological examination of the growth revealed invasive squamous cell carcinoma. At 32 weeks

gestation, radical vulvectomy was performed. Post-operative course was uneventful. Histological examination of the specimen showed well differentiated invasive squamous cell carcinoma. Pregnancy progressed satisfactorily under supervision. At 39 weeks she went into spontaneous labor and delivered a healthy male baby vaginally.

Two weeks postpartum, she was planned for bilateral inguinofemoral lymphadenectomy which she refused. However, she agreed to come for monthly follow up. Pap smear and colposcopy of the cervix and vagina were done 6 weeks postpartum which were normal. On year following surgery. She developed third degree uterovaginal prolapse. She was planned for Manchester repair but she wanted definitive surgery for the fear of recurrence of prolapse. Hence, vaginal hysterectomy with pelvic floor repair was done. Histopathology of the specimen showed no abnormality. Patient has been on regular up for the past four years with no evidence of local or distant metastasis.

### Discussion

A pregnant woman with malignancy is a significant challenge for the gynecologist. Diagnosis during pregnancy is often delayed which leads to progression of the disease. Treatment is more difficult due to the young age of the patient, the fact that two lives are involved, and the psychological problems of dealing simultaneously with malignancy and pregnancy.

In the pregnant patient presenting with vulvar irritation which cannot be attributed to infection, it is important to biopsy any suspect area. A review of the literature between 1940 and 2000 revealed 24 cases of carcinoma vulva which have been diagnosed and treated during pregnancy. Reports on therapy and outcome of patients with vulvar cancer diagnosed during pregnancy are varied.

Paper received on 28/01/2005 ; accepted on 02/07/2005

Correspondence :

Dr. Sumita Mehta

G 367, Preet Vihar, India.

Tel 91-11-22500333

Fax : 91-11-22500333 e-mail:drmehta@hotpop.com

In the earlier reports, survival rates for such patients were poor. Moore et al <sup>2</sup> described two cases of squamous cell carcinoma of vulva diagnosed in pregnancy. One patient with stage II disease underwent a cesarean section after diagnosis. At the time of laparotomy, internal and external iliac lymph node sampling and oophorectomy were performed. Radical vulvectomy with groin node dissection was performed 14 days later. The other reported patient was diagnosed in the second trimester but not treated. After delivery she had stage II disease and died 27 months after the initial diagnosis. In a similar case reported by Sivanesaratnam and Pathmanathan <sup>3</sup>, the patient had vulvar cancer diagnosed in early pregnancy, treatment was delayed and at the time of radical vulvectomy performed postpartum, the patient had stage IV disease. Regan et al <sup>4</sup> reported two cases and Gitsch et al <sup>5</sup> and Heller et al <sup>6</sup> reported one case each of successful surgical treatment in third trimester. These cases aptly emphasize the importance of early diagnosis and adequate management for optimal outcome.

The most important prognostic factors are the size and site of the tumour, depth of invasion, lymph node status. In our study decision to delay the inguinal lymph node dissection with its associated morbidity was based on her low risk for nodal disease and increased risk of postpartum complications (thromboembolism, lymphedema, infection).

Various treatment modalities are available. The present consensus is that vulvar cancer during pregnancy should be treated in the same manner as in the non-pregnant state. Colposcopy of the lower genital tract is important to exclude other invasive or preinvasive foci. Early lesions should be treated with radical local excision with at least an ipsilateral inguinofemoral lymphadenectomy if depth of invasion is > 1mm. More advanced lesions require a modified radical or radical vulvectomy and bilateral inguinofemoral lymphadenectomy. Patients diagnosed in the first and second trimester and treated by radical vulvectomy and by groin and

femoral lymphnode dissection as a one stage procedure before 16 weeks. After 16 weeks gestation pelvic lymphadenectomy is technically more difficult and only extended vulvectomy should be performed. Groin lymphadenectomy should be delayed until the early puerperal period. If the diagnosis is made later than that, delay in to the puerperium will not seriously prejudice the course of the disease.

Many obstetricians are nervous about allowing vaginal delivery after vulvar surgery, but provided that the wounds are well healed there is no reason why a vaginal delivery should not be attempted. Scarring of the vulva however influences the decision for caesarean section, as also the patient's choice. For the young patient who has been successfully treated for carcinoma of the vulva there is no contraindication to future pregnancies.

Vulva cancer in pregnancy should be treated in the same manner as in the nonpregnant state. Treatment is feasible during pregnancy and should to be tailored to the needs of the individual patient.

#### References

1. Bakour SH, Jalcol H, Woavor JB et al. Vulvar carcinoma presenting during pregnancy, associated with recurrent bone marrow hypoplasia: a case report and literature review. *Gynecol Oncol* 2002;87:207-9.
2. Moore DH, Fowler WC, Currie JL. Squamous cell carcinoma of the vulva in pregnancy. *Gynecol Oncol* 1991;41:74-7.
3. Sivanesaratnam V, Pathmanathan R. Carcinoma of the vulva in pregnancy: a rare occurrence. *Asia Oceania J Obstet Gynecol* 1990;16:207-10.
4. Regan MA, Rosenzweig BA. Vulvar carcinoma in pregnancy. A case report and literature review. *Am J Perinatol* 1993;10:334-5.
5. Gitsch G, Eijkeren M, Hacker N. Surgical therapy of vulvar cancer in pregnancy. *Gynecol Oncol* 1995;56:312-5.
6. Heller DS, Cracchiolo B, Hameed M. Pregnancy associated invasive squamous cell carcinoma of the vulva in a 20 year old, HIV negative women. *J Reprod Med* 2000;45:659-61.