Cervical carcinoma is mostly seen in women of childbearing age. Although rare in pregnancy it can occasionally present as a complication. Oncology referral centres may see one to two cases per year\(^1\). Incidence of invasive disease varies in different centres from 1 in 1250\(^2\) to 1 in 3000 pregnancies\(^3\). By definition a tumour diagnosed during pregnancy and within one year postpartum is considered as in association with pregnancy by many authors\(^4\). Although some have only reported antenatal cases, while others have included cases 18 months postpartum. Symptoms will be the same as in non-pregnant women, i.e., vaginal discharge and/or bleeding, either spontaneous or postcoital. Prognosis of the disease is the same in pregnant as in non-pregnant cases. Gestational age at the time of diagnosis is extremely important when planning treatment. We present two case reports of stage 1B carcinoma cervix complicating pregnancy.

CASE 1
Mrs. S.M. a 37 years old, gravida, 2 para 1+2, was seen at 36 weeks of gestation with a blood stained discharge on three occasions (at 9, 23 and 35 weeks of gestation). She had a normal vaginal delivery of a female baby followed by two spontaneous miscarriages at 9-10 weeks of pregnancy. Last smear was 2 years prior to presentation and was normal. On examination a cervical polyp of 2-3 cms in diameter was seen. Colposcopically guided biopsy of the polyp showed severe dyskaryosis with early invasion of the stroma. Elective caesarean section was performed at 36 weeks, i.e., the same week of diagnosis. She was referred to the oncology unit of Samaritan Hospital where an EUA and cystoscopy was carried out two weeks after caesarean section. Cystoscopy was normal. A polypoidal mass 3 cms in diameter was arising from both anterior and posterior lips of the cervix. Biopsy was repeated, histology of which showed invasive pleomorphic adenocarcinoma. Diagnosis of stage 1B carcinoma cervix was made and the patient prepared for Wertheim’s hysterectomy. Chest x-ray and renal ultrasound was normal. Liver function test, electrolytes and full blood count was normal. Wertheim’s hysterectomy with conservation of ovaries was carried out within a month of caesarean section. Histology showed a small spot of adenocarcinoma at the site of previous biopsy. Margins were free. No tumour was seen in the lymph nodes. Postoperative period was uneventful. Mother and baby were well and discharged home on the 12th postoperative day. Follow-up at 20 months was normal and the baby is alive and well.

CASE 2
Mrs. D.M. a 29 years old gravida 2, para 1, was seen in the postnatal clinic with a severe dyskaryotic smear having had a normal delivery of a female baby 2 months earlier and was pregnant again. Her smear 3 years prior to presentation was normal. Colposcopy was carried out on which abnormal transformation zone was seen with no evidence of invasion. When she returned for planned repeat colposcopic examination, she complained of a blood stained vaginal discharge. On vaginal examination a fungating polyp of 7 cms in diameter was seen and felt arising from the right side of the cervix. She was now 30 weeks pregnant. EUA and biopsy was carried out and histology showed a well differentiated squamous cell carcinoma of the cervix. There was no spread outside the cervix. Diagnosis of stage 1B cervical carcinoma was made and she was referred to the oncology unit of Samaritan Hospital. MRI scan was arranged which showed 3.5 cms mass arising from the cervix with
no lateral spread. It was decided to deliver the fetus prematurely in order to treat the cervical carcinoma. In order to enhance fetal lung maturity two injections of betamethasone 12.5 mg were given at an interval of 12 hours. Preoperative antibiotics and heparin 5000 IU subcutaneously BD was commenced. Elective caesarean section was performed followed by pelvic lymph node sampling. Frozen section of pelvic lymph nodes was negative and Wertheim’s hysterectomy with conservation of both ovaries was performed. Postoperatively she made a good recovery. Female baby weighed 1.8 kg with good apgar score. Histology revealed a large cell keratinizing squamous cell carcinoma of the cervix invading to the depth of 3.6 mm. Resection margin was free of tumour. Tumour was seen to invade lymphatic vessels, but no blood vessel invasion. There was no tumour in any lymph nodes. Mother and baby were well and discharged home on the 14th postoperative day and both have remained well at 12 months.

**DISCUSSION**

The importance of investigating excessive vaginal discharge or bleeding during pregnancy cannot be over emphasised. The obstetric causes, e.g., threatened abortion, placenta praevia, abruptio placentae and dilating cervix in the antenatal period must be excluded. Infection and retained products in the postoperative period should be considered. Cytology is very helpful in diagnosing the cervical lesion, but in cases where visible lesion is present on the cervix, biopsy is indicated regardless of cytology. No significant complications are seen from the biopsy. In the absence of a lesion colposcopic examination is important and biopsy taken if necessary. Random biopsy is unreliable. Smears should be performed during pregnancy if the last smear was done more than 3 years ago. The importance of taking smears during pregnancy is stressed as 30% of the patients may be without any symptoms. In pregnancy it can be difficult to stage the lesion and under staging during pregnancy has been reported. Treatment should then be prompt as delay in definitive treatment will decrease the chances of survival. Radical surgery is the appropriate form of treatment, but in places where expertise in surgery is not available, radiotherapy is a suitable alternative. Ovaries are conserved as the patients are young and malignancy in retained ovaries is extremely rare. Surgical approach maintains the vaginal integrity and function as compared to those who have radiotherapy. Vaginal delivery will not increase the risk of tumour dissemination but will delay the treatment time hence caesarean section should be performed at the same time as the radical surgery. Such patients are best dealt with in specialized units. Postoperative radiotherapy is given to those with positive nodes or resection margin too close to the tumour.

**REFERENCES**

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