

Pregnancy, contraception, menopause, and hysterectomy

This chapter discusses with the management of CIN during pregnancy, use of contraception and hormone replacement therapy, and hysterectomy.

17.1 Management of CIN during pregnancy

The management of CIN during pregnancy is dealt with comprehensively elsewhere (Freeman-Wang and Walker, 2006).

Inevitably, CIN will sometimes be first recognized during pregnancy, particularly if the population has not been systematically screened. CIN is also the most common gynaecological cancer of pregnancy (Yoonessi et al., 1982). Opinions vary as to whether it is wise to perform a smear during pregnancy. If a comprehensive screening programme is in place, it is not necessary, but

if not, it may be the only opportunity to do so.

The pregnant cervix is both easier and more difficult to examine than the non-pregnant one. It is usually easier to see the entire TZ because of eversion of the cervical epithelium, whereby there is a relatively large ectropion, which inverts postpartum. However, the extra mucus, increased vascularity, stromal hypertrophy, and decidual changes induced by pregnancy are more difficult to interpret in the presence of an abnormal screening test, and this is one of the few times that cancer may be mistakenly suspected when the tissue is actually normal. As pregnancy progresses, the vaginal walls may become highly patulous and the cervix more difficult to visualize. The use of lateral vaginal wall specula or, more comfortably, a condom (with its end cut off) placed around a speculum will

often be necessary to hold back the vaginal walls (Fig. 5.11b). Engorged vulvovaginal varices may add to the difficulty.

However, there are times when colposcopy will be necessary during pregnancy. If so, it is wise to refer the woman to a colleague who is experienced with colposcopy during pregnancy. If a woman meets the criteria for colposcopy, pregnancy should not defer it, but biopsy and treatment thresholds will be different. The primary ambition of a colposcopic examination during pregnancy is to recognize or rule out malignancy. Precancerous lesions are usually left untreated until about 3 months postpartum (NHS, 2010). However, it is often prudent to monitor suspected HSIL colposcopically and cytologically as pregnancy progresses.

Although the evidence is not conclusive, several observational

studies have reported the safety of delaying treatment during pregnancy (Coppola et al., 1997; Palle et al., 2000; Paraskevaidis et al., 2002; Woodrow et al., 1998). In the report of Paraskevaidis et al. of 98 pregnant women with CIN followed up until postnatal treatment by LLETZ, regression occurred in 36% of women with the antenatal suspicion of CIN1 and in 48% of women with suspected CIN2/CIN3. Of seven women with suspected microinvasion, only one had histological evidence (early stromal invasion < 1 mm), but there was one case of microinvasion (< 1.5 mm) not suspected antenatally. The opposite view was taken by Siegler et al. (2014), who reported safe treatment of precancer during pregnancy and suggested high rates of HSIL progression to cancer in women not treated during pregnancy. In their observational study of 31 pregnant women with HSIL, 18 were conservatively followed up and 13 underwent LLETZ during the first 14 weeks of pregnancy. Four women (12.9%) in the study group were diagnosed with invasive cervical cancer. Of the women who underwent LLETZ, nine continued their pregnancies, of which seven had full-term normal deliveries and two had late preterm deliveries. No complications of severe bleeding or miscarriage were reported in any of the treated patients. Siegler et al. advocate treatment of HSIL during pregnancy. However, most authorities recommend a conservative approach to the management of CIN during pregnancy, for two reasons: because of the risks of treatment during pregnancy, and because progression to cancer is thought to be uncommon (Massad et al., 2013; NHS, 2010).

The optimal management of CIN during pregnancy is uncertain at this time. What is universally agreed is that where a suspicion of microinvasive disease is present, a large

biopsy needs to be taken. ***Punch biopsies are inadequate in this situation.*** Several alternative means of taking a biopsy are available. An adequate biopsy sufficient to allow the pathologist to rule out or recognize cancer will be achieved using a small loop biopsy or a wedge biopsy. Occasionally, it may be necessary to take larger pieces of tissue or even to perform an excision of the TZ. If so, these procedures are better performed in hospital, usually under general anaesthesia with a suture set to hand and sometimes with a prophylactic cerclage in place. Haemorrhage is a real risk (Robinson et al., 1997).

Either way, it is crucial that women in whom CIN is first recognized during pregnancy are at least followed up and managed at 3 months postpartum, because the untreated disease usually persists (LaPolla et al., 1988).

In summary, colposcopy should be performed at the same threshold during pregnancy as for women who are not pregnant. For women with suspected LSIL, management may be deferred until 3 months postpartum. A large biopsy must be performed for women with suspected microinvasive or invasive disease. Endocervical curettage is contraindicated during pregnancy. Women with suspected HSIL should have a follow-up examination in the second half of pregnancy and again 3 months postpartum.

17.2 Contraception and CIN

17.2.1 Combined oral contraceptive pill

Women should not be advised to change their method of contraception because of the recognition of CIN at screening. Some studies have shown a slight increase in CIN among women using the combined

oral contraceptive pill, but no study has shown an advantage to discontinuing use. Also, in a large meta-analytical review, Smith et al. (2003) found no association between use of the combined oral contraceptive pill and CIN in women who had used the combined oral contraceptive pill for up to a decade (Ylitalo et al., 1999).

17.2.2 Intrauterine contraceptive device

There is no need to remove an IUCD in women who are being investigated for suspected CIN. It does not appear to have any effect on CIN progression or regression. Colposcopy is unaffected by the presence of an IUCD. However, there are implications for women who are undergoing excisional treatment. It is quite easy to resect the threads of an IUCD during excision of any kind. To prevent this, it is often possible to push the threads up above the field of resection under colposcopic guidance. It is thus possible to resect the TZ without disturbing the IUCD, and the threads (and not the IUCD) may then be gently pulled back down into their correct position.

However, sometimes it is not possible to ensure that the threads stay out of the field of resection. If the threads are resected, the woman should be informed about this, because she may need to attend a gynaecologist to achieve removal of the IUCD when it is due for removal or replacement. This is usually not difficult using a Nelson-Roberts forceps, particularly if the examination is performed in the follicular phase and with exogenous estrogen taken for a few days up to and including the day of the examination. With exogenous estrogen and in the follicular phase, the cervix is more likely to be relaxed, open, and amenable to forceps exploration of the endocervical canal and lower uterine cavity, whereby

the IUCD may be grasped and gently removed. It is rarely necessary to resort to general anaesthesia.

17.3 Hormone replacement therapy and CIN

Use of hormone replacement therapy does not increase or decrease the risk of CIN development or progression. There is no reason to advise cessation of hormone replacement therapy use because of a suspicion of CIN (Sawaya et al., 2000). In women who are not using hormone replacement therapy, it is sometimes useful to prescribe it for several weeks, when estrogen-related atrophic change confuses the colposcopic appearances or to increase the chance of successfully examining the endocervical canal.

17.4 Hysterectomy and treatment of CIN

It is prudent to take a smear or perform another screening test for any woman who is having a hysterectomy for benign pathology. Every woman who is due to have a hysterectomy and who has an abnormal screening test should have a preliminary colposcopic examination (NHS, 2010). The inadvertent undertreatment or overtreatment of CIN at hysterectomy is a preventable error. Where HSIL is present, if the TZ is not completely excised at hysterectomy, the risk of subsequent cancer developing will be increased and monitoring the vaginal vault is difficult. Some dysplastic epithelium may be buried in the scar of a hysterectomy, and this vaginal intraepithelial neoplasia

is difficult to evaluate or treat (see Chapter 16).

For women who have no other pathology, hysterectomy is gross overtreatment of CIN, which is better treated locally (by excision or ablation). Hysterectomy is associated with far greater morbidity than local treatment. Finally, simple hysterectomy is an inadequate treatment for invasive cancer (Roman et al., 1992). Where coexisting benign pathology exists or where unexplained endocervical pathology persists, it may be justifiable to perform hysterectomy, providing that all reasonable efforts have been made to rule out cancer and providing that iodine is applied just before hysterectomy to ensure excision of any vaginal intraepithelial neoplasia (Mohamed-Noor et al., 1997).

Key points

- Colposcopy should be performed at the same threshold during pregnancy as for women who are not pregnant, but for women with suspected LSIL, management may usually be deferred until 3 months postpartum.
- A large biopsy must be performed for women with suspected microinvasive or invasive disease, and endocervical curettage is contraindicated during pregnancy.
- Women with suspected HSIL should have a follow-up examination in the second half of pregnancy and again 3 months postpartum.
- The investigation of abnormal bleeding after menopause must include direct visual inspection of the cervix.
- All patients in the cervical screening age range undergoing a hysterectomy for other gynaecological reasons should have a negative test result within the screening interval or as part of their preoperative investigations.
- All patients being considered for hysterectomy who have an undiagnosed abnormal sample or symptoms attributable to cervical cancer should have diagnostic colposcopy and an appropriate biopsy.