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Colposcopy in special circumstances: Pregnancy, immunocompromise, including HIV and transplants, adolescence and menopause

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The true value of colposcopy in pregnancy is under debate; the examination may be more difficult depending on the gestation at which a woman presents. Cervical intraepithelial neoplasia does not have an accelerated progression during pregnancy, and treatment is usually deferred until postpartum. The prevalence of cervical intraepithelial neoplasia is greater in women with immune compromise. Those with human immunodeficiency have a higher prevalence, more persistence and less regression of human papillomavirus-related infections. Cervical cancer remains an AIDS-defining illness. Women who have had renal transplants also have a higher risk of developing cervical intraepithelial neoplasia. By contrast, other chronic illnesses that require immunosuppressant therapy do not seem to show this added risk. In young women, human papillomavirus infection is common and cervical intraepithelial neoplasia is also evident, but regression of these lesions is frequent and so conservative review may be appropriate. At the menopause, colposcopy is often unsatisfactory. The use of human papillomavirus testing for triage of low-grade cytological abnormalities may benefit this age group.

Colposcopy and pregnancy

The physiological changes of pregnancy (with the increased rate of squamous metaplasia, the increase in vascularity and the changes in the size and shape of the cervix) together conspire to make

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both cytological interpretation and colposcopic assessment a particular challenge. Benign lesions may appear to be suspicious of abnormality, but simply represent deciduosis, whereas active squamous metaplasia may be associated with a fine mosaic or punctuate surface pattern that may be indistinguishable from a low-grade cervical intraepithelial neoplasia (CIN) (Fig. 1). An awareness of this is reflected in the National Health Service Cervical Screening Programme guidance for management: (Table 1).[1] In countries in which routine screening is not available, however, opportunistic screening, whether by cytology or visual inspection of the cervix, with acetic acid may be of value.

Although colposcopy is a safe and effective method of evaluating abnormal cytology, carrying it out in pregnancy may produce particular technical challenges. The vaginal walls are often lax, and there may be vulval and vaginal varicosities. On examination it is recommended that a large speculum be used. To keep the vaginal walls apart, a latex glove with the tip of the finger portion removed may be inserted in order to cover the speculum blades. It is then opened once inserted into the vagina. A condom instead of the finger of a glove may also be used.

The value of colposcopy in pregnancy

The aim of colposcopy during pregnancy is to exclude malignancy. Paraskevaidis et al.[2] investigated the evolution of CIN and evaluated the safety of cytological and colposcopic surveillance of women with CIN during pregnancy.[2] Ninety-eight women with antenatal cytological, colposcopic impression of CIN, or both, were followed up during pregnancy with cytology and colposcopy every 2 months. A cytological and colposcopic re-evaluation 2 months postpartum was carried out, and large loop excision of the transformation zone (LLETZ) (or loop electrosurgical excision procedure as it is known in North America), carried out if appropriate. Punch or loop biopsies were only taken in pregnancy if micro-invasion was suspected. In 14 out of 39 (35.9%) and in 25 out of 52 (48.1%) women with an antenatal impression of CIN I and CIN 2 and 3, respectively, a postnatal impression of regression was evident. Seven

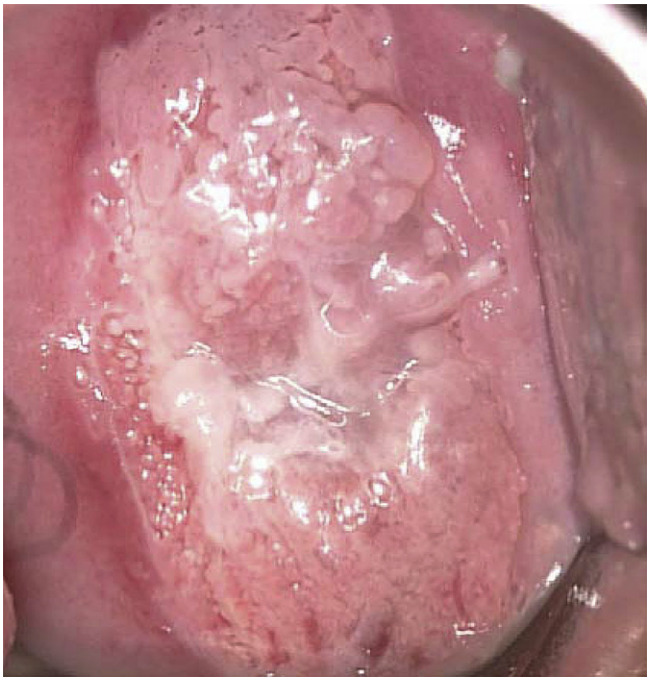

Fig. 1. Metaplasia in pregnancy.