Cervical Screening Guideline

A Pap smear for cervical cytology should be offered to every woman booking for antenatal care who:

- has not had cervical screening within the past two years, and
- has a history of abnormal symptoms, cytology reports and/or treatment of cervical abnormalities who has not been followed up in accordance with the national guidelines.

Rationale

Pregnancy and a request for antenatal care may be the only reason a woman presents to a health professional, and thus at the time of booking, or a later visit, may be the only occasion on which she can be offered cervical screening. In line with the practice of opportunistic screening Pap smears should be offered to all women presenting for antenatal care who have not had a previous Pap smear or have not had a Pap smear in accordance with national guidelines.

In general, pregnancy is not a contraindication to performing a Pap smear. It is recommended that Pap smears be offered to women where appropriate:

- until at least 28 weeks of pregnancy
- in selected women into the third trimester, (if it appears likely that they may have difficulty presenting for screening in the postnatal period).

Pap smears have not been associated with increased rates of miscarriage or pre-term labour but a woman with such a history in previous pregnancies, or of threatened miscarriage in the current pregnancy, may believe this to be the case and be understandably reluctant to agree to a Pap smear in pregnancy. In such cases the Pap smear provider should emphasise to the woman the importance of having a Pap smear performed as soon as the pregnancy is safely established. It is also recommended that every woman with unexplained bleeding in early pregnancy should have her cervix visualised via a speculum to ensure that unexpected malignancy is not the cause and should have her Pap smear repeated.

Procedure

When providing a Pap smear for a woman who is pregnant, as in the non-pregnant woman, the whole cervix should be clearly visualised so that the squamo-columnar junction can be adequately inspected and sampled. Adequate sampling of the transformation zone is indicated by the presence of both squamous and glandular cells in the smear. Reports of absent endocervical component are more common in pregnancy – if the cervix has been well visualised and the Pap smear provider feels an adequate smear has been collected and no other abnormality has been detected, then routine follow-up is recommended.

The use of a nylon or plastic brush and spatula in pregnant and non-pregnant women has been shown in multiple studies, including a Cochrane review, to be the method obtaining the highest rate of adequate smears (i.e. with endocervical cells reported.) In addition, studies involving around 1900 pregnant women showed no increased risk of serious outcomes for the woman or the pregnancy. There was a small increase in the incidence of vaginal spotting following the procedure - this was self-limiting. Pregnant women offered Pap smears should be warned that spotting may occur and reassured that it poses no risk to the foetus.

The manufacturers of the Cytobrush recommend that the device not be used after ten weeks of pregnancy. The Ayre spatula plus a cotton swab is recommended in one 1993 paper as being as effective as other devices. The plastic Cervex sampler used under direct vision is also an appropriate tool and likely to be the most familiar to clinicians. Liquid-based cytology is indicated if the smear is contaminated with mucus – this is more often the case when smears are collected.
in pregnancy. There is no need to wipe the mucus away from the cervix if collecting a sample that is also sent for liquid-based cytology. It is recommended that whatever device is used it only be inserted under direct vision into the cervical canal. If patulous vaginal walls make visualising the cervix difficult, a condom with the tip cut off may be placed over the blades of the speculum to help hold back the vaginal walls, or they may be held aside with sponge forceps or a wooden tongue depressor held by the person performing the smear, or an assistant.

When a Pap smear is performed in the postnatal period, low levels of oestrogen associated with breastfeeding may cause a degree of atrophic vaginitis making the collection or interpretation of the smear unsatisfactory. If this occurs the application of local oestrogen as cream or pessaries for two weeks prior to a repeat smear should solve the problem, and will not interfere with lactation.

When a Pap smear is offered but declined advise the pregnant woman to have a smear at an early date post-natally.

### Guideline for the Management of Screen Detected Abnormalities in Pregnancy

If the results of a Pap smear taken during a pregnancy indicate a high grade abnormality, the investigation of screening detected abnormalities during pregnancy should follow the same guidelines as for the non-pregnant woman.

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**Protocol**

Cervical screening should be offered to all pregnant women presenting for antenatal care who have not had a Pap smear performed in accordance with national guidelines i.e. within the previous two years for women with no history of abnormal cytology, or within the time specified for follow-up of women with abnormal cytology and/or a history of treatment of a cervical abnormality.

Pregnant women having cervical cytology should be advised that vaginal spotting may occur after the procedure; explain that this comes from the cervix and poses no risk to the pregnancy and is self-limiting.¹ ²

Although collecting a smear in pregnancy has not been shown to pose any risk to the foetus women with a history of threatened miscarriage or pre-term labour may be reluctant to undergo a Pap smear during pregnancy; in such cases the woman should be advised to have the Pap smear performed as soon as the pregnancy is safely established.

The NHMRC Guidelines for the Management of Asymptomatic Women with Screen Detected Abnormalities (2005) states that high grade lesions need early referral for colposcopic assessment, preferably by a colposcopist experienced in assessing the pregnant cervix.³ Colposcopy is safe during pregnancy. The main aim of colposcopy in the pregnant woman is to exclude the presence of invasive cancer and to reassure the woman that her pregnancy will not be affected by the presence of an abnormal Pap smear.⁴

The colposcopic evaluation of the cervix may be more difficult due to vaginal laxity preventing the complete visualisation of the transformation zone. The increased vascularity due to pregnancy may also be difficult to interpret. Biopsy of the cervix is usually unnecessary in pregnancy, unless invasion is suspected colposcopically.⁵

Experienced colposcopists will not usually perform a biopsy if they are confident that they have excluded an invasive cancer. If no lesion is identified at colposcopy, it is advisable to request a review of all the cytological slides.⁶

If the diagnosis of a high-grade abnormality is confirmed, a second opinion from another colposcopist with wide experience in the colposcopic evaluation of pregnant women is recommended. In this situation it will be prudent to review the woman at approximately 20–24 weeks with cytology and colposcopy to determine as far as possible that she does not have an invasive lesion.⁷

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References


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Contact Details

Queensland Cervical Screening Program
PO Box 2368, FORTITUDE VALLEY BC QLD 4006
Telephone: 07 3328 9467 Fax: 07 3328 9487