Management of women with hysterectomies

Three separate non-systematic literature searches were conducted in Medline and EMBASE from 2004 onwards. Searches were limited to the English language.

1. **Women with total hysterectomy for benign conditions who have never had an abnormal HPV or cytology. Do they need any further screening?**

Search terms: hysterectomy, cervical screening, test papanicolaou, vaginal smear, vault smear. (HPV was not added as a search term to enable a wider search).

Table 1: studies on women with hysterectomies for benign conditions who have never had an abnormal HPV or cytology and cervical screening.

Authors	Country	Study type	Subjects	Findings
Murta et al, 2005	Brazil	Retrospective study	22 women with a diagnosis of VAIN, with previous records of hysterectomy and cytology FU were identified from hospital records during 1993-2003	2/22 (9%) women who later developed VAIN previously had hysterectomies for benign uterine myoma (the remaining cases had hysterectomies for CIN or invasive cancer). The authors stated that finding VAIN in such women justified the routine use of pap smears. They also surmised that based on previous literature (Bell et al, 1984; Lenchan et al, 1986; Stuart et al, 1981) 28-41% of women who developed vaginal cancer had a previous hysterectomy for benign indications.
Stokes-Lampard et al, 2006	multiple	Systematic review	6543 hysterectomised women for benign conditions	Based on aggregated data from 3 studies of good methodological quality, the authors found that after hysterectomy for a benign indication (n=6543), 1.8% (n=117) had an abnormal smearand 0.12% (n=8) had an abnormal biopsy. No cancers were detected in aggregate data from 2 studies (n=5846)

2. **Women who have had in the past been HPV positive AND had a high grade abnormality (squamous or glandular) OR just had a high grade abnormalitiy, who have been treated satisfactorily and are on surveillance or have returned to normal screening, who then have a total hysterectomy with no evidence of abnormality on the hysterectomy specimen.**

Search terms: hysterectomy, post-hysterectomy, high grade intraepithelial neoplasia, high grade abnormality, high grade lesion, cervical intraepithelial neoplasia 2, cervical intraepithelial neoplasia 3, atypical glandular cells, atypical endocervical, AGUS, adenocarcinoma in situ, glandular dysplasia, glandular abnormality, glandular lesion, vaginal smear, vault smear, follow-up. Two separate searches were conducted; one for women who were both HPV positive and had a high grade abnormality and a second for women who only had a high grade abnormality.

Results: no articles were found that could directly address this particular question. In the majority of cases, when the history of cervical abnormalities was provided for women who had a hysterectomy, no further follow-up information was provided following that treatment.

3. **Women who have had a high grade abnormality treated by total hysterectomy, with complete excision of the lesion in the hysterectomy specimen. What follow up would be reasonable.**

Search terms: hysterectomy, post-hysterectomy, high grade intraepithelial neoplasia, cervical dysplasia, cervical abnormality, follow-up, cervical screening, papanicolaou smear, vaginal smear, vault smear.

Results: Although some studies were identified they did not specifically state whether there was complete excision of the lesion in the hysterectomy specimen.

Table 3: summary of studies

Authors	Country	Study type	Subjects	Findings
Parva et al, 2012	US	Retrospective review	64 patients referred for post-hysterectomy vaginal colposcopy based on indications for post-hysterectomy cytology using American Cancer Society guidelines. Women were divided in 2 groups according to cervical screening guidelines (Group A= unnecessary screening; Group B= continued screening because of risk factors including hysterectomy for high grade CIN)	Group A had 22 women with abnormal cytology history: 21 with LSIL or ASC-US and 1 with HSIL. After colposcopy no neoplasia was found in this group. Authors concluded that Group A should not have had screening based on guidelines. Group B had 42 women: 20/42 had CIN, 12 had history of vaginal intraepithelial neoplasia, 6 with history of cervical cancer, 2 with history of diethylstilbestrol exposure and 2 with history of radiation therapy. Colposcopy revealed 8 with VIN2/3 and 1 with squamous cell carcinoma. The authors stated that based on their findings screening after hysterectomy in patients with risk factors is justified.
Schockaert et al, 2008	Belgium	Retrospective analysis	125 hysterectomised women 6 months after a diagnosis of CIN2+, from a group of 3030 women with CIN2+ without history of VAIN	125 women had hysterectomies for: CIN3=89 women (71%), cervical cancer stage Ia1=25 (20%) and CIN2=11 (8.8%). Post-hysterectomy pap smears available for 94 women. 7/94 women (7.4%) of patients who were followed-up developed vaginal intraepithelial neoplasia 2+ after their hysterectomy (2 were invasive vaginal cancers, 3 had VAIN2 and 2 had VAIN3). These were confirmed with colposcopy guided biopsy. From 76/94 women with CIN2, CIN3 and carcinoma in situ, 6 had VAIN2+. Average follow-up of patients was 4 years. Authors recommend vaginal vault smears and if necessary colposcopy for 4y after hysterectomy.

Table 3: continuation

Authors	Country	Study type	Subjects	Findings
Gonzáles Bosquet et al, 2008	Spain	Prospective follow-up	44 women who had hysterectomy. In 36 cases the indication was persistent or recurrent HG SIL (previously treated by conisation) and in 8 it was cervical cancer	8/44 women subsequently developed VAIN (18%) [3 cases of VAIN1, 1xVAIN2 and 4xVAIN3]. Of these 8, before hysterectomy 4 cases had previously persistent HGSIL, 2 cases had recurrent HGSIL and 2 cases had cervical cancer. Average time between hysterectomy and VAIN was 3.8y (range 1-9y). 7/8 women with VAIN had hrHPV (mostly HPV51 and 53). The authors recommend FU of at least 5y after hysterectomy and suggest that detection of HPV in women who have undergone hysterectomy for CIN may be of value in identifying women at higher risk of VAIN.
Barbarinsa et al, 2006	UK	Retrospective review	15 women with VAIN cytology following hysterectomy because of CIN were identified from databases	9/15 women met inclusion criteria (ie no history of vaginal pathology, no invasive or benign cervical pathology, no pelvic irradiation). 66% had hysterectomy because of CIN2-3 and all patients had complete excisions. Post-op vaginal vault cytology showed 4/9 who had abnormal cytology reverted to normal after 12 months. No patient developed invasive vaginal cancer. Authors advised mandatory colposcopy before hysterectomy for CIN and regular vaginal cytology for at least 12m after hysterectomy for CIN.
Stokes-Lampard et al, 2006	multiple	Systematic review	hysterectomised women for CIN3	Based on aggregated data from 4 studies, after hysterectomy for CIN3 (n=2028), 14% (n=285) had an abnormal smear. Based on 6 studies, 1.7% (84/5037) had an abnormal biopsy and based on 2 studies, 0.03% (1/3569) had an invasive vaginal cancer..

4. **Women who have had a high grade lesion (CIN2+) who have been treated and have completed test of cure and returned to routine screening, subsequently have hysterectomy with no abnormality in the hysterectomy specimen. Is there any need for further screening?**

Search terms: high grade intraepithelial neoplasia, CIN, cervical dysplasia, cervical carcinoma in site, treatment outcome, treatment failure, disease progression, failure, outcome, hysterectomy, post-hysterectomy, follow-up, cervical screening, papanicolaou smear, vaginal smear, vault smear.

Results: No recent studies were identified which met all criteria. More specifically mention of test of cure and return to routine screening after hysterectomy with normal cytology could not be established in any articles.

References

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