Abstract: Background: Since the introduction of the Pap smear screening, the incidence of squamous cell carcinoma (SCC) has decreased significantly, but the incidence of adenocarcinoma (AC) relative to SCC has increased. Aim: To compare the Pap smear history of patients with AC and SCC of the cervix. Methods: Patients for the study were identified from the database of Queensland Centre for Gynaecological Cancer. Patients with AC and SCC were matched for age at diagnosis and International Federation of Gynecology and Obstetrics stage. The final population included 188 matched pairs, being 376 patients in total. Data were collected upon the histological type of cancer, result of the most recent Pap smear, date and result of the Pap smear prior to the most recent Pap smear and symptoms. Chi-squared tests and Fisher's exact test were used to compare the two patient groups for several variables. Results: Patients with AC had significantly more false-negative results on their most recent Pap smear (P < 0.0001) than patients with SCC. The incidence of symptoms such as bleeding and/or vaginal discharge was comparable in patients with AC and SCC. The time between the most recent Pap smear and the diagnosis of cervical cancer was significantly shorter for patients with AC (P = 0.01). Conclusions: Patients with AC had Pap smears more regularly than those with SCC, and their most recent Pap smear was significantly more likely to be normal. Thus, Pap smear prior to a diagnosis of AC is more likely than SCC false-negative and therefore not indicative of cervical cancer.
Pap smear screening history of women with squamous cell carcinoma and adenocarcinoma of the cervix

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Background
Since the introduction of the Pap smear screening, the incidence of squamous cell carcinoma (SCC) has decreased significantly but the incidence of adenocarcinoma (AC) relative to SCC has increased. The result of AC false-negative screening test has been higher than that of SCC.

Aim
To compare the Pap smear history of patients with AC and SCC of the cervix.

Methods
Patients for the study were identified from the database of Queensland Centre for Gynaecological Cancer. Patients with AC and SCC were matched for age at diagnosis and FIGO stage. The final population included 188 matched pairs, being 376 patients in total. Data were collected upon the histological type of cancer, age at diagnosis,
FIGO stage, result of the most recent Pap smear, date and result of the Pap smear prior to the most recent Pap smear and symptoms. Chi square test and Fisher’s exact test were used to compare the two patient groups for several variables.

**Results**

Patients with AC had significantly more false-negative results on their most recent Pap smear ($P < 0.0001$) than patients with SCC. The incidence of symptoms such as bleeding and/or vaginal discharge was comparable in patients with AC and SCC. The time between the most recent Pap smear and the diagnosis of cervical cancer was significantly shorter for patients with AC ($P = 0.01$).

**Conclusions**

Patients with AC had Pap smears more regularly than those with SCC and their most recent Pap smear was significantly more likely to be normal. Thus, PAP smear prior to a diagnosis of AC is more likely than SCC negative and therefore not indicative of cervical cancer.