system only was measured 5.3%(12 out of 226 cases). The false negative rate was reduced 3.5% by using the FocalPoint system.

In each group, group1 was 35 cases,(15.5%), group2 35 case(15.5%), group3 36 cases(16.0%), group4 35cases(15.5%), group5 37cases (16.4%). The group1 showed 42.8 %(15/35) in LSIL, 40%(14/35) in HSIL, 17%(6/35) in SCC. The group2 showed 5.7 %(2/35) in ASCUS, 40%(14/35) in LSIL, 37.1%(13/35) in HSIL, 14.2%(5/35) in SCC and 2.8%(1/35) in Adenocarcinoma. The group3 showed 27.7%(10/36) in normal cytology, 2.7 %(1/36) in ASCUS, 52.7%(19/36) in LSIL, 8.3%(3/36) in HSIL, 8.3%(3/36) in SCC. The group4 showed 34.2%(12/35) in normal cytology, 2.8%(1/35) in ASCUS, 2.8%(1/35) in ASC—H, 40%(14/35) in LSIL, 17.1%(6/35) in HSIL, 2.8%(1/35) in SCC. The group5 showed 62.1 %(23/37) in normal cytology, 8.1%(3/37) in ASCUS, 24.3%(9/37) in LSIL, 2.7 %(1/37) in HSIL, 2.7 %(1/37) in SCC.

Conclusion: The FocalPoint GS system reduced false negativity of liquid based cervical cytology comparing with manual review system using SurePath system. It can be an efficient screening system to localize atypical cells and reduce the false negativity.



## A comparison of cervicovaginal smear and histologic feature of uterine MMMT -analysis of 20 cases-

[Min Sun Jin], Hwa Jung Ha, Jung-Soon Kim, Jae-Soo Koh, Sunhoo Park, Min Suk Kim, Soo Yeon Cho, Seung-Sook Lee

Department of Pathology, Korea Cancer Center Hospital, KIRAMS

Malignant mixed mesodermal tumor (MMMT) of the uterus has been poorly characterized on cervicovaginal (Pap) smears, and we examined the cervicovaginal cytology (Pap smear) findings in comparison with histologic features in a series of 20 histologically confirmed uterine MMMT (19 endometrial and one cervical). Purpose of this study is to get diagnostic clue for cytologic diagnosis of MMMT in Pap smears, and to determine whether it is possible to make a correct diagnosis in cervicovaginal smear. All Pap smears were done shortly before histologic diagnosis. Average age of the patients was 60.6 years. Initial cytological diagnosis was positive for cancer in 19 out of 20 cases (sensitivity of 95%). However, initially correct specific diagnosis of MMMT was performed in only three cases. The remaining cases were adenocarcinoma (8), squamous cell carcinoma (3), adenosquamous carcinoma (1), and malignancy of type undetermined (6). Remaining one was initially diagnosed as atypical glandular cells of undetermined significance (AGUS). All had histologic confirmation by endometrial curettage (1 case) or hysterectomy (19 cases). The Pap smears and histologic slides were reviewed in a matching way. The histologic-cytologic correlative review confirmed both carcinoma and sarcoma components in every cases. The carcinoma components were endometrioid adenocarcinoma(13/20, 65%), adosquamous carcinoma (2/20, 10%), undifferentiated carcinoma(2/20, 10%), clear cell adenocarcinoma(2/20, 10%) and serous adenocarcinoma(1/20, 5%). The sarcoma components were endometrial stromal sarcoma (5/20, 25%), undifferentiated sarcoma(5/20, 25%), rhabdomyosarcoma(8/20, 40%) and chondrosarcoma(2/20, 10%). In cervicovaginal smear, carcinoma components were easily identified in most cases, whereas sarcoma componets were difficult to detect prior to histologic correlation. Most cases showed appreciable amount of sarcoma cells in the smears, however, the characteristics of exfoliative sarcoma cells in Pap smears were quite different from those of aspiration cytology of other sites. Characteristic clusters of spindle cells were only detected in 5 cases. Most sarcoma components looked epithelioid and plump with slightly granular or vacuolated abundant cytoplasm and smaller nucleus than carcinoma cells. They were arranged in small loose nests or more commonly isolated cells, and they were confused with histiocytic cells due to smaller nucleus with less hyperchromatic nature than carcinoma cells. These characteristic findings can be explained by that most common sarcoma components were endometrial stromal sarcoma, embryonal rhabdomyosarcoma, and