Application of fine needle aspiration cell blocks in the diagnosis of acinic cell carcinoma

WANG Miao, YU Xiao-meng
Department of Pathology, Beijing Friendship Hospital, Beijing 100050, China

OBJECTIVES
Acinic cell carcinoma (ACC) is a rare low grade epithelial malignant tumor of salivary gland, which is liable to be missed or misdiagnosed. In order to increase the definite diagnosis rate of ACC, the sampling technique of fine needle aspiration and cell block preparation methods were applied.

METHODS
By pen-holding aspiration sampling technique, sufficient material for cell block preparation was got. Some specimens were used to make cell smears for cytological diagnosis; the remaining specimens were used to make cell blocks (CB) according to protein-alcohol-coagulation method and then HE, PAS and immunohistochemical staining were performed to help making the pathological diagnosis.

RESULTS
The fine needle aspiration cell blocks were performed for 9 cases (3 cases suspicious for ACC), which were all confirmed by PAS and immunohistochemistry staining through cell blocks. Postoperative pathological section were obtained in 8 cases. The histological type and immunohistochemical staining results were the same as those of cell blocks.

CONCLUSIONS
Fine needle aspiration sampling technique and application of cell block preparation method can efficiently improve the diagnostic accuracy of ACC. Moreover, cell blocks have high application value in ACC histological type and classification, which is close to the pathological diagnosis after operation.

REFERENCES

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For difficult cases, cell block material can be used to perform immunohistochemical stains, as well as histochemical stains for mucin to improve diagnostic accuracy.