

中文題目:循環腫瘤細胞在頭頸癌復發時的角色

英文題目: Circulating tumour cells at disease recurrence in patients with head and neck cancer after curative therapy

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Background: Circulating tumour cell (CTC) has been prognostic and predictive in numerous types of cancer; however, its role in early diagnosis of relapse remains unclear.

Methods: Eighty-six patients were prospectively enrolled between March 2015 and June 2016. Among these patients, 51 head and neck squamous cell carcinoma (HNSCC) patients had suspicious recurrent lesion(s), whilst 35 HNSCC patients were newly diagnosed. CTC test was performed by negative selection processes plus flow cytometry and EpCAM-expressing cells were identified as CTCs. Biopsy on suspicious lesion(s) and CTC analysis were performed simultaneously. We analyzed the differences of CTC numbers among HNSCC patients with true recurrence, biopsy-negative and newly-diagnosed.

Results: Mean±standard deviation(SD) of CTC numbers in baseline at diagnosis (n=35), true recurrence (n=40) and biopsy-negative (n=11) groups were 41.98±32.02, 81.75±64.91 and 16.55±6.82 cells/mL, respectively. The difference of CTC numbers among three groups was significant (P <0.001). CTCs (mean±SD) among different failure types were 110.89±84.69, 105.67±50.77, 73.31±37.82 and 59.11±54.09 in lung metastasis, second primary tumour, extrapulmonary metastasis and locoregional recurrence respectively and significantly different (P = 0.049). Also, CTC numbers between first cancer (baseline at diagnosis) and second primary tumour were different (P = 0.004).

Conclusion: CTCs numbers is significantly higher in true recurrence than the biopsy-negative group when a patient had a lesion suspected to be the recurrence. CTC test may be useful to help distinguish true recurrence in HNSCC patients after curative therapy.