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1. Topic in Research Achievements in the Year 2006

BACKGROUND: Oral squamous cell carcinoma (OSCC) is common type of human cancer, but little is known about the molecular mechanisms deciding on this malignancy. Comprehensive gene expression profiling is essential for understanding OSCC.

METHODS: cDNA microarray was used to analyze expression patterns of 16,617 genes in nine OSCC patients. RESULTS: Forty-seven genes with altered expression among all cases were extracted. The ontology of these 47 genes was classified into 10 categories. To validate the microarray data, the expression of genes, including TGFBI, FADD and DUSP1 was analyzed by reverse transcriptase-polymerase chain reaction (RT-PCR). By hierarchical clustering analysis, the nine cases were divided into two clusters.

CONCLUSIONS: The 47 genes are suggested as having a functional significance in oral squamous cell carcinogenesis. It is also suggested that the gene expression patterns by hierarchical clustering analysis can represent degrees of differentiation. The postoperative recovery was uneventful and patients free from tumor after surgery. In the future, on the occasion when the time comes that the number of cases accumulated for microarray increases and each case is observed more over a long-term, these data of 5-year survival rate will be added. Thereby, it will become possible to represent the malignancy of OSCC by these gene expression patterns.

2. Publications in the year 2006


3. Expression and regulation of human CD275 on endothelial cells in healthy and inflamed mucosal tissues.


5. Role of caspase 8 as a determinant in chemosensitivity of p53-mutated head and neck squamous cell carcinoma

6. Guidelines on screening 2006 for oral cancer

7. Papillary cystadenocarcinoma arising in the floor of the mouth: report of a case.

8. Parp-1 deficiency does not increase the frequency of tumors in the oral cavity and esophagus of ICR/129Sv mice by 4-nitroquinoline 1-oxide, a carcinogen producing bulky adducts.


3. Abstracts in the year 2006


4. Ayano Kaneoya, Shogo Hasegawa, Yoich Tanaka, Ken Omura. Quantitative Analysis of Invasive Front in Oral Squamous Cell Carcinoma using Ultrasonography. 11th


