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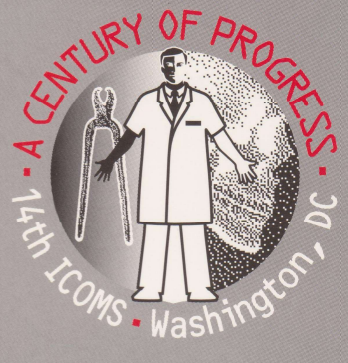

Abstracts

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MUNKSGAARD · COPENHAGEN

24. OK-432 Conjugated Tumor Vaccine Induces Tumor-Specific Immunity for SCC of the Tongue

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Purpose

To induce tumor-specific immunity for tumor inoculated into tongue of mouse by immunization with a newly developed tumor vaccine.

Methods

Tumor cells (SCC from mouse) were mixed with OK-432 which was a lyophilized streptococcal preparation (Picibanil; Chugal Pharm. Co., Ltd., Japan), and conjugated each other using a glutaraldehyde (GA) method as previously described (BUKAWA et al. Nature Med 1995: **1**: 681). 1, 8 and 15 days after tumor cells were inoculated into tongue of mice, mice were immunized with OK-432 conjugated tumor vaccine or saline. Tumor incidence and mortality of immunized mice were compared to control.

Results

OK-432 conjugated tumor vaccine was observed like star form 30 minutes after conjugation. This connection was so stable that did not separate each other by 3 times of centrifuges in order to remove surplus GA and untreated OK-432 from conjugated tumor cells. We made sure of the safety of this OK-432 conjugated vaccine as follows: About 80% of the conjugated cells were stained with trypan blue, indicating that many OK-432 conjugated tumor cells were not alive. Culture of the OK-432 conjugated tumor cells induced no proliferation of tumor cells. When mice were immunized 3 times with OK-432 conjugated tumor vaccine, suppression of tumor incidence was observed in comparison with control mice. Mortality of mice was also improved by immunization with OK-432 conjugated tumor vaccine.

Conclusions

OK-432 conjugated tumor vaccine, which was newly constructed, may have a feasibility to induce tumor-specific immunity for SCC inoculated into tongue of mouse.