production of IFN-γ in macrophages.Taken together, these results suggest TNF-α treatment induces the production of IFN-γ in murine macrophages from tumor environment.

[PB4-5] [10/18/2001 (Thr) 14:00 - 17:00 / Hall D]

Immune effects of pedunculagin on Dentritic cell.

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Dentritic cells are known as the most potent antigen presenting cell(APC). Currently, many studies on an activation of dedritic cells are actively ongoing because dentritic cells are known to be well against the infected cells by cancers or viruses. In line with this, the study was focused on the activation of dentritic cells by using pedunculagin, which is hydrolyttic ellagitannin. In vitro, the total RNAs were extracted from murine dentritic cell at 4, 8, 12, 24hr after the application of 1, 10, 100㎍/㎖ of pedunculagin with no other stimulators. However, it is considered there has been no great deal in expressing IL-mRNA, telling that pedunculagins are not that much related to the expression of IL-10mRNA. This result shows that pedunculagin dose not generate the action of suppression against INF or macrophage by IL-10 in dendritic cell of mouse.

[PB4-6] [10/18/2001 (Thr) 14:00 - 17:00 / Hall D]

The role of TNF-a in tissue-dependent production of IFN-r by LPS from macrophages.

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Macrophages have an crucial roles in tumor angiogenesis by producing
cytokines and growth factors. Lipopolysaccharides(LPS) is known to stimulate the macrophages to produce an angiogenic cytokines like TNF-a or IFN-r, an anti-angiogenic factor. In this study, we examined the differential effect of LPS on residential macrophages from the spleen and peritoneal cavity to produce the angiogenesis-related cytokines. LPS (100ng/ml) activated the residential splenic macrophages to produce IFN-r (1968 pg/ml, 484% of control) and TNF-a (429 pg/ml, 339% of control). On the other hand, peritoneal macrophages did not respond to LPS to produce cytokines (under detection limit by ELISA). To mimic the macrophages in tumor environment, Mac 1+ cells were purified by magnetic beads from the peritoneal cavity of C57BL/6 mice injected with syngeneic B16F10 melanoma cells for 11 days. Cells from the tumor environment were activated by LPS to produce IFN-r (26 pg/ml). Anti-TNF-a antibody increased the IFN-r production (46 pg/ml, 178% of LPS alone). Data suggested that LPS may modulate the macrophages to produce angiogenesis-related cytokines in tissue-dependent manner. And the production of IFN-r and TNF-a from the macrophages in tumor environment may imply the control of angiogenic switch.
This study was supported by Korea Science and Engineering foundation,2000.

[PB4-7] [10/18/2001 (Thr) 14:00 - 17:00 / Hall D]

Immune activating effects of pedunculagin