E233 Detection of Genes for Toxic Shock Syndrome Toxin 1 in *Staphylococcus aureus* by the Polymerase Chain Reaction

Yoon Hyo Sook * · *Seo Kwang Seok* · *Lee Chong Sam*
Dept. of Biology, college of Natural Sciences, Sungshin Women's Univ.
Dept. of Environmental Engineering, Gachongil College

Staphylococcus aureus produces extracellular toxins, such as exfoliative toxin, TSST-1 and virulence factors which are thought to contribute to the pathogenicity of the organism. Toxic shock syndrome is a specific type of infectious disease occurring widely in young women during the menstrual period, but it has also been reported in non-menstrual cases. Clinically toxic shock sysdrome is closely associated with *S.aureus* carrying the *tst* genes encoding toxic shock syndrome toxin 1(TSST-1). *tsst-1 gene* in Staphylococcus aureus(MRSA) 275 isolated from the clinical specimen obtained in the various hospital located in Seoul and Kyung Ki-Do were detected by PCR. 35 strains(12.7%) among the isolate 275 produced TSST-1 toxin.

E234 A Study on the Molecular Genotyping of TSST-1 Producing Strains of Methicillin Resistant *Staphylococcus aureus* by Using Arbitrarily Primed PCR.

Yoon Hyo Sook * · *Lee Chong Sam*
Dept. of Biology, College of Natural Sciences, Sungshin Women's Univ.

DNA finger printings of TSST-1 producing MRSA 26 isolated from the clinical specimen obtained in 6 hospitals, were analyzed by DNA finger printing method using AP-PCR with the primers(S_1, S_2 and E_2).

When S_1 primer used, 25 strains among TSST-1 producing MRSA 26 were identified a single cluster and showed to the similarity of 96.01%. 20 strains among the isolates 26 were classified a same group and showed to the similarity of 76.90%, when S_2 primer was used. Otherwise, when E_2 primer used, 21 strains out of 26 isolates were identified a single group and confirmed the similarity of 80.76%. From the obtained results, it was concluded that 84.22% of the isolates were closely related to the genetical course.