Ethnic Difference in Breast Cancer Occurrence, Progression and Treatment

Ethic difference has become an extremely important issue in breast cancer field as well as other fields. Multiple points are possible to be raised such as difference in incidence, distribution of intrinsic phenotype, nodal metastasis, hormone dependency, sensitivity and toxicity of anti-cancer therapies. It is well known that breast cancer incidence differs significantly between Western countries and Asian countries, although the Asian immigrants in the Western countries show the similar incidence as the Caucasian's in their countries. It is absolutely remarkable that breast cancer incidence increased in most of Asian countries. Recent epidemiological studies elucidated that life-style including diet factors is crucially important. Estrogen is a potent promoter of hormone dependent breast cancer. The intrinsic subtype, which contains estrogen dependency as well as estrogen independency including basal phenotype, is also needed to consider from the point of ethnic or regional difference. As to drug sensitivity and toxicity of anticancer agents, pharmacogenomical issues are crucial to study with. Many pioneering works have been done in recent days especially on the anticancer drugs such as hormonal agents and chemotherapeutic agents. In addition, exploratory studies are conducted in the new molecular-targeting agents. These efforts will contribute to the therapeutic individualization not only in Asian breast cancer patients but also in other countries breast cancer patients.