

Systemic Lupus Erythematosus (SLE)

Systemic lupus erythematosus (SLE) is a chronic disease affecting multiple organs. SLE can occur at any age, but it affects mainly young women at around the ages of 15 to 30 years, the female to male ratio is 8:1. It has many causative factors, including inborn genetic predispositions for abnormal responses by the body's immune system as well as environmental or hormonal factors. The immune system is normally responsible for protecting the body against bacterial or viral infections through the production of protective antibodies. However, the immune system in patients with SLE malfunctions. This leads to the production of antibodies and lymphocytes that can attack one's own organs, and the kidneys are commonly affected.

Many patients with SLE have skin and joint manifestations. Skin rash commonly affects the face, and worsens after exposure to sunlight. Alopecia can accompany active disease. Joint pain typically affects the small joints of the fingers, and is associated with stiffness in the morning. Some patients can develop abnormalities of small blood vessels, leading to micro-infarcts of fingertips and toes. Though skin and joint manifestations are readily evident, they are rarely life-threatening. In contrast, involvement of internal organs can lead to serious consequences. For example, 'lupus nephritis' (the term for kidney involvement in SLE) can affect up to 60% of patients. In severe cases, lupus nephritis can result in rapid deterioration of kidney function, leading to kidney failure that requires dialysis within a few months. Therefore, early diagnosis and prompt effective treatment are of critical importance in ensuring favorable outcome.

Conventional treatment for severe SLE, such as severe lupus nephritis, includes the use of corticosteroid and a cytotoxic agent, such as cyclophosphamide. Despite the proven efficacy, the treatment regimen is associated with considerable side-effects. Hong Kong has played a leading role in clinical research on the treatment for lupus nephritis, and has pioneered the use of a new drug called 'mycophenolate mofetil' (MMF) in severe lupus nephritis. Researchers at the University of Hong Kong have demonstrated that MMF is an effective treatment with much fewer side-effects. More recently, they have observed that treatment with MMF is associated with favorable kidney function during long-term follow-up. However, since MMF is much more expensive than conventional treatment, this drug is not routinely provided free

of charge by the Hospital Authority, and patients may need to buy it by themselves.