

# First Kidney cum Bone Marrow Transplant in Asia

November 2005

NUH and The Cancer Institute have successfully performed the first combined kidney and bone-marrow transplant in Asia for Mr Koh Hock Heng, 43, who suffered from kidney failure and Myelodysplastic Syndrome (MDS), a pre-leukaemic disease. Due to Mr Koh's pre-leukaemic disease (a form of blood disorder), he could not be accepted for kidney transplantation. He required a Nonmyeloablative stem cell transplant to cure his blood disease, before he could have a kidney transplant. Fortunately, he found a matched donor - his younger brother, Mr Koh Chuan Hin, 39, who donated his stem cell and kidney. The team first treated Mr Koh's cancer by transplanting the stem cells donated by his brother before the kidney transplantation.

Eleven months later, they transplanted a kidney donated by the brother. In the procedure, the patient and donor stem cells blend completely so the kidney was fully accepted by Mr Koh's body without the need for the immunosuppressant drugs usually required to prevent organ rejection after a transplant. He is one of the few transplant patients in the world who do not need to take medication for life to prevent his body from rejecting the new kidney. This procedure could have wide-reaching implications for kidney transplants in the future. With the ability to achieve transplantation immune tolerance using this treatment protocol, it is possible for us to explore and adapt such treatment strategies for future living kidney transplantation.



*Mr Koh Hock Heng (left) and his brother returned to normal life within a few months and are currently well.*

Photo courtesy of Singapore Tourism Board