Uganda performs its first bone marrow transplant

Mr Stephen Sande was the first bone marrow case done totally by Ugandans in Uganda.

BY TONY ABET

In a historic milestone for Uganda's healthcare system, the Uganda Cancer Institute (UCI) on Friday discharged its first bone marrow transplant patient, Stephen Sande, who was successfully treated for multiple myeloma, a form of blood cancer.

Dr Jane Ruth Aceng, the minister of Health, who presided over the discharge ceremony at UCI Mulago, confirmed that Mr Sande is the first patient to undergo a bone marrow transplant entirely on Ugandan soil.

The autologous stem cell transplant (where the patient is the donor of the stem cell) was performed by a fully local team of Ugandan scientists and health workers, led by Dr Clement Okello and Dr Henry Ddungu of the UCI. Stem cells are unspecialised "master cells" capable of self-renewal and differentiating into various specialised cell types in the body.

The multidisciplinary team that made this history included two doctors, two pharmacists, laboratory scientists, nurses, a nutritionist, a radiation oncologist, a biomedical engineer, special cleaners, and even an economist, demonstrating the comprehensive effort required for such a complex procedure.

"Today marks the beginning of a new era in Ugandan medicine," Dr Aceng said during the ceremony. "For many years, bone marrow transplant meant seeking care abroad, often at great financial and emotional support. Ttoday, UCI has rewritten that narrative."

Mr Sande, a Ugandan from Namayingo District in eastern Uganda, spent 22 days in intensive isolation at UCI following the transplant. "I am grateful," he said. "They paid for it, and I have received treatment."

Mr Sande, who is still recovering will be subjected to all childhood vaccinations as his immunity develops.

"I am better and will be going home now," he said, thanking the doctors and health professionals who worked on him and saved his life.

22

This is the number of days Mr Sande spent in intensive isolation at Uganda Cancer Institute after the transplant.

Mr Stephen Sande (right), the first patient to undergo bone marrow transplant performed Uganda, is congratulated by the medical team at UCI on Friday during discharge, PHOTO/TONNY ABET

What next after transplant?

Dr Okello, the lead transplant physician and consultant haematologist, described the achievement as the result of years of planning, setbacks, and determination to build a sustainable local programme.

He described what happens in bone marrow transplantation. "Bone marrow transplant is not surgery, like they do in a kidney transplant," he explained. So, bone marrow transplant, as it started with Stephen, is that we select the. He happened to have

"It starts with having the right diagnosis and Stephen had multiple myeloma. He had to undergo a series of tests to make sure he's actually fit to undergo this. These checks were done on the heart, dental, lungs, among other organs, to ensure he was a perfect candidate," Dr Okello added.

Thereafter, Sande was given a special treatment to grow healthy stem cells and these were harvested using a special machine at the Institute.

"We got them (stem cells) and kept them aside. We prepared the patient for the infusion. He then got very high-dose chemotherapy (one shot) to clear every remaining cells in him, including disease cells, if they were there, and also healthy cells," Dr Okello revealed.

"He asked Dr Okello, Dr Ddungu, where is my hair? He had lost all his hair and that was a sign that his body was ready to receive the transplant (the harvested seedlings). That marked day zero. Today we are on day plus 22," he narrated on Friday.

Ceaper than abroad

Dr Ddungu said the bone marrow transplant, which cost around $15,000, is significantly lower than the $50,000 that patients are charged when they go abroad for the service. UCI handled the cost for Sande.

Dr Ddungu said sustaining and expanding the transplant will save Uganda from haemorrhage of resources caused by medical tourism abroad. "We should make sure that we keep the medical sovereignty to reduce the referral of Ugandan patients abroad," he said.

Dr Okello said among the most pressing needs to expand and sustain this programme is the need for more staffing, expansion of space, as they currently have only one bed.

He said they intend to treat or cure a range of diseases, including sickle cell disease, through bone marrow transplant.

BONE MARROW TRANSPLANT

Ugandan team
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Cost saving
The successful procedure is expected to significantly reduce the financial burden on patients who previously had to travel abroad for bone marrow transplants, often at enormous cost.
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