

Dare to Dream: Zero Leprosy, Ethiopia **Progress report for The St Lazarus Charitable Trust**

Dare to Dream addresses the high numbers of children being diagnosed with leprosy and disability among women in Ethiopia. Activities within the project include the treatment of ulcers among people affected by leprosy, using L-PRF (see below).

Thanks to the incredible efforts of The St Lazarus Charitable Trust for the SLCT-World Leprosy Appeal 2023, Ethiopia, your generous funding has resulted in the purchase of two L-PRF centrifuge machines, supplies, and the training of 18 medical health workers in its use.

Thank you! We are humbled by your determination to stand alongside people affected by leprosy.



What is L-PRF?

L-PRF (Leukocyte-Platelet Rich Fibrin) treatment has been used in dentistry for years to optimise wound healing following dental surgery. It was introduced in Anandaban Hospital, Nepal, in 2018, where it is now treating the ulcers of leprosy patients successfully.

Roughly one in five leprosy patients suffers from ulcers, which can be debilitating. Results from L-PRF trials have been exciting. One patient had a foot ulcer that had not healed despite 12 months of treatment. With L-PRF treatment, the ulcer healed within 10 weeks.

L-PRF treatment uses blood samples taken from the patient, which is then spun in a centrifuge to separate the red and white blood cells into two layers. The white blood cells and platelets then create a gel membrane, a concentration of the body's own healing growth factors and infection-fighting agents.

This gel membrane is pressed into strips and applied to the affected area like a plaster. Typically, chronic ulcers are completely healed in a tenth of the time it would normally take.

Thanks to your generosity, this cutting-edge treatment has now been introduced into Ethiopia, into two leprosy-referral hospitals. These are ALERT Hospital, in the capital city of Addis Ababa, and Boru Meda Hospital, which is located in Amhara region about 250 miles away.



Dr Indra is a specialist in L-PRF.

Training in September

The Leprosy Mission ran a four-day training course from 11-15 September in Ethiopia, attended by 21 staff from the two leprosy referral hospitals. Participants comprised surgeons, doctors and nurses, who will introduce L-PRF in their hospitals.

The training was led by Dr Indra Napit (MBBS, MS-Ortho), who has worked at Anandaban Hospital for more than 15 years as a Senior Orthopaedic and Reconstructive Surgeon. Dr Indra developed the revolutionary technique to use L-PRF to treat the ulcers of leprosy patients.

Below are some images taken during the training programme.



Above: The four days saw several lectures and 14 live demonstrations.



Above: A patient has her blood drawn.

Left: Dr Indra shows how the gel membrane is prepared.



Above: There were ample opportunities for practice.

One participant said: “This training is beyond my expectation... Now we have this kind of technology, we are very excited to use L-PRF.”

Next steps

> Work within Ethiopia

As this is a two-year project, the next steps are to get the L-PRF centres up and running in the ALERT and Boru Meda Hospitals. Dr Indra will be on hand in a consultant capacity to advise and support the two hospitals as they implement their L-PRF strategies and practices.

Best practice from the hospitals will be documented and shared to increase learning and expertise between health workers. Data will be collected to track progress.

Additionally, there are plans to introduce tele-consultations. Knowledge and advice will be exchanged through tele-consultation services to help the two hospitals manage ulcers and any complicated cases.

Costs have so far come to £11,420.61, leaving a balance of £12,579.39.

> Introducing L-PRF treatment to Bangladesh

In addition to the above activities, we'd like to use some of the remaining funds to purchase two additional L-PRF centrifuge machines for use in Bangladesh. Bangladesh currently does not offer L-PRF treatment, but the country has a high rate of the disease. In 2022, just under 3,000 people were newly diagnosed with leprosy.

The Leprosy Mission Hospital (DBLM Hospital) in Nilphamari is the only referral centre in Bangladesh to offer specialist treatment for leprosy. It treats around 800 people who are suffering with leprosy every year.

In addition, The Leprosy Mission has a number of other projects in the country, including in the tea gardens of Sylhet where there are exceptionally high numbers of undiagnosed cases. A number of patients present every year with chronic and debilitating ulcers, who would benefit from L-PRF treatment.

The plan is to have one L-PRF centrifuge machine based permanently at The Leprosy Mission Hospital in Nilphamari, and for the second to be part of a mobile treatment centre. This second centrifuge would be shared among the different projects, staying in a location for up to six months at a time.

A mobile unit would enable people affected by leprosy to seek treatment for their ulcers locally, rather than the daunting prospect of travelling possible hundreds of miles to seek treatment.

Thank you! Your incredible grant will transform the lives of hundreds of people affected by leprosy who have debilitating ulcers.

Without this revolutionary treatment, some patients would undoubtedly have had a limb amputated in order to save their lives.

You have given them hope. Thank you.