

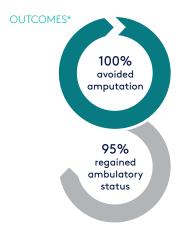
FROM AMPUTATION, TO FUNCTIONAL RECONSTRUCTION AND LIMB PRESERVATION

As the diabetes pandemic sweeps the world, in its wake, diabetic foot disease continues to cause disability and death. In addition, patients with comorbidities, including heart disease and chronic kidney disease, require a highly specialised level of capability and care rarely found in the independent sector. London Bridge Hospital now offers one of the few services in the UK with the multidisciplinary expertise to treat every aspect of the condition at one site.

Not long ago, there were two options for patients with diabetic foot: restrict weight bearing or amputate. In 1990, 4.5% of patients would have their diabetic foot amputated. By 2014, it was 0.25%. Today, just 0.014% of patients can expect amputation, as reconstruction becomes the preferred alternative.*

Of the patients managed by the diabetic foot team, who undergo foot reconstruction, 95% are able to walk just a few months after surgery. And reconstruction is just one aspect of the diabetic foot service now available at London Bridge Hospital.

Indeed we offer care and treatment at all stages – from assessing your risk of future ulceration and providing specialist evaluation for diabetic foot ulcer control, all the way up to major corrective surgery.



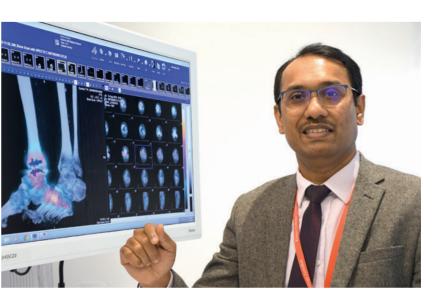
^{1.} Charcot foot reconstruction - how do hardware failure and non-union affect the clinical outcomes? Kummen I, Phys N, Kavarthapu V, Ann Joint 2020

^{2.} The Diabetic Foot Attack: "Tis Too Late to Retreat!", P Vas, M Edmonds, V Kavarthapu, H Rashid, R Ahluwalia, C Pankhurst, N Papanas. The International Journal of Lower Extremity Wounds. February 2018

^{*}Figures from King's College Hospital NHS Foundation Trust – Diabetic Foot Unit

A REVOLUTION IN DIABETIC FOOT RECONSTRUCTION TECHNIQUES

The outlook wasn't always this optimistic. Leg amputation in diabetic patients carries a greater risk of mortality than most common cancers. And until recently, the outcomes associated with standard diabetic foot reconstruction weren't much better than the outcomes associated with amputation.



Techniques used in the past didn't provide lasting support for healing bones. Metal structures broke down and screws would shift or disconnect. The devices used weren't intended for diabetic feet – they were designed for use in trauma patients.

This all changed with Professor Venu Kavarthapu. The first surgeon in the UK to fully reconstruct a major diabetic foot deformity using new techniques, leads the multidisciplinary diabetic foot team at King's College Hospital NHS Foundation Trust and now London Bridge Hospital. Over his career, he has researched and campaigned for new techniques and devices that significantly improve the outcomes in patients offered amputation by their local clinicians.

STRATIFIED CARE: A RANGE OF SERVICES FOR DIABETIC FOOT PATIENTS

Reconstruction is the last step in a long ladder of options for patients with diabetic foot. Here at London Bridge Hospital, we offer a complete service, from prevention to reconstruction, and a seamless transition between our specialist podiatrists, physicians and surgeons.

Ulcer debridement

Soft tissue balancing procedures

Bone exostectomy

Minor amputations

At early stages of the condition, we offer specialist ulcer care and debridement. To control infection and revitalise senescent ulcers, we remove the dead tissue around the ulcer down to healthy tissue, which has potential to proactively heal itself.

One step up from this basic procedure is soft tissue balancing. If the patient has tight tendons in their toes or ankles, but there's no significant damage to the foot, we can release the tissue to correct the deformity. This will reduce the risk of ulceration.

Some patients develop a bone prominence which can lead to ulceration. Debridement will not be enough to affect ulcer healing, so we use a simple surgical procedure to remove the bone – exostectomy – shaving off the overgrown bone rather than changing the shape of the foot.

To stop the spread of infection and to reduce vascular compromise, we may recommend minor amputations and deformity corrections on severe toe infection and deformities.







Acute deforming Charcot correction

Major deformity corrections

Two stage reconstruction

If the deformity is in the mid part of the foot, this will require reshaping and fixing with metalwork such as screws, plates, pins or rods. This condition requires more specialist skills to correct. The more serious deformities, in the hind foot for example, carry a higher risk of major amputation. A reconstruction can provide functional limb salvage. These procedures are extremely complex and demand a high level of expertise.

At its most serious, an infected and deformed diabetic foot might require a two stage reconstruction. Stage one, to eradicate infection through debridement and stage two, permanent correction and stabilisation of deformity

The techniques pioneered by Professor Venu Kavarthapu mean that reconstruction is a successful alternative to major amputation.

RECONSTRUCTION AND REHABILITATION

We expect patients to be able to walk independently within four to six months of surgery. The time it takes to recover depends on the extent of damage and complexity of reconstruction undertaken.



1. BEFORE SURGERY

Before surgery, the patient will check into hospital for pre-operative care. One of our specialist consultant diabetologists will monitor their heart, kidney and lungs, and ensure blood sugar levels are healthy. Our podiatrist will provide specialist care to any existing wounds and help manage any cast or brace care. We carry out comprehensive tests, including for foot circulation, and correct any abnormalities before reconstruction.

2. DURING SURGERY

If damage is not too severe and there is no active infection, our surgeons will undertake a full foot reconstruction as a one-stage procedure. They will correct the foot deformity and fix the bones in the new position using specialist metal structures inside the foot. This allows the bones to heal together in the corrected position.

If there's a greater level of damage or active infection in the foot, our surgeons will first perform a clean-up operation to remove infected tissue or disintegrated bone matter. The patient will need to heal for six to eight weeks after this initial surgery before a full foot reconstruction takes place.

3. AFTER SURGERY

Patients will remain in the hospital while they recover from surgery. They'll be cared for by the multidisciplinary team lead by Professor Kavarthapu. During this time, the podiatrist will continue to provide specialist care and a resident orthotist will produce custom-made shoes to support longer-term rehabilitation.

After one-stage reconstruction, we expect patients to stay with us for two to six weeks. If the patient has had a two-stage reconstruction, with initial clean-up surgery, we expect a longer period of recovery in hospital – up to three months in some cases

4. FULL RECOVERY

We expect patients to fully recover from surgery, and in most cases, regain the ability to walk without support, within three to six months.

London Bridge Hospital's rehabilitation programmes can seamlessly bridge the gap between leaving hospital and returning home. The same multidisciplinary team will offer care to outpatients, and we offer partnership packages with either the Shangri-La at The Shard, Hilton London Tower Bridge or London Bridge Hotel.

THE TEAM AT LONDON BRIDGE HOSPITAL

Our multidisciplinary team led by Prof Kavarthapu, Mr Hester and Dr Vas provides end-to-end support for our patients, ensuring a steady and lasting recovery.



Professor Venu KavarthapuConsultant Orthopaedic Surgeon

Professor Venu Kavarthapu is an internationally recognised specialist in surgical foot reconstruction. He established the popular 'Multidisciplinary and Surgical Reconstruction of Charcot Foot Symposium and Cadaver Workshop'. He has recently been elected as the President of the Association of Diabetic Foot Surgeons. As well as heading our Diabetic Foot clinic at London Bridge Hospital, he teaches his speciality around the world.

Prof Kavarthapu revolutionised reconstruction surgery with extra support structures that reduce complications. He worked with device companies to develop new devices and this new method is being used successfully across the world.



Mr Thomas HesterConsultant Orthopaedic Surgeon

As part of his subspecialist interest in foot and ankle surgery, Mr Hester works within the Diabetic Foot Reconstruction Team at King's College Hospital and London Bridge Hospital.

He is involved in a number of key research areas in this evolving field of medicine and has many peer reviewed papers on the subject.



Dr Prashanth VasConsultant Diabetologist

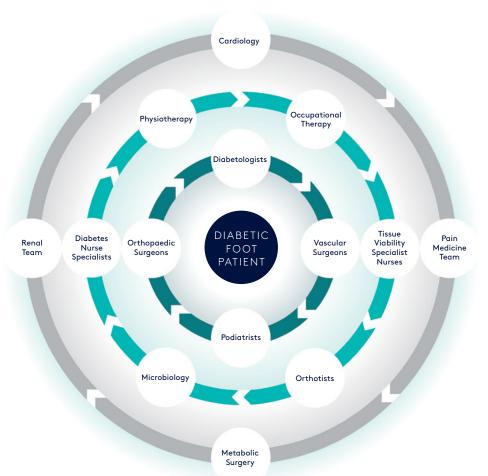
Dr Vas is a Consultant Diabetologist and diabetic foot physician based at King's College Hospital, which set up the world's first multidisciplinary foot clinic. His specialisms include diabetic neuropathy, Charcot foot, diabetic foot infections and peripheral vascular disease management.

He helped develop the Ipswich Touch Test, a simple method to assess loss of protective foot sensation, now used by Diabetes UK. He has been involved in developing diabetic foot ulcer healing guidance for the International Working Group of Diabetic Foot (IWGDF). He has also been a part of two Quality in Care – Diabetes award-winning teams.

THE FULL SPECTRUM OF DIABETES AND DIABETIC FOOT CARE

Fundamental to the ability to provide successful outcomes for patients with all forms of diabetic foot needs is an extended team. At the heart of this team are consultant orthopaedic and vascular surgeons and radiologists working alongside consultant diabetologists.

Allied healthcare professionals experienced in diabetic foot conditions and reconstruction are crucial in the long term care of patients with complex needs. London Bridge Hospital is also able to call on leading consultants from other specialties that diabetic patients might require.



Surgeons and radiologists

Mr Hisham Rashid

Consultant Vascular Surgeon

Mr Raju Ahluwalia

Consultant Orthopaedic Surgeon

Mr Said Abisi

Consultant Vascular Surgeon

Mr Prakash Saha

Consultant Vascular Surgeon

Mr Domenico Valenti

Consultant Vascular Surgeon

Mr Hany Zayed

Consultant Vascular Surgeon

Dr Dean Huang

Consultant Interventional Radiologist

Dr Jason Wilkins

Consultant Interventional Radiologist

Professor Francesco Rubino

Consultant Bariatric and Metabolic Surgeon

ABOUT LONDON BRIDGE HOSPITAL

London Bridge Hospital, part of HCA Healthcare UK, provides multi-specialty, complex and acute care. We're at the cutting-edge of medicine, performing procedures such as living donor renal and liver transplants, and stem cell transplants for blood cancers and multiple sclerosis.

We're able to provide such complex care in every specialty due to the eminent consultants – leaders in their fields of medicine – who choose to practice here. These distinguished men and women are supported by sub-specialised teams of nurses and other healthcare professionals so that care can be provided at the highest levels of complexity, standards and safety.

HOW WE SUPPORT OUR INTERNATIONAL PATIENTS

- Translation services
- Assistance with the admissions process
- Help with the arrangement of transport and accommodation for relatives
- Bespoke menus, designed to appeal to Middle Eastern patients and other nationalities
- Arabic TV channels and newspapers
- A dedicated prayer room
- Clinical Nurse Specialist (CNS) care and support throughout

The Care Quality Commission (CQC), the independent regulator of health and social care in England remarked that they saw:

"Innovative practice throughout the hospital including new research in theatre, new infection prevention and control practices, and safer medicines management."

London Bridge Hospital is rated Outstanding by the CQC



CONTINUOUS, SEAMLESS REHABILITATION AND CARE

Once patients are able to leave hospital, London Bridge Hospital can provide additional rehabilitation programmes to seamlessly bridge the gap between leaving hospital and returning home. Patients will remain with the same therapy team whose care they were under as an inpatient.

Every individual's needs are different which is why we offer two programmes:

- In-hospital stay (inpatient) including: a personalised physiotherapy programme, extended stay in hospital and nursing care available 24/7.
- In-hotel stay (outpatient) including: a personalised physiotherapy programme and discounted rates at three of the finest hotels in the area Shangri-La at The Shard, Hilton London Tower Bridge and London Bridge Hotel.

Both environments create gentle steps to recuperating and rediscovering independence – providing a safe, guided and supported recovery with the freedom to come and go as patients please. At the programme's core is an extensive course of physiotherapy which delivers an enhanced package of care.

REFERRALS

To refer a patient, email pa.venu.kavarthapu@hcahealthcare.co.uk or call +44 (0)20 3667 3131.

An initial outpatient consultation will be with either Professor Venu Kavarthapu or Mr Thomas Hester, and Dr Prashanth Vas at The Shard, HCA UK Outpatients and Diagnostics Centre, 32 St Thomas Street, London SE1 9BS.

For all other referrals, email GPliaisonlbh@hcahealthcare.co.uk or call 020 7234 2009.









Consultations: HCA UK at the Shard 32 St Thomas Street London SE1 9BS

hcahealthcare.co.uk

London Bridge Hospital part of HCAHealthcare UK