Background: Gastroepiploic lymph node flap has been used as a donor site in treatment of lymphedema. For patients who have failed other management options, limited peripheral lymph node donor sites, or those who want to avoid complication such as iatrogenic secondary lymphedema, the gastroepiploic lymph node flap may be the best alternative for lymphedema treatment.

Methods: First 7 cases who were diagnosed with primary lymphedema or secondary lymphedema (Campisi clinical stage II-IV) of lower extremity due to cancer treatment were treated with gastroepiploic lymph node flap. All of the patients were refractory to nonsurgical management and lymphatico-venular anastomosis, and all of them chose gastroepiploic lymph node flap for lymphedema treatment after being advised the risks and benefits of the treatment. All data was recorded at Vajira Hospital with at least 6 months of follow up.

Results: After surgery, 83.3% of the patients (5 out of 6, one patient was excluded due to total flap loss from severe fibrotic tissue that causing venous impairment) showed average reduction in leg diameter (mean 28.2%). The reduction in the leg diameter was clearly seen at the knee, below the knee and at the ankle. However, the reduction measured at above knee was inconclusive, as the reduction only seen in 4 out of 5 patients. There was no intra-abdominal complication.

Conclusions: The gastroepiploic lymph node flap could reduce the swelling of lower extremity lymphedema. Using a laparoscopic technique for flap harvest has less risk of donor site morbidity and hides scarring.