Background: To present video technique and results of harvesting the right gastroepiploic flap for lymphedema treatment in our institute.

Methods: At Vajira hospital, 18 lymphedema patients, whom underwent laparoscopic omental free flap were included in the study during July 2016 to February 2019. Demographic data and donor site morbidity were recorded. In the operation, patients were in supine poison with both arms abduction 90 degree. All 4 ports were placed into pneumoperitonium space. Surgeon and an assistant surgeon tracted the greater omentum; started to dissect at the gastrocolic ligament or in middle part of greater curve; keeping dissection along greater omentum to patient’s left side until just before approaching the left gastroepiploic vessels; using vessel sealing device to seal up the epiploic arcade into stomach wall; ending point of dissection was just long enough for omental flap used. Surgeon then, approached the patient’s right side at infrapyloic region to identify right gastroepiploic vessels; clipped right gastroepiploic vein after separated the anterior superiortpecurodenal vein; clipped right gastroepiploic artery after branching from gastroduodenal artery; finally using vessel sealing device dissected omentum flap from greater curve; removed flap via umbilicus port for microvascular anastomosis.

Results: Laparoscopic harvesting right gastroepiploic flap was operated in 2 primary lymphedema patients and 16 secondary lymphedema patients, providing flap for 20 extremities. Nineteen (95%) flaps were survived, one (5%) was failed due to untreated left common iliac vein stenosis which found post operatively. Half of the patients had previous abdominal surgery. Neither bowel injury nor pancreatitis found postoperatively.

Conclusions: Laparoscopic harvesting right gastroepiploic flap for lymphedema treatment was a safe procedure with low complications.