# Neovascularization of free jejunal graft

Jin-Sung Son, Hee-Jong Baek, Jong Ho Park, Jae-Hyun Kim, Hae-Won Lee

*Department of Thoracic Surgery, Korea Cancer Center Hospital, Korea*

There have been very few studied on suitable neovascularization between transplanted jejunum and pharynx or esophagus after free jejunal graft interposition for advanced hypopharyngeal cancer. In an animal experiment, there are reported that neovascularization of transplanted jejunum maintained sufficient blood flow out of four weeks after surgery. However, in human, there are reported that neovascularization of transplanted jejunum was not suitable out of four months after surgery. We herein report our case that was observed sufficient blood flow without ischemia or necrosis of transplanted jejunum, although nutrient vessels were obstructed by thrombus out of four months after a free jejunal reconstruction.

A 65-year-old male who had been diagnosed to have laryngeal cancer, was done radiotherapy with 70 Gy, subsequently total laryngectomy. However, we performed total pharyngectomy and cervical esophageal resection, subsequently free jejunal reconstruction because of recurrence on hypopharynx. After surgery, we performed pseudoaneurysmectomy, and interposition with great saphenous vein or artificial vessel graft on three times due to repeated pseudoaneurysm on anastomotic site between mesenteric artery and Lt. common carotid artery. The fourth pseudoaneurysm was developed, and the thrombus was developed from origin of Lt. common carotid artery, and the mesenteric artery was observed total occlusion. However, the mucosa of transplanted jejunum was intact without necrosis. As we experienced repeated pseudoaneurysm on anastomotic site between mesenteric artery and Lt. common carotid artery after free jejunal transplantation, we fined that the blood flow maintained without blood supply through anastomotic vessel of Lt. common carotid artery out of four months after surgery.