of the national emergency headquarter in South Korea. A total of 87 patients was enrolled in the study. Single tendon rupture cases in Flexor zone I from index finger to little finger were included in the study, and the previous trauma history or underlying disease affecting the motion of the hand were considered as exclusion criteria. The tenorrhaphy was performed by single surgeon, HS Shim, and the bovine dermal matrix was wrapped around the tenorrhaphy site before the skin closure in the study group. The hyaluronic acid based anti-adhesion agents was applied in both group.

RESULTS: The results were assessed by the post-operative range of motion (ROM). The range of the motion in the distal / proximal interphalangeal joint (DIPJ / PIPJ) was recorded at 6-month postoperative period. In the control group of 46 patients, the average ROM was 78 / 75 degrees respectively. In the study group of 41 patients, the average ROM was 84 / 85 degrees which was significantly greater than control group.

CONCLUSION: The surgeon should be aware of multiple strategies for prevention of adhesion in tenorrhaphy of the hand. Among these, the artificial dermal matrix has a definite role for anti-adhesion by creating barrier from adjacent tissue.

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A Unique Case and Review of Literature of an Epithelioid Sarcoma of the Hand

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Epithelioid Sarcoma is a rare form of soft tissue sarcoma most commonly found in the hand and forearm.1 While it is the most common hand sarcoma, the infrequency in which it presents often leads to misdiagnosis and late identification.2 We present a case of a sixty-seven-year-old man who was treated for three months for a recurrent infection of the left thumb web space prior to be sent to our institution for further evaluation. Despite repeated irrigation and debridement and broad spectrum antibiotics the lesion only continued to grow. No organisms were isolated on culture and ultrasound of the mass showed a large complex circumscribed mass in region of left thenar eminence/first web-space with appearance favoring a hematoma. Superimposed infection could not be excluded. Given suspected infected hematoma the patient was taken to the operating room for exploration and debridement. A large ulcerated and necrotic lesion was identified and removed. Pathological analysis was consistent with epithelioid sarcoma. Epithelioid tumors often are believed to be recurrent infections, DeputytreO’s nodules and other types of tumors prior to being correctly identified.3 It is important to always have a high index of suspicion for malignancy and metastatic potential even when treating an apparently benign process.

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A Prospective Evaluation of Health Related Quality of Life in Lymphedema Treatment

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INTRODUCTION: The vascularized lymph node transfer (VLNT) is one of the flap of choices for lower extremity lymphedema. Although physical rehabilitation is important for lymphedema treatment, there is no standardized procedure for different stage lymphedema. This study was conducted to investigate the long term outcome using VLNT and complete decongestive therapy (CDT) in lymphedema.

METHODS: An IRB approved prospective study was performed of patients who underwent vascularized lymph node transfer for symptomatic upper (ULL) or lower limb (LLL) lymphedema. Patients who had either submental or groin VLNT for upper or lower limb lymphedema were included. Outcomes were assessed using improvement of circumference reduction, decreased number of episodes of cellulitis and health related quality of life (HRQoL) metric.

RESULTS: A total 138 patients were identified and met the inclusion criteria. Almost equal patients underwent VLN (50.7%) as compared to CDT (49.3%) for lymphedema. Patients’ age, BMI, tobacco use, diabetes, hypertension, lymphedema grading and lymphedema reason were similar between groups (p=0.4; p=0.2; p=0.6, p=0.5, p=0.5, p=0.7, p=0.7, respectively). Circumference reduction was statistically higher in the VLNT group (35.3%) as compared to the CDT group (23.4%); and postoperative episodes of cellulitis was statistically lower in VLN group (1.4 ± 1.3 times per years) compared to CDT group (4 ± 1.5 times per years) at a 12-month of follow up (p= 0.03 and p= 0.04, respectively). In HRQoL part, overall quality of life and function, body appearance, symptom, and mood domains were all significantly improved in the VNL group (p< 0.01 within each domain).

CONCLUSION: The vascularized lymph node transfer and complete decongestive therapy and are both valuable treatment options in treating lymphedema with different grading. VLN transferred is much more effective in severe lymphedema (Grade III to IV) in the functional recovery. These functional improvements are mirrored by improvements in patient reported outcomes and quality of life measures. These changes can be seen at a 12- month of follow-up and continued steady improvement can be expected.

Comparing Outcomes Between Vascularized Lymph Node Transfer and Lymphovenous Anastomosis in the Treatment of Primary Lymphedema

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INTRODUCTION: Primary lymphedema is a devastating and debilitating disease. Much of the current treatment options demonstrate evidence in the treatment of secondary lymphedema. This study was to investigate the outcomes between vascularized lymph node transfers (VLNT) and lymphovenous anastomosis (LVA) in the treatment of primary lymphedema.

METHODS: A total of 17 patients with a mean age of 31 (ranged 2- 57) years were recruited to the study with a total of 19 lower limbs with primary lymphedema. All patients reported a non-hereditary, occurrence of lymphedema without surgical and medical history. All patients were treated with either VLNT or LVA. Patients with a grade 1 or early grade 2 lymphedema were treated with LVA whereas late grade 2 to grade 4 patients received VLNT treatment. Quality of life and serial circumferential limb measurements including number of episodes of cellulitis were compared both pre and postoperatively.

RESULTS: Fifteen limbs underwent VLNTs and had an average of 3.8 cm circumferential reduction above knee, 3.6 cm below knee and 4 cm above ankle with an average reduction of 3.7 cm. Four limbs received LVA treatment and had an average of 1.3 cm circumferential reduction AK, 3.0 cm BK and 1.5 cm AA, giving an average reduction of 1.9 cm. Follow-up was for an average of 19.7 ± 8.5 months. Patients in the VLNT group had an average cellulitis episode drop from 5.2 preoperatively to 0.1 postoperatively. Patients in the LVA group reported an average reduction in cellulitic episodes from 5 preoperatively to 0.8 postoperatively. In the VLNT group, an average significant improvement in overall quality of life was noted by 2.5 points. In the LVA group, an