for one of the highest percentages of women at 19%, with a steady growth entering the specialty. Ascension to leadership positions has not yet been fully elucidated among this group. Using membership data obtained through the American Society for Surgery of the Hand (ASSH), our study examines whether increased female representation translated to representation at different levels within the organization.

**METHODS:** The 2014–2018 membership rosters were obtained from ASSH and compared by sex. Leadership and volunteer committee positions were evaluated as published in the annual ASSH Committee Reference Book. Leadership positions were defined as appointment to committee chair, Council or acceptance to the young leader’s program, a development program for Candidate and Active members.

**RESULTS:** Between 2014 and 2018, the percentage of female ASSH members steadily increased from 14% to 17%. The average percent of female members who applied for committee positions was 22% with an average of 18% of applicants occupying a committee position. The average number of committee applications submitted per female applicant was similar to that of their male counterparts (1.31–2.00 versus 1.55–1.97, respectively). Ascension of female members to council ranged from 8% to 31% with the highest percentage during 2015–2016.

**CONCLUSIONS:** There is a steady increase in the percentage of women at every level of ASSH. Female ASSH members applying for leadership positions at a higher rate than their male peers and advanced through the leadership ladder quicker. This may indicate that future women leaders are appropriately supported in the organization. Low representation at the highest levels may be due to a predictable time lag as younger women ascend in the organization.

**Sparing the Fifth Toe in Postaxial Polysyndactyly of the Foot**

**Presenter:** Soo Jin Woo, MD

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**PURPOSE:** In postaxial polydactyly of the foot, deciding which toe to be excised has been controversial. The postaxial polysyndactyly of the foot usually has been treated by resection of the fifth toe to keep lateral neurovascular bundles of the sixth toe safe. The sixth toe is occasionally noticeably short of reaching the arcade of toes with variable degrees of axis deviation, which may require a wedge osteotomy of the proximal phalanx. The wedge osteotomy itself can make the phalanx shorter and may compromise circulation, which results in partial or total loss of the tip of the toe. This study is to propose an individualized method to spare the length and to the axis of preserved fifth toes in the cases of the postaxial polysyndactyly of the foot with short and deviated sixth toes.

**MATERIALS AND METHODS:** This study includes 38 postaxial polysyndactyly of feet, which had short and deviated sixth toes from September 2006 to July 2019. Eighteen cases treated by removal of the sixth toe were compared with 20 cases treated by removing the fifth toe. The patients’ demographics were reviewed through medical records, and the classification was done through the SAM system. Forefoot width and toe lengths were compared between 2 groups and with the contralateral side foot. Also, the orderly arcade of the toes was evaluated by measuring the angle between 2 linear lines connecting the tip of adjacent toes. Postoperative complications such as valgus deformity, hypertrophic scar, and wound problem and subjective judgments on cosmetic and functional results were also gathered.

**RESULTS:** There was no significant difference between the 2 groups in sex distribution, the average age of operation conducted, and the follow-up period. There was a significant reduction of the forefoot width compared to the contralateral side after the surgery in both groups (P < 0.01). There was a significant reduction of the angle difference compared to the contralateral side after the surgery in the group, which spared the fifth toe (P < 0.01). However, there was no significant reduction of the angle difference compared to the contralateral side after the surgery in the group, which spared the fifth toe (P > 0.05). In the experimental group, the toe length was 99.2% compared to the fifth toe in the unaffected foot after the surgery; however, in the control group, the length of the new fifth toe (which was the sixth toe) was 73.2% compared to the fifth toe in the unaffected foot. Complications of impaired circulation were not observed. Two cases showed hypertrophic scars, and one case needed additional surgery for removal of remained callous. Subjective evaluations revealed satisfactory results.

**CONCLUSION:** In cases with short sixth toe with axis deviation of more than 15° (SAM classification, A2, or A3), sparing the fifth toe is a safe and effective way of surgical
treatment with high satisfaction functionally and cosmetically after the surgery. Surgical results showed improved appearance as well as more comfortable shoe fitting without any delay of toe growth, varus or valgus deformities with high satisfaction.

**Targeted Muscle Reinnervation Utilizing the Distal Anterior Interosseous Nerve**

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**PURPOSE:** Sensory nerve lacerations of the wrist are common around the wrist and can lead to debilitating neuromas. All the superficial nerves around the wrist including the dorsal ulnar sensory nerve (USN), the distal lateral antebrachial cutaneous nerve (LABC), the distal branches of the superficial branch of the radial nerve (RSN), and the palmar cutaneous branch of the median nerve (PCB) are sources of peripheral nerve neuromas. The surgical treatment of neuromas has progressed significantly over the past few years. Targeted muscle reinnervation (TMR) and regenerative peripheral nerve interfaces represent the newest members of our reconstructive armamentarium. We present a cadaver study and clinical case evaluating the use of the anterior interosseous nerve (AIN) as a viable recipient for TMR around the wrist.

**MATERIALS AND METHODS:** The AIN, RSN, USN, and PCB were all dissected in 2 upper extremity cadaver specimens. Terminal AIN branches to flexor pollicis longus (FPL) and flexor digitorum profundus were identified. The terminal AIN to Pronator Quadratus (PQ) was divided just distal to these branches in order to gain adequate length for TMR to all the other nerves, sparing other muscular function. The remaining nerves were then identified distally to show where along the nerve would be a viable option for coaptation to the distal AIN. After the cadaveric concept was developed, the technique was utilized in a clinical case.

**RESULTS:** In one upper extremity, 2 AIN branches to FPL were identified with the most distal one occurring 6 cm proximal to PQ and 14 cm from the wrist crease. On the other, there was only one branch to FPL which occurred 8.5 cm proximal to PQ and 18 cm from the wrist crease. When divided just distal to the distal FPL branch, there was adequate length to reach all sensory nerves when they were severed at the wrist crease in both specimens. The technique was then utilized in a clinical scenario. A middle-aged male presented with a neuroma in the PCB 2 years after carpal tunnel release. The neuroma was identified at the exact location of the painful Tinel sign. The AIN was identified and was dissected proximally until adequate length was achieved. The proximal AIN was divided and PCB was cut just proximal to the neuroma. No muscle branches of the AIN needed to be divided excepting the terminal branch to PQ. Coaptation was completed just superficial to the interosseous membrane. The patient continues to do well 9 months postoperatively with complete resolution of symptoms and no recurrence.

**CONCLUSIONS:** We do not always think of the distal AIN. It can be taken with a long proximal tail with the only muscle sacrifice is to the PQ. All of the distal sensory nerves around the wrist can be reached by the AIN. We continue to investigate anatomically and clinically how the terminal AIN can be safely divided without compromising FPL function.

**REFERENCE:**
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**Immediate Versus Delayed Mobilization After Cubital Tunnel Release Surgery: A Systematic Review and Meta-analysis**

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**PURPOSE:** Cubital tunnel syndrome is a consequence of the ulnar nerve being compressed at the elbow. It is unknown whether early mobilization after cubital tunnel decompression improves functional outcomes without increasing complication risk. The objective of this systematic review is to evaluate the benefits and harms of early mobilization