extremity anomalies in the context of known genetic defects to assist in timely and accurate diagnosis of RS.

METHODS: Patients with clinically identified RS were invited to our institution for multidisciplinary evaluation. A total of 18 patients were evaluated by plastic surgery, urology, orthopedic surgery, neuropsychology, and genetics teams. Twelve patients ultimately agreed to genetic testing and were found to have a genetic variant of RS. Limb anomalies were surveyed and documented by 3 members of the plastic surgery team with particular attention to the upper extremity. Upper extremity findings were compared to individual genetic variants to elucidate any correlations.

RESULTS: A total of 5 genetic variants were identified. Mesomelia (47%) was the most common skeletal dysplasia. Rhizomelia (33%) was limited to patients with variants of the DVL1 and NXN genes. Eight distinct hand anomalies were identified, the most being brachydactyly (92%), broad thumbs (83%), and clinodactyly (75%). Brachydactyly and broad thumbs in particular were evident across all genetic variants. The most common functional deficit was decreased forearm rotation (57%), which was seen in all genetic variants aside from an X-linked GPC4 variant. One patient with a mutation of the NXN gene demonstrated skeletal dysplasia without hand anomalies.

CONCLUSION: A trained hand surgeon should be aware of the common findings associated with Robinow syndrome. This is the first study to correlate the genotypic and phenotypic presentation of patients with a confirmed diagnosis of RS. A thorough understanding of the breadth of RS-associated hand anomalies can aid in early identification and proactive management of sequelae.

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Improper Preservation of Amputated Parts: A Pervasive Problem

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BACKGROUND: Following traumatic amputation, preservation of the amputated part plays a crucial role in its viability for replantation. Proper preservation consists of wrapping the part in saline-soaked gauze inside a watertight bag and placing it on ice. Frequently, the amputated part is not preserved according to this protocol, diminishing its viability for replantation. The objective of this study is to examine the rate of proper preservation in patients arriving from home and as transfers from referring medical centers.

METHODS: A retrospective review of adult and pediatric patients at a single academic medical institution was conducted using ICD10 codes over the study period of 2015–2019. Patients were included if they suffered an acute traumatic amputation of a digit or an extremity, their amputated part was present for evaluation by the hand surgery team, and their medical record contained documentation regarding modality of preservation. Patients with partial amputations, nontraumatic amputations, and absence of amputated parts were excluded from the study. Additional data including method of patient transport, replantation attempt, and operative outcome were included. Patients were stratified based on whether or not proper preservation was employed and compared using chi-square tests.

RESULTS: A total of 91 patients met inclusion criteria. Thirty-one of these patients (34.1%) had amputated parts which were properly preserved in saline-soaked gauze in a bag on ice. Transfer patients from referring hospitals were more likely to present with properly preserved parts (45.0%) than those presenting from home (25.5%), though this did not meet significance (P = 0.051). In total, 74 patients arrived via emergency medical services with 26 (35.1%) of those patients having properly preserved parts. Of the 31 patients who had properly preserved parts, 58.1% underwent attempted replant; of the 60 patients who had improperly preserved parts, 23.3% underwent attempted replantation (P = 0.001).
CONCLUSION: The majority of patients who suffer traumatic amputations do not present with properly preserved amputated parts, making it difficult for surgeons to offer replantation. Neither interhospital transfer nor emergency medical services transport is predictive of adherence to protocol. With a direct correlation to attempted replantation, proper preservation is a crucial aspect of care. Dissemination of awareness and education to referring facilities may improve outcomes for patients who experience a traumatic amputation of an extremity or digit.

Social Media Use Among Academic Hand Surgeons

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PURPOSE: Social media has revolutionized communication in society and has become an important interface between patients, trainees, and physicians for education, networking, and marketing. A growing number of surgeons are embracing this trend by increasing their social media presence. Many studies have investigated the benefits of a surgeon’s web presence in plastic and aesthetic surgery, but a paucity of data exists in use among academic hand surgeons. The objective of this study was to evaluate social media use in fellowship trained, academic hand surgeons and to investigate differences between orthopaedic and plastic surgery trained hand surgeons.

METHODS: Hand surgery fellowship programs were identified from the ASSH website, and a list of faculty members from each respective program was compiled. A search was performed for faculty members on social media platforms including Facebook, Instagram, Twitter, LinkedIn, and personal websites. The respective accounts and/or personal websites were investigated for any content related to hand surgery; accounts with personal content only were not included. Faculty members were analyzed by sex, board certification status, subspecialty of residency training (plastic surgery versus orthopaedic surgery), years in practice, geographical region (east, west, south, or midwest), and professional presence on a personal website or accessible social media platform. Analysis of variance and student t tests were performed to evaluate the statistical significance ($P = 0.05$) of differences between groups.

RESULTS: A total of 469 academic hand surgeons were included. Among academic hand surgeons in the United States, LinkedIn is the most common platform utilized at 40.3%, followed by Facebook (15.78%), a personal website (13.86%), Twitter (12.37%), and Instagram (4.05%). Plastic hand surgeons are more present on Instagram (8.26% versus 2.59%) and Twitter (19.01% versus 10.06%) ($P = 0.0062837$ and $P = 0.009921$, respectively). Male hand surgeons were more likely than female hand surgeons to use LinkedIn (41.19% versus 34.85%) ($P = 0.044956$). Southern (18.89%) and eastern region (14.36%) surgeons utilized personal websites more than western (6.52%) and midwestern (4.60%) surgeons ($P = 0.0319107$).

CONCLUSION: Despite the widely known use of social media amongst plastic and aesthetic surgeons, this study shows the use of web-based marketing strategies to be quite rare in the academic hand surgery setting. Social media can have a profound impact on medical practices and thus we suggest that academic plastic and orthopaedic hand surgeons throughout the United States should consider having a larger social media presence to expand advertising, improve patient education, and enhance networking within their practices.

Risk Factors for Emergency Department Visits After Upper Extremity Surgery

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PURPOSE: The “global period” after most upper extremity surgeries includes coverage of postoperative visits and routine care with no additional copay or coinsurance for 90 days. Despite this, patients often present to their local emergency department (ED) after surgery with concerns that could be addressed in clinic, resulting in increased costs, overutilization of ED services, and in many systems, negative quality scores for the hospital or surgeon. We examined patient-reported questionnaire data to identify if patient responses indicate risk of subsequent presentation at an emergency department within the 90-day global period after surgery.