Several risk factors have been associated with the development of CTS including, age, body mass index (BMI), pregnancy, and wrist morphology. A single study has identified sleep position as a causative factor in the development of CTS. Our study evaluates the influence of age on the report of nighttime paresthesias and further examines the relationship between sleep position and reports of hand paresthesias.

METHODS: A cross-sectional study of 420 participants was performed. Participants were sent an anonymous online questionnaire regarding their preferred sleeping position, frequency of nighttime paresthesias, and risk factors for CTS including, age, gender, BMI, sleep position, elbow position, wrist position, CTS diagnosis, previous carpal tunnel surgery, smoking, diabetes, and thyroid disease. Incomplete questionnaires were excluded. Data analysis was performed using ordinal and logistic regressions. P < 0.05 was considered significant.

RESULTS: 420 participants responded to the survey and 396 were included in the analysis (128 males and 268 females with a mean age of 38.8 ± 20.5 years). Nighttime paresthesias were present among all age groups. Nineteen percent of those under 20 years of age, 26 percent of respondents between 20 and 30 years of age, and 46 percent of respondents between 30 and 40 years of age experienced at least 1 to 2 episodes of nighttime paresthesias per week. Side sleeping (p=0.003), side sleeping with other sleep positions (p=0.001), and sleeping with the wrist straight (p=0.031) were significantly associated with fewer episodes of nighttime paresthesias. As age increased, the likelihood of side sleeping increased, with participants less than 20 years of age being the most likely to choose sleeping in a non-side lying position.

CONCLUSIONS: Populations much younger than typically thought of as being at risk for CTS experience nighttime paresthesias and may benefit from earlier intervention to prevent the future development of CTS. A lateral sleep position is associated with a decrease in nighttime numbness and tingling and is the preferred sleep position as age increases.

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RESEARCH & TECHNOLOGY SESSION 2

Matching into Plastic Surgery: The Value of Research Fellowships

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PURPOSE: Although a growing number of plastic surgery applicants are interested in research fellowships, no resources exist to guide their decision making. Therefore, this study was performed to serve as a reference for individuals seeking a residency in plastic surgery.

METHODS: Surveys were sent to integrated plastic surgery residency applicants from the past two years as well as program directors regarding prevalence, productivity and utility of research fellowships. A comparative analysis was then performed.

RESULTS: 129 individuals participated in the study representing a 31% response rate. Approximately 27% of applicants participated in a research fellowship with 44% performing both basic science and clinical projects. Most applicants (55%) underwent a research fellowship to strengthen their applications. An average of 8 publications and 5 presentations were obtained during the research fellowship. Approximately 95% of research fellows matched into plastic surgery however, only 18% of applicants matched at the institution at which the fellowship was performed. Most research fellows believe that research is very important when applying for plastic surgery and would recommend a fellowship to interested medical students. Program directors rated research experience as the 3rd most important factor behind letters of recommendation and academic performance. Approximately 1–4 publications and 1–2 presentations were viewed as a productive fellowship. Quality of publications was more important than quantity.

CONCLUSION: Research fellowships are a great way to strengthen one’s involvement in plastic surgery. Applicants with strong research backgrounds are highly sought after and significantly increase their chances of landing a coveted plastic surgery residency position.