Functional Outcome of De Quervain's Tenosynovitis by Population Characteristics in South Indian Population – A Prospective Study

K S Anandha Geethan¹, A K Arumugam¹, S H Syam Nath¹, Venkatesh Kumar¹, Rohini Venkatesh²

Learning Point of the Article:

Male patients, non-dominant side involvement, and younger patients (age < 45 years) appear to fare well in both the surgical and steroid instillation groups. Employed or working patients do well after receiving a steroid injection for chronic dequervain's tenosynovitis. Housewives appear to do well in the post-surgery group for chronic dequervain's tenosynovitis. Based on our study, the treatment for chronic dequervain's tenosynovitis can be planned accordingly.

Abstract

Introduction: The purpose of this study was to evaluate the functional outcome of population characteristics in South Indian patients with chronic De Quervain's Tenosynovitis.

Materials and Methods: This prospective study was conducted in a tertiary care hospital in South India. A total of fifty chronic dequervain's tenosynovitis patients were included in the study after getting clearance from the ethical committee. The main outcome measures data were VAS and DASH scores among the variables such as age, size, gender and occupation in all our patients.

Results: By considering VAS score and DASH scores postsurgery, patients aged < 45 years of age, patients with nondominant hand involvement complaints, and homemakers had greater reductions in pain scores yet statistically insignificant. The female patients had a good reduction in DASH score postsurgery, which was statistically insignificant. However, males had a greater reduction in pain scores postsurgery females, and the difference was statistically significant.

By considering VAS score and DASH scores poststeroid instillation, patients aged more than or equal to 45 years of age, males, patients with dominant hand complaints, and patients who were employed had a greater reduction in pain score following steroid therapy. However, the difference is not statistically significant.

Conclusion: Male patients, nondominant side involvement, and younger patients (age < 45 years) appear to fare well in both the surgical and steroid instillation groups. However, the employed patients do well after receiving a steroid injection, and the homemakers appear to do well in the postsurgery group.

Keywords: Dequervain's tenosynovitis; Functional Outcome; South Indian Population; Population Characteristics

Introduction

Dequervain's tenosynovitis is described as Stenosing tenosynovitis/Tendovaginitis of the Abductor Pollicis Longus (APL) and Extensor Pollicis Brevis (EPB) of the first Extensor compartment of the wrist [1]. In 1895, a Swiss surgeon named

Access this article online

Website: www.jocr.co.in

DOI: https://doi.org/10.13107/jocr.2025.v15.i05.5634

Fritz de Quervain initially described it at Kocher's Clinic in Berne, Switzerland [2]. This problem mostly affects women who work in the home and people doing a skilled job that involves wrist ulnar deviation with abducted and extended thumbs [3]. This condition's impairment is quite debilitating and restricts daily

Author's Photo Gallery





Dr. A.K. Arumugam



Dr. S H Svam Nath



Dr. Venkatesh Kumar



Dr. Rohini Venkatesh

¹Department of Orthopaedics, Dhanalakshmi Srinivasan Medical College and Hospital, Perambalur, Tamil Nadu, India, ²Department of Neurosurgery, Dhanalakshmi Srinivasan Medical College and Hospital, Perambalur, Tamil Nadu, India.

Address of Correspondence:

Dr. Venkatesh Kumar,

Department of Orthopaedics, Dhanalakshmi Srinivasan Medical College and Hospital, Siruvachur, Perambalur - 621 113, Tamil Nadu, India. E-mail: mailvenkatesh91@gmail.com

Submitted: 26/02/2025; Review: 12/03/2025; Accepted: April 2025; Published: May 2025

DOI: https://doi.org/10.13107/jocr.2025.v15.i05.5634

© The Author(s). 2025 Open Access. This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (https://creativecommons.org/licenses/by-nc/4.0/), which permits unrestricted use, distribution, and non-commercial reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The Creative Commons Public Domain Dedication waiver (http://creativecommons.org/publicdomain/zero/1.0/) applies to the data made available in this article, unless otherwise stated.

Table 1: Th	e association of VA			h vas scor post surge		nd after su	rgery
Variables		Pre su	urgery VAS	score	Post-surgery VAS score		
	ranabies		F test	P value	Mean	F test	P value
Ago	< 45 Years	8.68	1.48	0.234	0.81	0.37	0.546
Age	≥ 45 Year	8.46	1.40		1.3		
Gender	Female	8.6	1.42	0.241	8.89	3.9	0.05*
Gender	Male	8	1.43		5		
Side	Right	8.64	2.175	0.152	1.12	0.28	0.601
side	Left	8.25			0.5		
Ossupation	Housewife	8.59	0.000	0.931	0.68	2.602	0.110
Occupation	Others	8.57	0.008		2.14		0.118

2	\sim 1	117	71	tı	es

Local steroid injection, surgical release of the tendon sheaths of the APL and EPB tendons, and excision of a narrow strip of the extensor retinaculum are the most often used therapeutic options after a trial of conservative management [4].

We used DASH and VAS scores to analyze functional outcomes of population variables, including differences in age, gender, side effects, and profession, in relation to functional outcomes of dequervain's tenosynovitis patients, the literature on which we believe is scarce and seldom done.

Material and Methods

Sample size

This was a prospective comparative study conducted in a tertiary care hospital from September 2018 to September 2020. Fifty patients were included in the study after getting clearance from the research and ethical committee.

Participants

Inclusion criteria

Patients with age between 20 and 70 years were included regardless of gender with pain for more than 6 months or pain interfering with their daily activities of living.

Table 3: The association of various variables with VAS score before and after steroid therapy VAS association pre and post steroid therapy									
Variables		Pre s	steroid VAS s	core	Post steroid VAS score				
		Mean	F test	P value	Mean	F test	P value		
Age	< 45 years	8.12	0.16	0.69	3.06	0.41	0.52		
Age	≥ 45years	8.2	0.10	0.03	2	0.41			
Gender Female Male	Female	8.15	0.16	0.69	2.95	0.82	0.37		
	Male	8			0				
Side	Right	8.17	0.77	0.39	2.64	0.22	0.63		
Side	Left	8	0.77		3.5				
Occupation	Housewife	8.11	0.16	0.69	3.5	2.89	0.1		
Occupation	Others	8.25			0.5		0.1		

Table 2: The	e association			with dash s		e and afte	r surgery
Variables		Pre surgery dash score			Post surgery dash score		
		Mean	F test	P value	Mean	F test	P value
^	<45 year	78.8	0.35	0.55	9.5	0.08	0.77
Age	≥45 year	77.9			10.7		
Candan	Female	78.6	1.97	0.17	9.7	6.26	0.19
Gender	Male	73.3			27.3		
Side	Right	78.5	0.42	0.83	10.8	0.87	0.35
Side	Left	78			7		
Occupation	Housewife	78.2	0.13	0.71	9.3	1.64	0.21
	Others	78.9			13.47		

Exclusion criteria

- 1. Patients having bleeding disorders.
- 2. Patients having comorbidities such as diabetes mellitus.
- 3. Comorbid conditions not permitting major surgical procedures Pregnancy Local arthritis Previous surgeries Hypothyroidism Rheumatoid arthritis.
- 4. Wound/ infection/ previous steroid injection in and/or around the wrist.
- 5. 100 patients were screened and 50 were selected according to the inclusion and exclusion criteria.

Randomization

After obtaining informed consent, the study population was selected and randomized between the study groups by the random number table method.

Allocation and Implementation

The patients were allocated into two groups, i.e., Group A and Group B, of 25 patients each with similar baseline characteristics.

Interventions

The corticosteroid group (Group A) patients were given 1 cc (40 mg) of methylprednisolone acetate with 1 cc of 2% lidocaine

		Dash assoc	iation pre an	d post steroi	therapy			
Variables		Pre steroid dash score			Post steroid dash score			
		Mean	F test	P value	Mean	F Test	P value	
Ago	< 45 Years	74.14	0.2 0.66	15.96	0.04	0.83		
Age	≥ 45 Years	75.16		0.00	14.98	0.04	0.65	
Gender	Female	74.2	0.239	0.63	15.98	0.33	0.57	
	Male	76.5			10.7			
Side	Right	74.3	0.03	0.85	15.44	0.09	0.766	
	Left	74.7			16.97			
Occupation	Housewife	74.2	0.09	0.76	17.21	2.67	0.11	
	Others	75			9.4			



The surgery group (Group B) underwent surgical release of the 1st extensor compartment under local anesthesia. A longitudinal skin incision is made over the anterior border of the anatomical snuff box, centering the radial styloid and the constricted tendon sheath identified. An incision is made on the tendon sheaths of APL and EPB. 2–3 mm of a thin strip of the dorsally based flap of the extensor retinaculum is excised.

Objectives

The patient's data, such as age, gender, the side affected and occupation details, were collected. Patients in both groups were followed for at least one to one and a half years.

Outcomes

Assessment was done using:

- 1. Visual Analog Scale (VAS) [5].
- 2. Disabilities of the Arm, Shoulder, and Hand (DASH) score [6].

Statistical Analysis

Data were entered in SPSS version 10. The mean \pm standard deviations are calculated for continuous variables like age. The frequencies and percentages were calculated for categorical variables such as age, gender, affected side, and occupation. Results were described and presented in the form of tables 1-4.

Observation and results

In our study, the mean age was 36.7 and 96% of cases were female and 4% of the cases were male. In our study, 86% of patients had right-sided affiliation and 14% of patients had left-sided affiliation. Dominant hand was most commonly affected in our study and the maximum number of patients (78%) affected were homemakers.

The presurgery mean VAS among the patients aged <45 years and patients aged \geq 45 years were 8.68 and 8.46, respectively. The difference was statistically insignificant (P = 0.234). The postsurgery mean VAS among the patients aged <45 years was 0.81 and for patients aged \geq 45 years, it was 1.30. The difference was statistically insignificant (P = 0.546).

The presurgery mean VAS among the male and female patients were 8.60 and 8.00, respectively. The difference was statistically insignificant (P = 0.241). The postsurgery mean VAS among the male and female patients were 8.89 and 5.00, respectively. The difference was statistically significant (P = 0.005).

The presurgery mean VAS among the right and left side patients were 8.64 and 8.25, respectively. The difference was statistically insignificant (P=0.152). The postsurgery mean VAS among the right and left side patients were 1.12 and 0.50, respectively. The difference was statistically insignificant (P=0.601).

The pre-surgery mean VAS among the homemakers and other occupations were 8.59 and 8.57, respectively. The difference was statistically insignificant (P = 0.931). The post-surgery mean VAS among the homemakers and other occupations were 0.68 and 2.14, respectively. The difference was statistically insignificant (P = 0.118).

The pre-surgery mean DASH among the patients aged < 45 years and patients aged \geq 45 years were 78.8 and 77.9, respectively. The difference was statistically insignificant (P = 0.55). The postsurgery mean DASH among the patients aged < 45 years was 9.5 and for patients aged \geq 45 years was 10.7. The difference was statistically insignificant (P = 0.77).

The presurgery mean DASH among the male and patients were 78.6 and 73.3, respectively. The difference was statistically insignificant (P = 0.17). The Post-surgery mean DASH among the male and patients were 9.7 and 27.3, respectively. The difference was statistically insignificant (P = 0.19).

The presurgery mean DASH among the right and left sides were 78.5 and 78.0, respectively. The difference was statistically insignificant (P = 0.83). The postsurgery mean DASH among the male and patients were 10.8 and 7.0, respectively. The difference was statistically insignificant (P = 0.35).

The presurgery mean DASH among the homemakers and other occupations were 78.2 and 78.9, respectively. The difference was statistically insignificant (P=0.71). The Post-surgery mean DASH among the male and patients were 9.3 and 13.47, respectively. The difference was statistically insignificant (P=0.21).

The presteroid mean VAS among the patients aged < 45 years and patients aged \geq 45 years were 8.12 and 8.20, respectively. The difference was statistically insignificant (P = 0.69). The Post-steroid mean VAS among the patients aged < 45 years were 3.06 and patients aged \geq 45 years were 2.00. The difference was statistically insignificant (P = 0.52).

The presteroid mean VAS among the male and patients were 8.15 and 8.00, respectively. The difference was statistically insignificant (P = 0.69). The poststeroid mean VAS among the males and patients were 2.95 and 0.00, respectively. The



difference was statistically insignificant (P = 0.37).

The presteroid mean VAS among the right and left sides were 8.17 and 8.00, respectively. The difference was statistically insignificant (P = 0.39). The poststeroid mean VAS among the males and patients were 2.64 and 3.5, respectively. The difference was statistically insignificant (P = 0.63).

The presteroid mean VAS among the homemakers and other occupations were 8.11 and 8.25, respectively. The difference was statistically insignificant (P = 0.69). The poststeroid mean VAS among the males and patients were 3.5 and 0.5, respectively. The difference was statistically insignificant (P = 0.10).

The presteroid mean DASH among the patients aged < 45 years and patients aged \geq 45 years were 74.14 and 75.16, respectively. The difference was statistically insignificant (P = 0.66). The post-steroid mean DASH among the patients aged < 45 years was 15.96 and patients aged \geq 45 years was 14.98. The difference was statistically insignificant (P = 0.83).

The presteroid mean DASH among the male and patients were 74.2 and 76.5, respectively. The difference was statistically insignificant (P = 0.63). The poststeroid mean DASH among the males and patients were 15.98 and 10.70, respectively. The difference was statistically insignificant (P = 0.57).

The presteroid mean DASH among the right and left sides were 74.3 and 74.7, respectively. The difference was statistically insignificant (P = 0.65). The poststeroid mean DASH among the males and patients were 15.44 and 16.97, respectively. The difference was statistically insignificant (P = 0.766).

The presteroid mean DASH among the homemakers and other occupations were 74.2 and 75.0, respectively. The difference was statistically insignificant (P = 0.76). The poststeroid mean DASH among the males and patients were 17.21 and 9.4, respectively. The difference was statistically insignificant (P = 0.11).

Discussion

Although dequervain's tenosynovitis affects the upper extremities frequently, its epidemiology is not much studied. The 40-year-old group of patients had the greatest incidence rate, according to Wolf et al., with a rate of 1.37 per 1000 person-years [7]. According to Stahl et al. [8], Dequervain's patients tended to be older. Incidence is higher in women between the ages of 20 and 40 [9, 10, 11] and it is almost ten times more prevalent in females. According to Wolf et al. [7], women experienced 2.8 cases per 1,000 person-years compared to men's 0.6 cases per 1,000 person-years.

Women generally have greater joint flexibility and distinct tendon structures, particularly in the thumb and wrist, compared to men. This may make them more susceptible to repetitive strain in the tendons, leading to inflammation and De Quervain's Tenosynovitis. Additionally, hormonal changes during pregnancy and menopause can cause fluid retention in the body, especially in the wrists and hands, leading to swollen tendon sheaths. As the tendons rub against their sheaths during wrist movements, particularly at the base of the thumbs and wrists, De Quervain's Tenosynovitis can develop. After childbirth, the increased use of the wrists to support babies while breastfeeding can further raise the risk of developing this condition.

Regarding occupational factors, it has been noted that repetitively demanding or required full-time manual labor tasks have occurred, but no specific cause has been identified [12, 13]. Hard workers made up 37.9% of the patients in Taufiq et al.'s [13] research of 29 patients with de Quervain's tenosynovitis, homemakers made up 41.4%, light workers made up 17.2%, and others made up 3.4%. In their study, Omoke NI et al. [14] discovered that the three most prevalent patient vocations were nursing, teaching, and housewifery, with the housewife being the third-most prevalent.

In our study, the presurgery mean VAS and DASH among the patients aged < 45 years, male patients, dominant side, employed was insignificantly higher compared to the patients aged \ge 45 years, female patients, nondominant side and homemakers. The pre-steroid mean VAS and DASH scores among the patients aged \ge 45 years and employed patients were insignificantly higher compared to the patients aged < 45 years and homemakers. The pre-steroid mean VAS was insignificantly higher among the male patients and dominant side. Whereas, the presteroid mean DASH was insignificantly higher among the female patients and nondominant side. In general, the presurgery and pre-steroid VAS and DASH scores were higher among the younger population, male patients, dominant hand and homemakers.

No significant difference was found in the longterm outcome among the age groups with local steroid treatment [14, 15]. However, Raza W et al [16] report that the results of their research of 97 patients with de Quervain tenosynovitis who had steroid injections suggest that steroids are significantly effective in younger populations. In their study of 97 individuals with de Quervain tenosynovitis, Raza W et al [16] found that steroids were considerably significantly effective in treating the female gender. In contrast, Njoku et al. [14] reported that, when given steroid medication, male patients experienced complete remission of their symptoms and signs as opposed to female patients, but this difference was statistically insignificant. Similarly, Weiss et al. [15] found no gender- or hand-dominance-related differences in treatment results with steroid medication. According to NJOKU ISAAC et al. [14], there was



no correlation between the result and hand dominance.

In our study, considering the VAS score and DASH scores postsurgery, patients aged less than 45 years, patients with left-sided complaints and homemakers had greater reductions in pain scores yet statistically insignificant. The female patients had a good reduction in DASH score post-surgery, which was statistically insignificant. However, males had a greater reduction in pain score post-surgery compared to females, and the difference was statistically significant. In view of VAS score and DASH scores poststeroid instillation, patients aged more than or equal to 45 years of age, males, patients with right-sided complaints and patients who were employed had a greater reduction in pain score following steroid therapy. However, the difference is not statistically significant.

In a study by Kaushal A. Upadhyay et al [17] involving 90 patients who had first compartment release, it was found that men had a mean difference in DASH and VAS ratings that were larger than that of women. However, there was no significant difference between the sexes. For the dominant hand, the VAS score changed from 6.90 to 0.36 between pre and post-surgery. The VAS score for the nondominant hand decreased from 6.64 to 0.64 between pre and post-surgery. For the dominant hand, the DASH score changed from 70.45 to 1.43 during pre and post-surgery. For the non-dominant hand, the DASH score changed from 67.85 to 1.07 between pre and post-surgery. Although the dominant hand performed somewhat better, there was no significant difference between the dominant hand and the nondominant hand. Age, gender, septation, prior steroid medication, or occupational status were not significantly correlated with either long-term complications or patient satisfaction [18].

There is no causal link between occupational risk factors and dequervain's tenosynovitis, according to a systematic review and meta-analysis of 80 papers [8]. Housewife 39 patients (78%), farmer 4 patients (8%), vegetable vendor 2 patients (4%), typewriter 1 patient (2%), mechanic 1 patient (2%), and sales executive 1 patient (2%), were the patients who worked as homemakers in our study. Results after surgery among homemakers and results after steroid injection among employed patients both indicate higher reductions in pain scores, although both are judged to be statistically insignificant.

Study Limitations

Limitations of this research were a small sample size of 50 patients and a shorter 1-year follow-up period. Also, a single hospital in south India was the setting for the study. The study also eliminated patients with gout, rheumatoid arthritis, uncontrolled diabetes, and other illnesses that resembled dequervain's disease. Therefore, the results and analysis of such

patients with associated dequervain's were not studied. It needs further research on each of these comorbidities. In place of a comparison with a placebo control group, which would have provided improved vision instead of comparison with regard to outcome, the steroid group and the surgically managed group were contrasted.

Furthermore, our study primarily focuses on improving the treatment of De Quervain's Tenosynovitis in the South Indian population, which represents 20-30% of India's total population. The findings are specific to South Indian patients and may not be applicable to other ethnic or geographic groups. This is due to variations in genetic makeup, occupational activities, and lifestyle factors across different regions, all of which can influence health outcomes. For instance, genetic differences can impact susceptibility to disease, while diverse occupational tasks, diets, physical activity levels, and environmental exposures may lead to different health patterns. Additional research is needed to explore effective treatments for De Quervain's Tenosynovitis in other parts of India.

Conclusion

In our study, younger patients, non-dominant hand involvement, and homemakers fared better after the surgical release of the first compartment. The postsurgery DASH score drop for the female patients was good but not particularly noteworthy. However, compared to women, men dramatically reduced their pain scores after surgery. Patients with more than 45 years of age, males, dominant hand involvement, and employment had an insignificant but good reduction in pain score after the administration of steroid medication.

Clinical Message

In this prospective study, we compared the outcomes of corticosteroid injections and surgical release in patients with De Quervain's tenosynovitis, using the Visual Analog Scale (VAS) and Disabilities of the Arm, Shoulder, and Hand (DASH) scores.

Our findings indicate that while both treatments lead to significant reductions in pain and disability over time, factors such as age, gender, affected side, and occupation were mostly not statistically significant. However, we observed that women experienced a greater improvement in VAS scores after surgery compared to men. Additionally, housewives showed more noticeable improvements in pain relief and functional outcomes than patients in other occupations.

This study provides valuable insights into the management of De Quervain's tenosynovitis and highlights that corticosteroid injections and surgical release result in similar long-term functional outcomes. However, patient characteristics and occupation may influence the treatment experience and recovery. Further research with larger sample sizes and extended follow-up periods is needed to confirm these findings and refine treatment approaches.



GeethanKSA, et al www.jocr.co.in

Declaration of patient consent: The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given the consent for his/her images and other clinical information to be reported in the journal. The patient understands that his/her names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Conflict of interest: Nil Source of support: None

References

- 1. Chaya B, Bakhach E, Bakhach J. The de-quervain tenosynovitis: Literature review. Biomed J Sci Tech Res 2018;8:6650-2.
- 2. Ahuja NK, Chung KC. Fritz de Quervain, MD (1868-1940): Stenosing tendovaginitis at the radial styloid process. J Hand Surg Am 2004;29:1164-70.
- 3. Goubau JF, Goubau L, Van Tongel A, Van Hoonacker P, Kerckhove D, Berghs B. The wrist hyperflexion and abduction of the thumb (WHAT) test: A more specific and sensitive test to diagnose de Quervain tenosynovitis than the Eichhoff's test. J Hand Surg Eur Vol 2014;39:286-92.
- 4. Saaiq M. Management outcome of de Quervain's disease with corticosteroid injection versus surgical decompression. Arch Bone Jt Surg 2021;9:167-73.
- 5. Klimek L, Bergmann KC, Biedermann T, Bousquet J, Hellings P, Jung K, et al. Visual analogue scales (VAS): Measuring instruments for the documentation of symptoms and therapy monitoring in cases of allergic rhinitis in everyday health care: Position paper of the German society of allergology (AeDA) and the German society of allergy and clinical immunology (DGAKI), ENT section, in collaboration with the working group on clinical immunology, allergology and environmental medicine of the German society of otorhinolaryngology, head and neck surgery (DGHNOKHC). Allergo J Int 2017;26:16-24.
- 6. Gummesson C, Atroshi I, Ekdahl C. The disabilities of the arm, shoulder and hand (DASH) outcome questionnaire: Longitudinal construct validity and measuring self-rated health change after surgery. BMC Musculoskelet Disord 2003;4:11.
- 7. Wolf JM, Sturdivant RX, Owens BD. Incidence of de Quervain's tenosynovitis in a young, active population. J Hand Surg Am 2009;34:112-5.
- 8. Stahl S, Vida D, Meisner C, Lotter O, Rothenberger J, Schaller HE, et al. Systematic review and meta-analysis on the work-related

- cause of de Quervain tenosynovitis: A critical appraisal of its recognition as an occupational disease. Plast Reconstr Surg 2013;132:1479-91.
- 9. Rossi C, Cellocco P, Margaritondo E, Bizzarri F, Costanzo G. De Quervain disease in volleyball players. Am J Sports Med 2005;33:424-7.
- 10. Johnson CA. Occurrence of de Quervain's disease in postpartum women. J Fam Pract 1991;32:325-7.
- 11. Roquelaure Y, Ha C, Leclerc A, Touranchet A, Sauteron M, Melchior M, et al. Epidemiologic surveillance of upper-extremity musculoskeletal disorders in the working population. Arthritis Rheum 2006;55:765-78.
- 12. John C, Polmear MM, Nesti LJ. Dispelling the myth of work-related de Quervain's tenosynovitis. J Wrist Surg 2019;8:90-2.
- 13. Morshed T, Ferdous MZ, Atiquzzaman MD, Sarkar D, Sen AK. Outcome of surgical resection of de quervain's stenosing tenosynovitis. Clin Pract 2020;17:1482-5.
- 14. Omoke NI, Nnadozie UU. Clinical outcome of nonoperative treatment of de Quervain's disease with local corticosteroid injection in Nigerian setting. Niger J Surg 2019;25:146-52.
- 15. Weiss AP, Akelman E, Tabatabai M. Treatment of de Quervain's disease. J Hand Surg Am 1994;19:595-8.
- 16. Raza W, Bakar A, Awan S, Qadir RI. Outcome of steroid injections in patients with de-Quervain's tenosynovitis. J Med Sci 2020;28:162-6.
- 17. Upadhyay KA, Tank PM, Patel HN, Damor HN, Katara DL. Observational study of management of stenosing tenosynovitis at wrist. J Orthop Spine 2023;11:8-13.
- 18. Ta KT, Eidelman D, Thomson JG. Patient satisfaction and outcomes of surgery for de Quervain's tenosynovitis. J Hand Surg Am 1999;24:1071-7.

Conflict of Interest: Nil Source of Support: Nil

Consent: The authors confirm that informed consent was obtained from the patient for publication of this case report

How to Cite this Article

Anandha Geethan KS, Arumugam AK, Syam Nath SH, Venkatesh Kumar S, Rohini Venkatesh. Functional Outcome Of De Quervain's Tenosynovitis By Population Characteristics In South Indian Population – A Prospective Study. Journal of Orthopaedic Case Reports 2025 May;15(5): 279-284.

