

A Retrospective Study, on Efficacy of Oral Corticosteroid Therapy in 'Trigger Finger' Patients

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Original Research Article

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Article History

Received: 20.04.2018

Accepted: 05.05.2018

Published: 30.05.2018

DOI:

10.21276/sjams.2018.6.5.5



Abstract: Trigger finger is a disease of the tendons of the hand leading to triggering (locking) of affected fingers, dysfunction, and pain; and one of the most common reasons of referral to an orthopaedic. The objective of this study was to investigate the efficacy of oral steroid therapy for treating trigger digits. This was a descriptive type of record base retrospective study. The present study was conducted at tertiary care teaching of hospital of western Maharashtra. In present study; more female (64.70%) has affected by trigger finger as compared to male (35.29%) and predominant affected age group was 46 to 55 Yrs. The most common finger involved as 'trigger finger' was 'middle' finger (76.74%); followed by 'ring' finger (17.64%) and 'thumb' (5.88%) was least commonly involved. At the end of follow up, 90% patients reported to relief from pain and associated symptoms. Oral corticosteroid could be used, as alternative therapy in trigger finger patients.

Keywords: Trigger finger, Oral steroid, locking of finger, Stenosing Tenovaginitis.

INTRODUCTIONS

One of the common causes of hand pain and disability is a tendon entrapment of digits [1]. 'Trigger finger' aka 'stenosing tenovaginitis' [2] occurs when, sheath of flexor tendon thickens due to inflammation. If this persists for a long time, it becomes nodular, which prevents flexor tendon from gliding within its sheath. Due to inflammation, thickening progresses to constriction, so on bending of the finger or thumb; pulls the inflamed tendon through the thickened tendon sheath making a snapping sound. Patients of this condition frequently presents with painful popping and catching of involved finger on flexion and extension [3]. The life time risk of developing trigger finger is between 2 to 3% [4].

Ring finger, middle finger, and thumb are most commonly involved as trigger finger. Trigger finger occurs more commonly in persons with repetitive use injuries, diabetes mellitus, rheumatoid arthritis, carpal tunnel syndrome etc[5]. Middle aged women affected more commonly than their male counterparts. Although standard treatments for trigger fingers are either local corticosteroid injections or surgery; but these two have their own pros and cons. Use of local corticosteroid injection is associated with complications like local infection, partial recovery or recurrence of symptoms. On other side; complication of surgical approach are; radial nerve injury, infection, stiffness of the joint, fibrosis at the incision site and incomplete or over release of 'pulleys' etc. With this background; present record based retrospective study was conducted at tertiary care teaching hospital, to determine the clinical profile and outcome of oral steroid in the trigger finger patients.

OBJECTIVES

- To determine the clinical profile of trigger finger patients.
- To determine the outcome of oral corticosteroid drugs in trigger finger patients.

MATERIALS & METHODS

Institutional Ethical Committee's permission and clearance from medical record department (MRD) was obtained before starting of the study. This was a descriptive type of record base retrospective study. The present study was conducted at tertiary care teaching of hospital of western Maharashtra. Archives were screened, to retrieve out previous two years (2015 to 2017) medical records of 'trigger finger' patients of orthopaedic department. All the medical records were duly checked for their completeness. Out of 41 records 34 records were found to be complete in terms of

compliance to the treatment. Sociodemographic and clinical data of the patients were recorded in to the questionnaire. Appropriate measures were ensured to maintain the confidentiality of the patients.

STATISTICAL ANALYSIS

Questionnaires were checked for the completeness and data entry and coding was done in Microsoft excel. Descriptive analysis was used for the analysis.

RESULTS

On analysis we have found that out of 34 trigger patients, females and males were 22 (64.70%) and 12 (35.29%) respectively. (Graph no 01) On age wise distribution it was seen that the maximum patients were belonged to age group of 46 yrs. to 55 yrs. The mean age group of the patients was 50.73 ± 8.7 Yrs. No statistical difference was observed in between age and gender of the patients. (Chi-square (χ^2) test: 1.98, d.f:03 P= 0.57 Non Significant). Occupation wise distribution of the patients has shown in table no 02.

Apart from house wives (26.47%); the second most common occupation was farming (23.52%), followed by working in industries, and road constructions (14.70%). The most common finger involved as 'trigger finger' was 'middle' finger (76.74%); followed by 'ring' finger (17.64%) and 'thumb' (5.88%) was least commonly involved. (Graph no 02). Initially, all the patients had received 0.5 mg of oral tablet of dexamethasone thrice a day for the first week; followed by 0.5 mg twice a day in the second week and 0.5 mg once a day in the third week. As per follow up records 66% (22) reported decreased in the intensity of pain as well as decreased in snapping in the first week. At the end of second week and third week, 78% (26%) and 90% (30) reported to relief from pain and associated symptoms respectively. (Graph no 03) Out of 34 patients 04 (11.76%) reported no effect of treatment; out of that, 01 (2.94%) patients reported persistence of symptoms and 03 (8.82%) patients reported worsening of the symptoms. As per records no side effects were reported by patients during the course of the treatment.

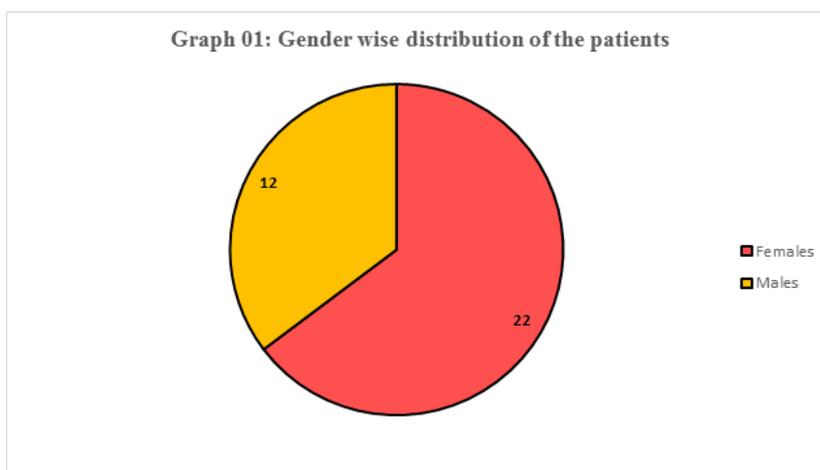


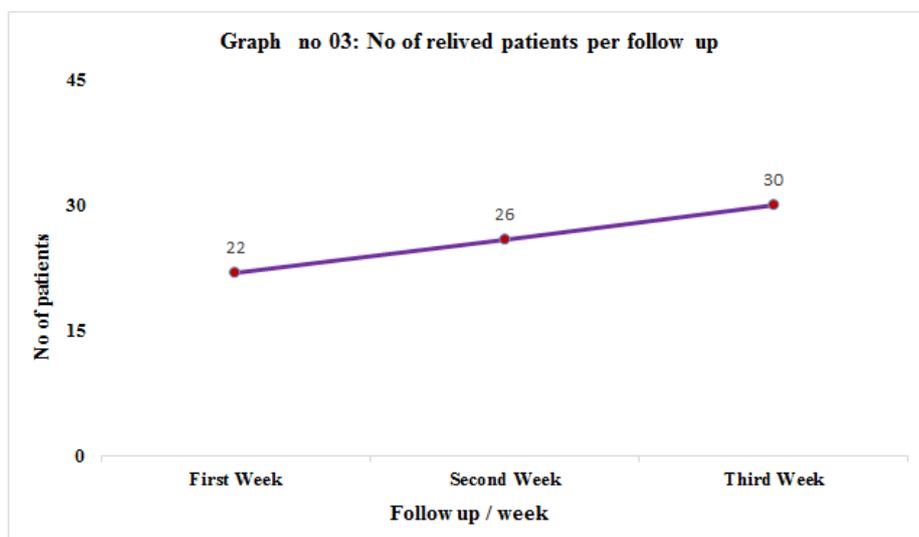
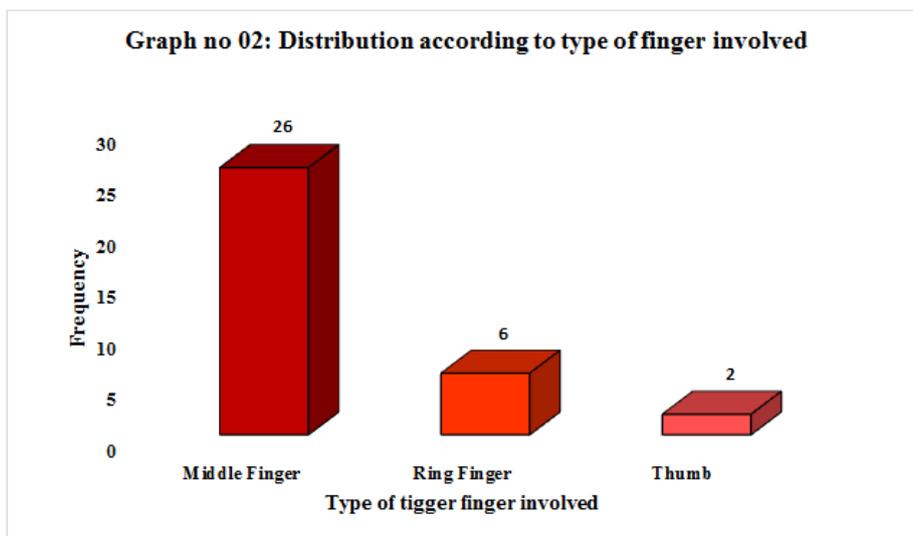
Table-01: Age & Gender wise distribution of the patients (n=34)

Sr.no	Age groups (Yrs.)	Male	Female	Frequency (%)
1.	≤ 35 Yrs.	01	00	01 (02.94%)
2.	36Yrs. to 45 Yrs.	03	06	08 (23.52%)
3.	46 Yrs. to 55 Yrs.	05	11	16 (47.05%)
4.	≥ 56 Yrs.	03	06	09 (26.47%)
5.	Total	12 (35.29%)	22 (64.70%)	34 (100%)

Mean ± S.d: 50.73 ± 8.76
 Chi-square (χ^2) test: 1.98, d.f:03 P= 0.57 Non Significant

Table-02: Occupation wise distribution of the patients (n=34)

Sr.no.	Types of occupation	Frequency (%)
1.	Farmers	08 (23.52%)
2.	Industrial Workers	05 (14.70%)
3.	Road Labourers	05 (14.70%)
4.	Musician	02 (5.88%)
5.	Surgeon	01 (2.94%)
6.	Computer Operator	04 (11.76%)
7.	House wives	09 (26.47%)
	Total	34 (100%)



DISCUSSION

In present, record based retrospective study, 34 records of trigger finger patients were analysed; who had consulted orthopaedic department during last two years for the treatment. Female (64.70 %) has more inclination towards trigger finger as compared to males (35.29%). The most common age group affected by trigger finger was 46 yrs. to 55 yrs. No statistically significant difference was observed in between the age and gender of affected patients. In our study, house wives were found to be most commonly affected by trigger finger, followed by farmers. Middle fingers (76.74%) were more predominantly involved as compared to other fingers. At the end of three week follow up, majority of patients reported relief from pain and other associated symptoms. Even after intensive search of data base, we could not found a similar study to discuss the present finding.

CONCLUSION

Oral corticosteroid could be used, as alternative therapy in trigger finger patients.

REFERENCES

1. Masoud YD, Hassanpour SS, Mosavizadeh MD. Multiple trigger fingers in a musician. Archives of Iranian Medicine. 2010;13(3):251-52
2. Lapidus PW, Fenton R. Stenosing tenovaginitis at the wrist and fingers. AMA Arch Surg. 1952;64(4):475-87
3. Ali BM, Nakhdejvani A, Lloyd MA, Schreuder FB. The efficacy of steroid injection in the treatment of trigger finger. Clinics in orthopaedic surgery. 2012;4(4):263-68
4. Strom L. Trigger finger in diabetes. J Med Soc N J. 74(11):951-4.
5. Chambers RG. Corticosteroid injection for Trigger finger. Am FAM Physician. 2009;80(5):454-55