

# ***Extra-sheath injections through the dorsal web for trigger finger and thumb. A prospective cohort study***

***I. JIMÉNEZ, A. MARCOS, B. ROMERO, GL. GARCÉS, J. MEDINA***

*Hospital Universitario Insular de Gran Canaria  
Universidad de Las Palmas de Gran Canaria  
îles Canaries, Espagne*



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- **Success rate** of corticosteroid injections for trigger digits ranges from **47% to 92%** of cases.
- The **pain** during the injection is an **always-present** side effect.
- It is **not a slight pain**, mean score on the **VAS 5.32** points when the injection is performed **using the palmar** midline technique.

Castellano J et al. Long-term effectiveness of corticosteroid injections for trigger finger and thumb. **J Hand Surg Am.** 2015.

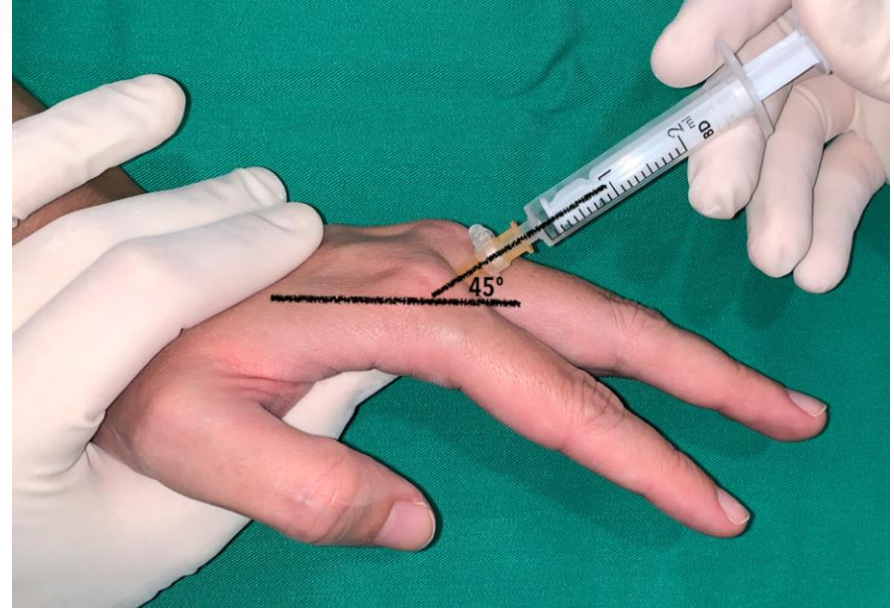
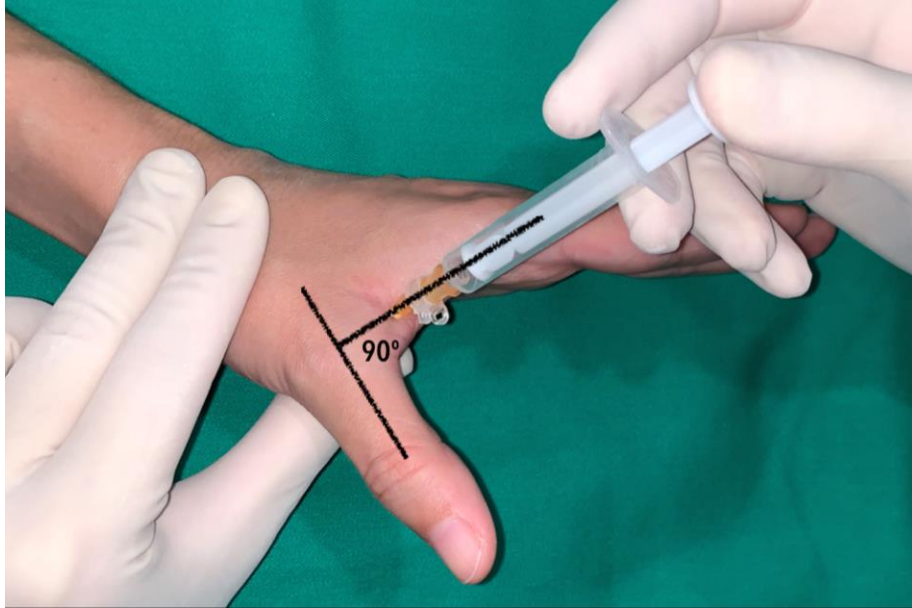
Earp et al. Needle-Free Jet Lidocaine Administration for Preinjection Anesthesia in Trigger Finger Injection. **J Hand Surg Am.** 2017.

Halim A, Sobel AD, Eitorai AEM, Mansuripur KP, Weiss AC. Cost-Effective Management of Stenosing Tenosynovitis. **J Hand Surg Am.** 2018.

- The purpose of this study was to assess the effectiveness, safety and perceived pain during a subcutaneous corticosteroid injection for trigger finger and thumb performed through the dorsal skin.

# Material / Method

- Prospective cohort of 63 consec. patients in a 6-months period.
- **Extra-sheath** corticosteroid injection through the dorsal web.

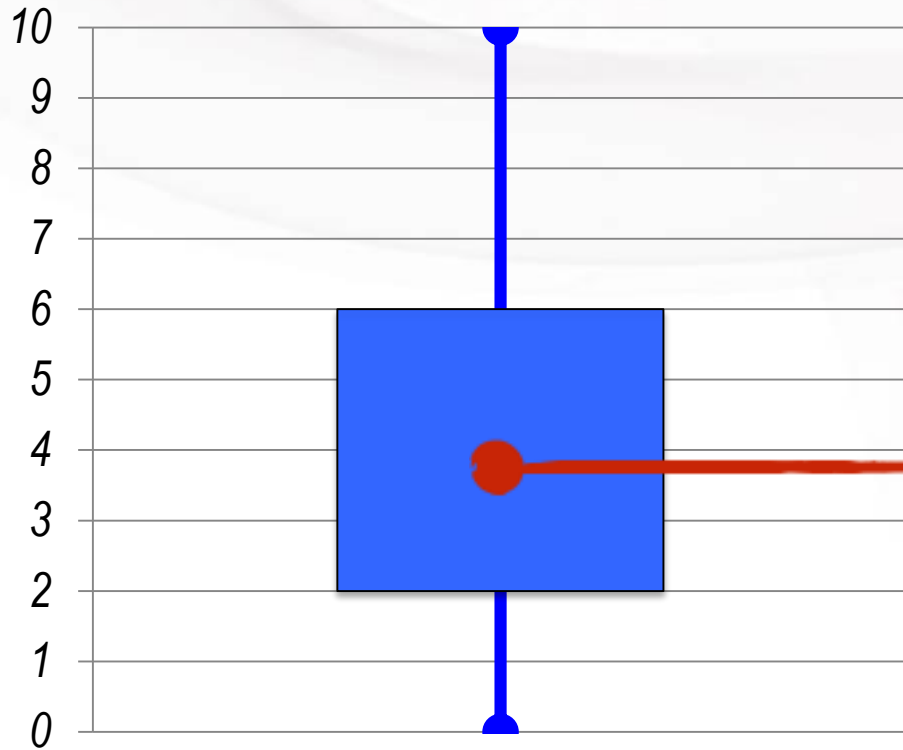


- Prospective cohort of 63 consec. patients in a 6-months period.
- **Extra-sheath** corticosteroid injection through the dorsal web.
- All patients were reviewed at 1m, 3m and **12 m**. If triggering was not completely solved, a second injection was offered.
- Demographic data, DASH questionnaire, VAS for pain, success rate and complications were collected.

- 43 women and 20 men. Mean age 61 years (range, 42-82).
- **11% were diabetics. 14% previously operated on for CTS.**
- Most **affected: middle** finger 38%, followed by **thumb** 32%
- Green's classification: 91% of cases were grade 2 or 3.

# VAS for pain

# Results

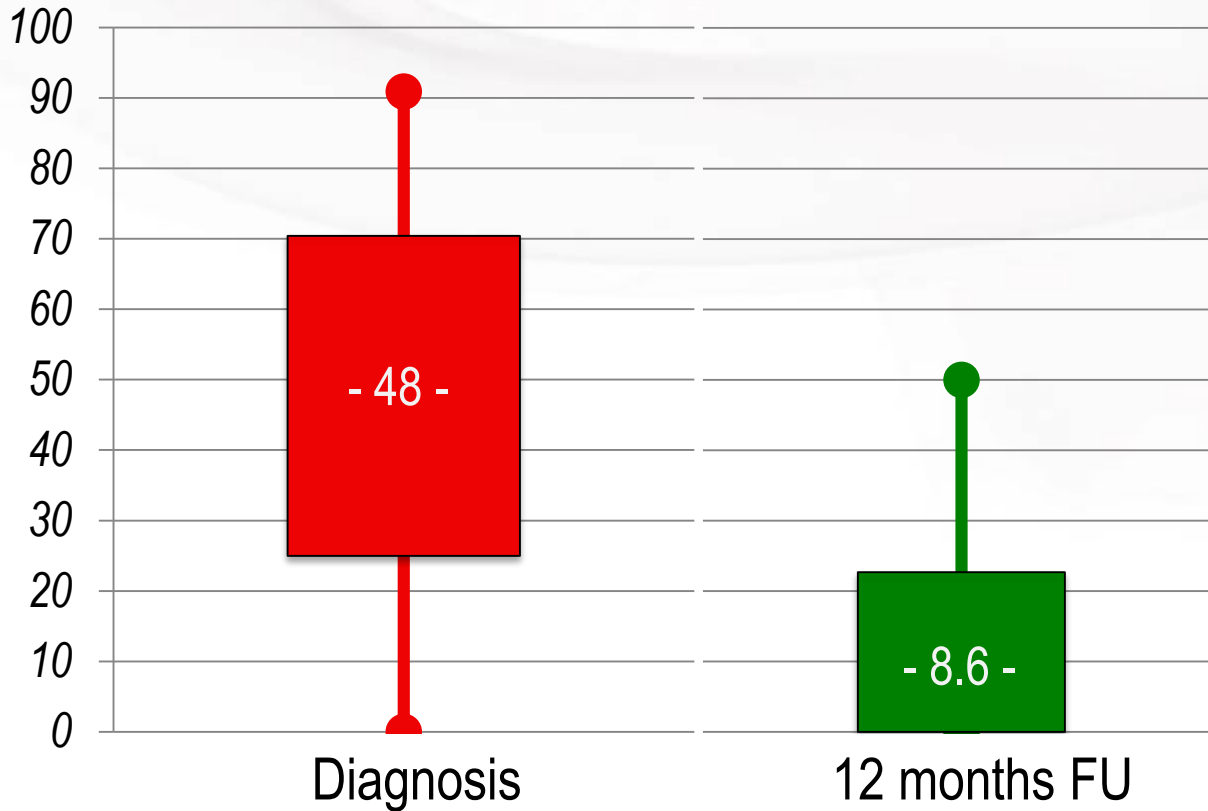


Mean **3.84** points  
(95% CI: 3.2–4.4)



# DASH questionnaire

# Results



**48** (95%CI: 41.9–54.3)



**8.6** (95%CI: 4.4–12.8)

## Success rate

## Results

- Six patients were lost to follow-up.
- Success rate after the **initial injection** was 31/57 (**54.4%**).
- **Overall success** rate at 12 months FU was 39/57 (**68.4%**).
- 14 patients rejected a second injection so they were referred for surgery. The success rate after the second injection was 8/12 (66.7%).

- **No complications** were noted.
- Best result was achieved on the **middle finger** (19/22; 86%), followed by the **ring finger** (10/12; 83%).
- **No** differences btwn diabetic and non-diabetic ( $p=0.653$ ).
- **No** differences btwn previously operated on CTS ( $p=0.124$ ).
- **No** differences according to the Green's clasif. ( $p=0.445$ )

## Limitations

- It is a prospective cohort so it lacks of a **control group**.
- The sample size was not determined before and some differences might have been unperceived.
- All injections were performed by the same team, providing good internal validity but limiting its **external validity**.

	<b>Dorsal subcut</b>	<b>Volar intra-sheath</b>
<b>Effectiveness</b>	68.4%	47–92%
<b>VAS pain (0–10)</b>	<b>3.84</b>	<b>5.32</b>
<b>Complications</b>	None	None

	<b>Dorsal subcut</b>	<b>Volar intra-sheath</b>
<b>Effectiveness</b>	68.4%	47–92%
<b>VAS pain (0–10)</b>	<b>3.84</b>	<b>5.32</b>
<b>Complications</b>	None	None

Castellano J et al. Long-term effectiveness of corticosteroid injections for trigger finger and thumb. **J Hand Surg Am.** 2015.  
Wojan RD, Calfee RP. Long-term outcomes following a single corticosteroid injection for trigger finger. **J Bone Joint Surg Am.** 2014.  
Dala-Ali BM et al. The Efficacy of Steroid Injection in the Treatment of Trigger Finger. **Clin in Orthop.** 2012.

# Discussion

	<b>Dorsal subcut</b>	<b>Volar intra-sheath</b>	
<b>Effectiveness</b>	68.4%	47–92%	
<b>VAS pain (0–10)</b>	<b>3.84</b>	<b>5.32</b>	<b>27.8%</b>
<b>Complications</b>	None	None	

Castellano J et al. Long-term effectiveness of corticosteroid injections for trigger finger and thumb. *J Hand Surg Am.* 2015.  
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# Conclusion

- ☑ A **subcutaneous** corticosteroid injection through the **dorsal web is effective** for trigger fingers and thumb.
- ☑ It seems to be **less painful** than the reported scores for the palmar midline technique although it should be assessed in a **prospective randomized study**.



*Merci beaucoup*

