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Title

Risk Factors for Postoperative Infection Following Open Trigger Finger Release: A Retrospective Review of 999 Digits

Purpose

Anecdotal evidence among hand surgeons has questioned whether recent steroid injection may be related to complications following open trigger finger release, particularly wound infection, but no studies have primarily studied this connection to date. We aimed to determine if recent steroid injection and other factors were associated with post-operative surgical infections.

Methods

A retrospective chart review of 780 adult patients who had undergone open trigger finger release of 999 digits by 6 fellowship-trained hand surgeons at three affiliated hospital settings from January 1, 2014 to January 1, 2016. Timing of steroid injections, number of steroid injections, type and amount of steroid used, timing of surgery, concurrent procedures at time of surgery, use of antibiotics, and postoperative complications including infections was gathered.

Results

Steroid injection correlated with postoperative surgical site infection in trigger finger release. Older age and increasing days between steroid injection and surgery correlated with infection rates. Other factors found to be associated with infection rates included smoking and use of lidocaine with epinephrine.

Conclusion

Steroid injection, smoking, increasing age, lesser number of days between steroid injection and surgery, and use of lidocaine with epinephrine are risk factors for postoperative trigger surgical infections. We recommend careful preoperative counseling regarding higher wound healing risks for smokers, avoidance of multiple steroid injections prior to an operative date, and scheduling operative dates that are greater than 80 days from the date of last steroid injection. We also recommend avoidance of epinephrine in the local anesthetic solution, as this may minimize surgical site infection risks.