

Colchicine prevents gout flares at a dosage of 0.6 to 1.2 mg per day. The dose should be adjusted in patients with chronic kidney disease and when used with cytochrome P450 3A4 or P-glycoprotein.



 [SHOP NOW ONLINE](#) 


## 10. Joint Injection with Steroids | Hospital Handbook



Anatomy: The first metatarsophalangeal joint is a condyloid synovial juncture and consists of the head of the first metatarsal, the base of the proximal phalanx, six muscles, eight ligaments and two sesamoid bones, with associated ligamentous attachments. The joint capsule is shaped like a box.


## Diagnosis, Treatment, and Prevention of Gout | AAFP

**American Family Physician**  
A peer-reviewed journal of the American Academy of Family Physicians December 15, 2014



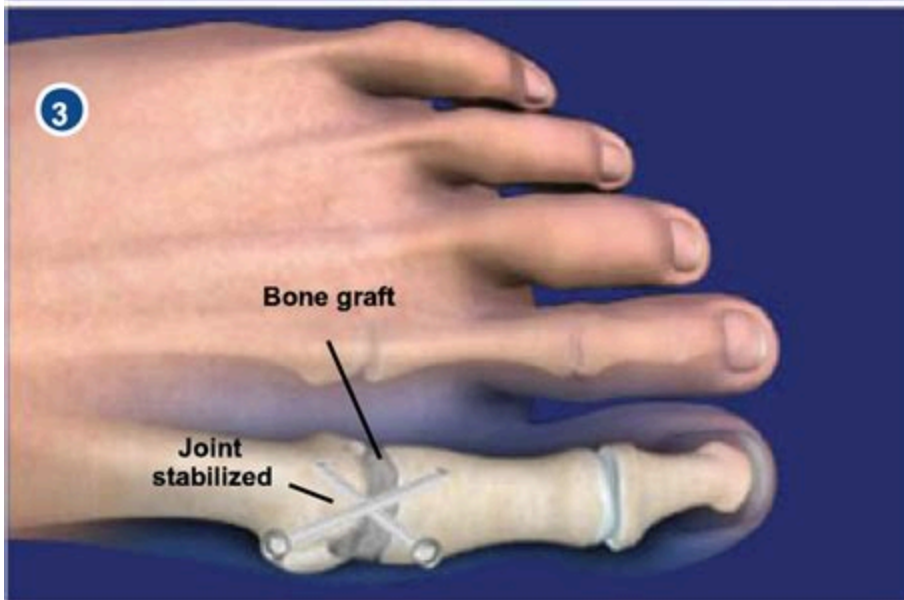
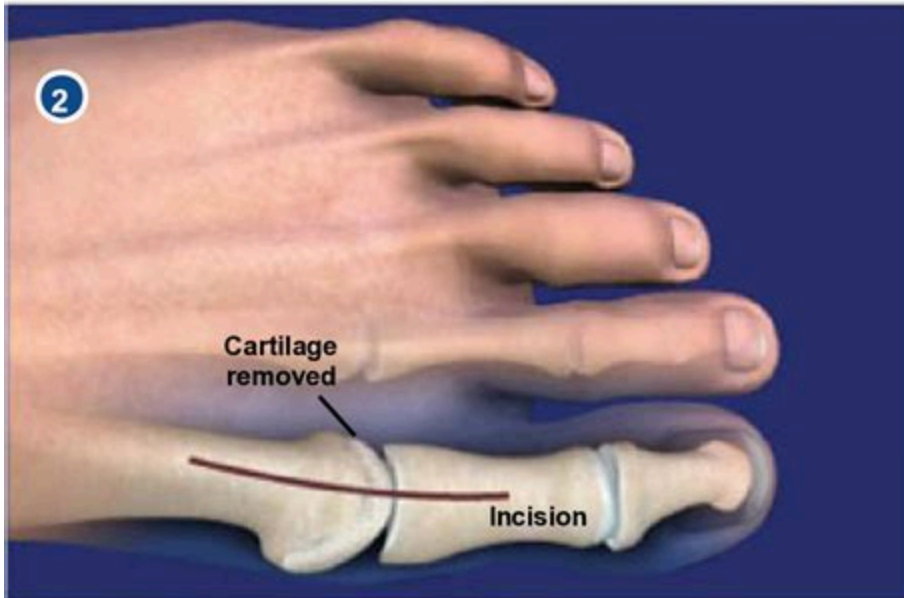
**Diagnosis, Treatment, and Prevention of Gout 831**

843 Common Questions About Developmental Dysplasia of the Hip	818 Letters to the Editor
851 Role of the Family Physician in the Care of Children with Down Syndrome	822 Editorials: Childhood Adversity
	859 Putting Prevention into Practice
	861 Photo Quiz
	863 STEPS: New Drug Reviews
	867 Practice Guidelines
	830 CME Quiz is worth 3.0 credits

 AMERICAN ACADEMY OF FAMILY PHYSICIANS  
[www.aafp.org/afp](http://www.aafp.org/afp)

Anatomy The big toe is made up of two joints. The largest of the two is the metatarsophalangeal joint (MTP), where the first long bone of the foot (metatarsal) meets the first bone of the toe (phalanx). Its function is to bend and grip the ground and to accommodate foot flexibility when walking.

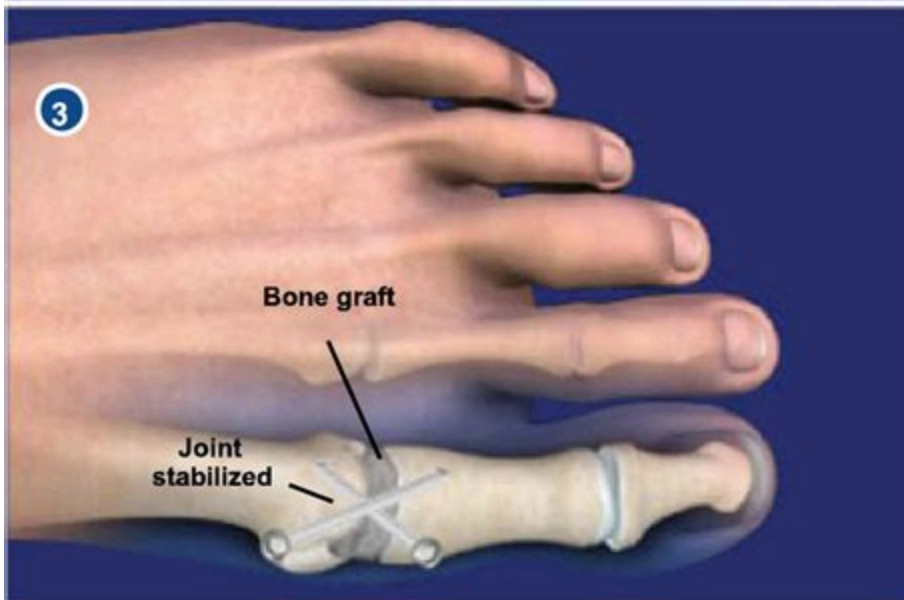
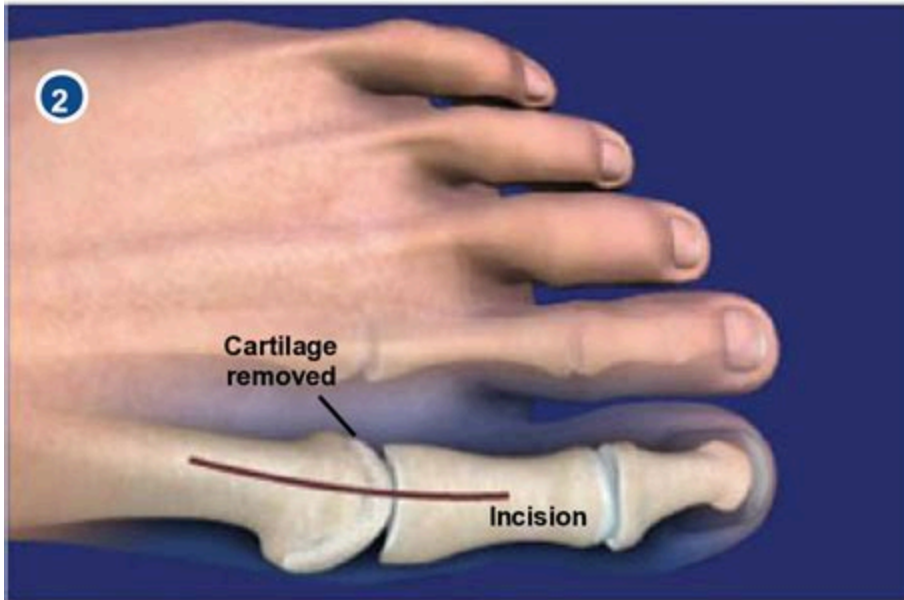
## **First Metatarsophalangeal Joint Sprain (Turf Toe)**



Injectable glucocorticoids are widely used in the first metatarsophalangeal joint (1st MTP jt) to treat various forms of joint pathology such as osteoarthritis (hallux rigidus) and gout [ 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21] but no standard protocol for injection of this joint exists.

**Management of first metatarsophalangeal joint osteoarthritis by .**





Just need to get the needle under the joint capsule, not necessarily inside the joint. aka. "Great toe injection", "Big toe injection" Indications. First metatarsophalangeal (1st MTP) joint painful osteoarthritis; Gout (in the "great toe" joint) — most common location; Turf Toe \*\*see all ICD-9 and ICD-10 codes at end of post

## (PDF) A systematic review of injectable corticosteroid for .

### AB084. SOH21AS021. Corticosteroid injection for greater trochanteric pain syndrome: a systematic review

Barbara Nolan<sup>1</sup>, Dominic Harmon<sup>2</sup>

<sup>1</sup>University of Limerick School of Medicine, Castletroy, Limerick, Ireland; <sup>2</sup>Department of Anaesthesia and Pain Medicine, Limerick University Hospital, Doonadoyle, Limerick, Ireland

**Background:** Greater trochanteric pain syndrome commonly causes disabling lateral hip pain and has largely replaced diagnoses including trochanteric bursitis and gluteal tendinopathy. No systematic review has examined best practice exclusively in corticosteroid injection for this condition. This review therefore aims to evaluate the efficacy of corticosteroid injection for Greater Trochanteric Pain Syndrome.

**Methods:** On 4/08/2020, a systematic search was completed on Cochrane, CINAHL, EMBASE and MEDLINE. Experts were contacted and bibliographies were hand-searched. Key search words included: Greater trochanteric pain syndrome, trochanteric bursitis, gluteal tendinopathy, gluteal, trochanteric, synovial bursa, corticosteroid, steroid, injection, cortisone and glucocorticoid. Eligibility criteria: Randomised controlled trials published in English which examined corticosteroid injection for a primary diagnosis Greater Trochanteric Pain Syndrome.

**Results:** Ten studies (n=1,141) were included; injection technique (n=2), CSI *vs.* other intervention (n=6), corticosteroid injection *vs.* placebo (n=1) and corticosteroid injection *vs.* no treatment (n=1). Methodological quality was varied. High-quality evidence suggests that corticosteroid injection may be significantly less efficacious in long-term outcomes versus Platelet Rich Plasma, with no differences between corticosteroid injection and placebo. Imaging-guided techniques had no significant advantage. Moderate-to-low quality studies showed that corticosteroid injection improved short-term outcomes but other treatments

(exercise, Platelet Rich Plasma, extracorporeal shockwave therapy) are efficacious over a longer period.

**Conclusions:** Corticosteroid injection may be useful in short-term treatment for Greater Trochanteric Pain Syndrome. Landmark-guided techniques are sufficient. Future high-quality placebo-controlled trials with established diagnostic criteria are necessary to determine the role of corticosteroid injection in Greater Trochanteric Pain Syndrome.

**Keywords:** Corticosteroid injection; gluteal tendinopathy; greater trochanteric pain syndrome; trochanteric bursitis

#### Acknowledgments

*Funding:* None.

#### Footnote

*Conflicts of Interest:* Both authors have completed the ICMJE uniform disclosure form (available at <http://dx.doi.org/10.21037/map-21-ab084>). The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

*Open Access Statement:* This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

doi: 10.21037/map-21-ab084

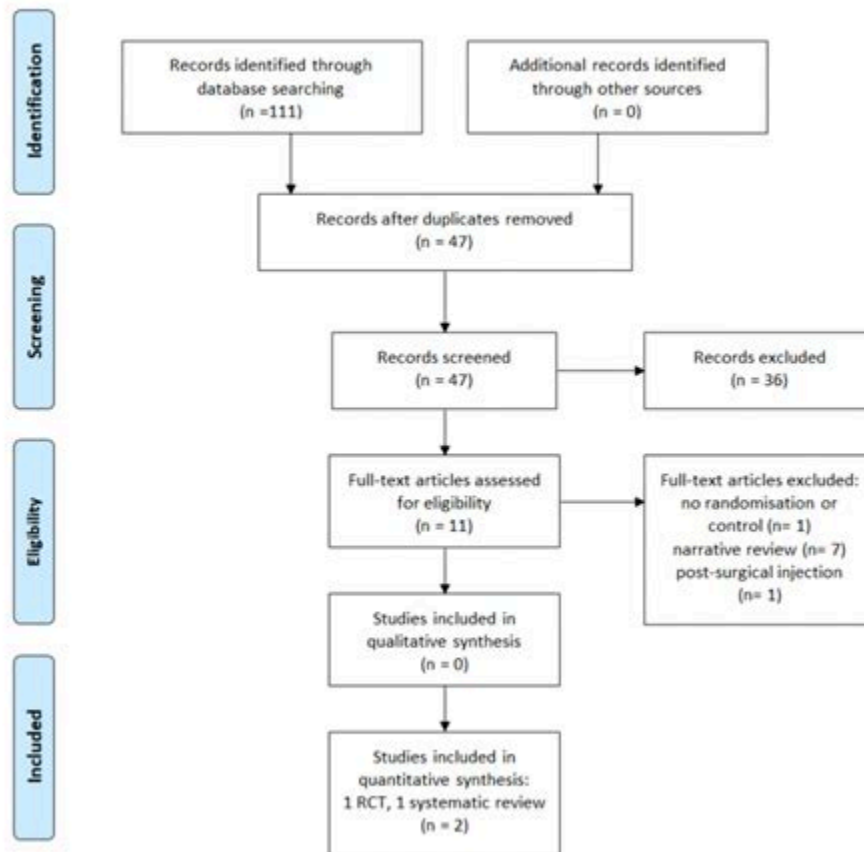
**Cite this abstract as:** Nolan B, Harmon D. Corticosteroid injection for greater trochanteric pain syndrome: a systematic review. *Mesentery Peritoneum* 2021;5:AB084.

Hallux rigidus is a degenerative disease of the first metatarsalphalangeal (MTP) joint and affects 2. 5% of people over age 50. Dorsal osteophytes and narrowed joint space leads to debilitating pain and limited range of motion. Altered gait mechanics often ensued as 119% of the body force transmit through the 1 st MTP joint during gait cycle.



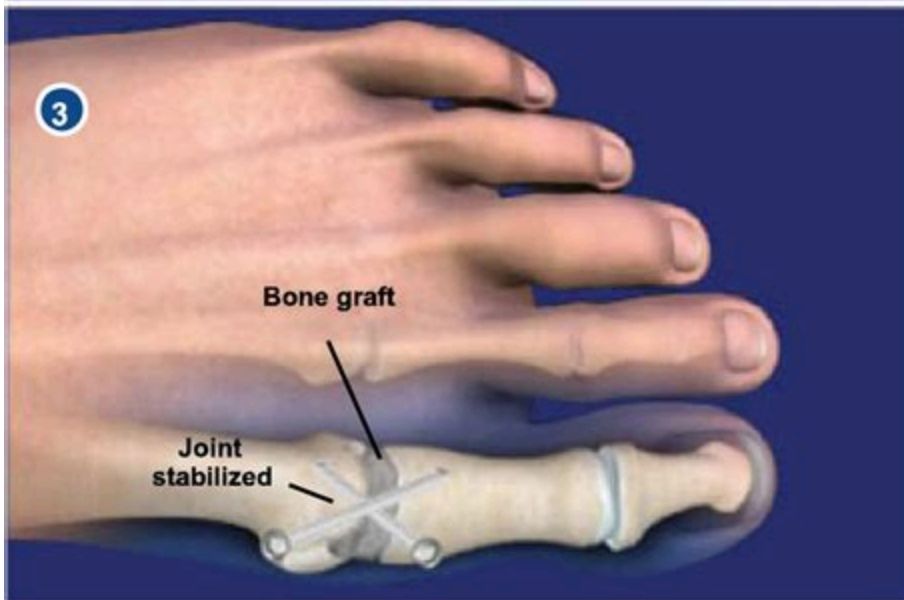
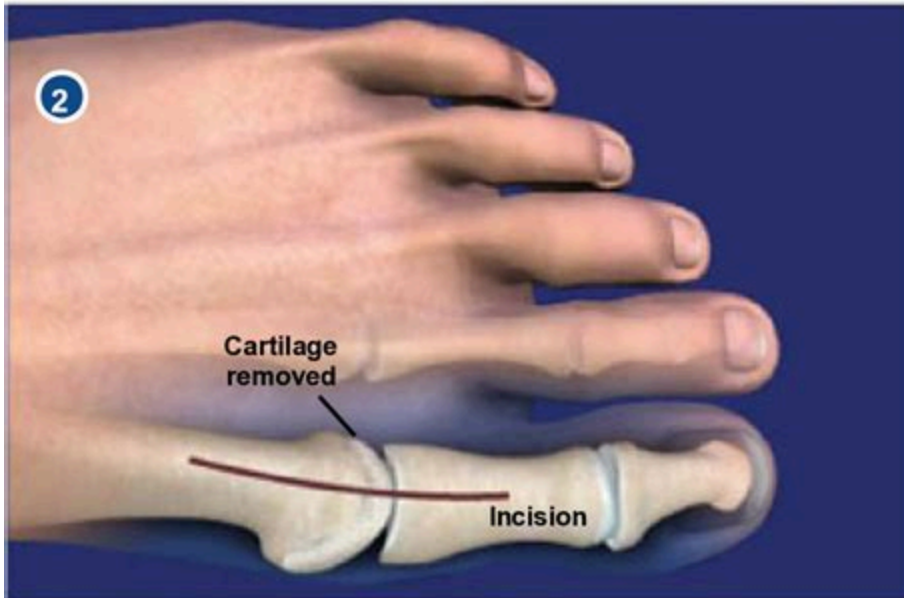
# A systematic review of injectable corticosteroid for . - FAOJ

Figure 1. PRISMA flow chart for trials selected for review [17]



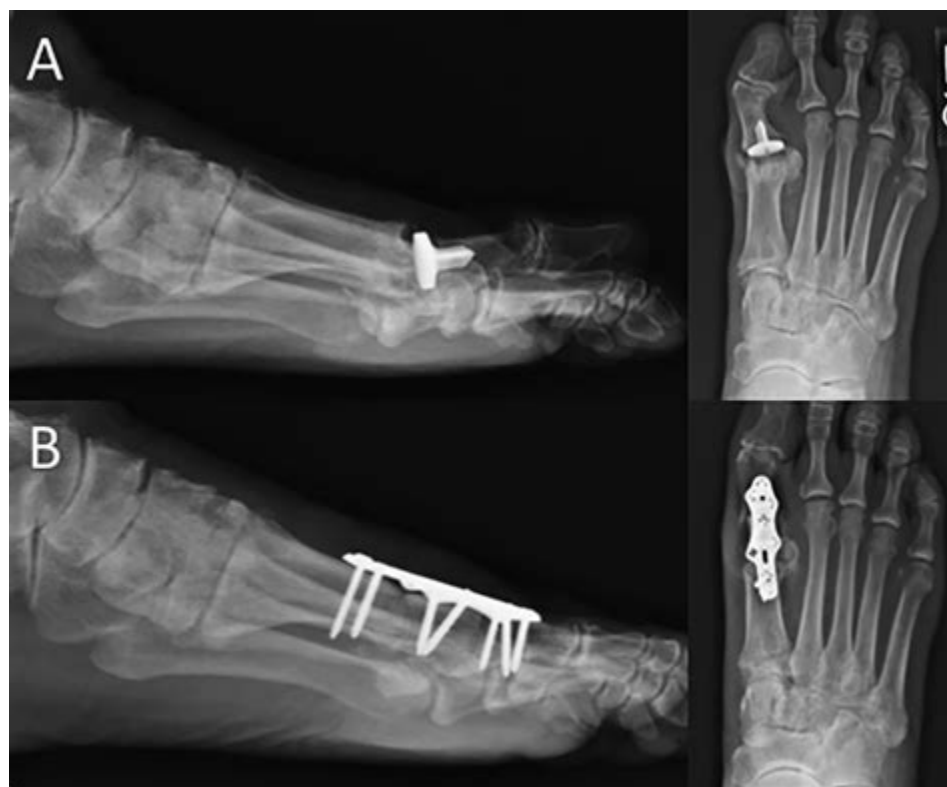
One of the most common ailments affecting the foot is the development of osteoarthritis of the first metatarsophalangeal (MTP) joint, where the big toe connects with the rest of the foot. This is often referred to as hallux rigidus . Osteoarthritis of the big toe can range from mild to severe and can cause symptoms such as:

**The accuracy of first metatarsophalangeal joint palpation guided .**



First-line treatment for acute gout is either NSAIDs, colchicine, steroid injection, or oral prednisone. Urate-lowering therapies (e. g. allopurinol) should be continued during flares, and may be initiated during flares with prophylactic colchicine (and careful uptitration). . Joints commonly affected: 1st MTP joint (podagra) most common .

### Current Concepts Review: Hallux Rigidus - SAGE Journals



Metatarsalgia is a common condition in daily clinical practice; its causes include lesser toe deformities, metatarsophalangeal (MTP) joint synovitis, Freiberg infractions, degenerative arthritis, systemic arthritis, and interdigital neuromas. 1 Alongside hallux valgus deformity, the condition may arise from the pressure of overloading the centra.

## Ultrasound-guided first metatarsophalangeal joint injections .



The injection equipment consisted of a 2.5 ml Luer lock syringe and a 23-gauge needle used to inject iohexol (Omnipaque 300) into the first metatarsophalangeal joint in six cadaveric specimens. The needle was placed into the joint space by a single practitioner using palpation guidance.



# Hit and miss: The accuracy of intra-articular injections of the first .

## Hit and miss: The accuracy of intra-articular injections of the first metatarsophalangeal joint

Ian Reilly MSc, FRCPodS, FFPM RCPS(Glasg)<sup>1,2</sup>

1 - Department of Podiatric Surgery, Northamptonshire Healthcare Foundation NHS Trust, United Kingdom  
2 - School of Health, Science and Wellbeing, Staffordshire University, United Kingdom.

**Introduction:** Therapeutic injections provide a treatment option for patients with joint and periarticular pain, those who are not surgical candidates, whom conservative treatment has failed, or those that are awaiting surgery. Injectable glucocorticoids are one of the most common therapeutic interventions in musculoskeletal healthcare and are widely used in pathologies of the first metatarsophalangeal joint. The aim of this paper is to highlight current concepts around first metatarsophalangeal joint injection accuracy.

**Anatomy:** The first metatarsophalangeal joint is a condyloid synovial juncture and consists of the head of the first metatarsal, the base of the proximal phalanx, six muscles, eight ligaments and two sesamoid bones, with associated ligamentous attachments. The joint capsule is shaped like a box.

**Methods:** To achieve the research aim, a scoping review was undertaken with a search strategy that identified evidence via the following sources: Electronic databases, Google scholar, and Reference lists.

**Results:** The search yielded 193 articles, 48 of which appeared of potential relevance. After removing duplicate articles this total was reduced to 37 articles. After scanning the content, 27 were excluded to leave 10 articles. Twenty eight further articles were found through related author research, examination of reference lists and free text searches of Google Scholar. One reference was unobtainable. The final count of papers utilised for review was 37 which produced three themes, one of which was injection accuracy.

**Injection accuracy:** In the long history of injection therapy, infiltrations have often been performed without image guidance, i.e., using palpation guidance, anatomical landmarks and clinical judgement to direct needle entry and advancement. Needle placement may also be confirmed by use of diagnostic imaging. Typical imaging modalities are fluoroscopy or ultrasound, used alone or in combination with contrast media.

**Discussion:** The perceived wisdom is that if an injectate misses its target it is likely to be less effective and lead to false negative reporting of poor treatment outcomes, but the literature is not unequivocal. This article discusses the recent literature in the field.

**Conclusions:** The literature suggests that steroid injections are safe and effective for the short-term relief of joint pain. When injecting small synovial joints using palpated-guided methods, clinicians must be alert to the potential for failure of technique from the needle penetrating too far into the articulation and exiting the joint on the contralateral side from the entry point. Use of shorter needles and use of imaging, +/- the use of contrast media, might reduce the number of such failures.

**Keywords:** steroid injection, injection accuracy, synovial joint, hallux limitus

Corticosteroids - first MTP joint injection Ian Reilly Podsurgeon 18. 8K subscribers Subscribe  
Subscribed 26K views 6 years ago From 'Foot and Ankle Injection Techniques' - my guide to a.

## 11. Gout & Pseudogout | Hospital Handbook



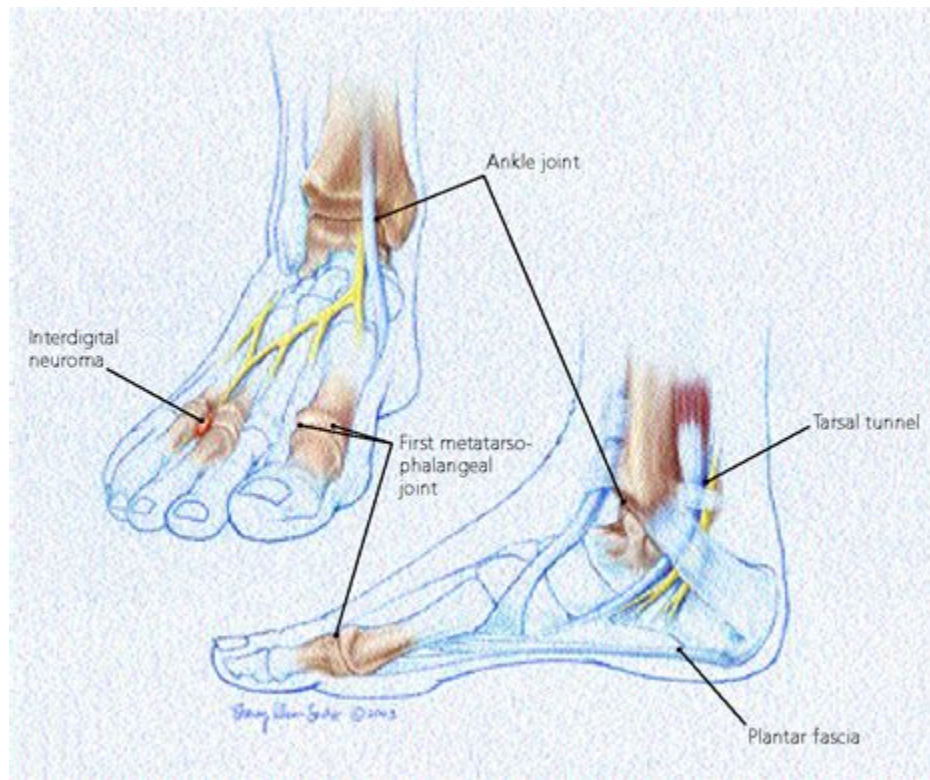
### What is Gout ?

Gout, also known as gouty arthritis, is a form of inflammatory arthritis affecting people who have high levels of uric acid in the blood.



Corticosteroid options Betamethasone (Celestone) 0.25 ml of 6 mg/ml Methylprednisolone (Sol-umedrol): 0.25 ml of 40 mg/ml Anesthetic Lidocaine 1%: 1 ml or Bupivacaine 0.25% or 0.5%: 1 ml V.  
Technique Images Patient position Supine position with knee flexed over towel roll Foot in neutral position against exam table Slightly plantar flex great toe

## Diagnostic and Therapeutic Injection of the Ankle and Foot



Steroid injection is controversial; some authors believe it may predispose to further soft tissue damage. . The majority of initial injuries (83%) occurred on artificial turf and decreased range of motion of the first metatarsophalangeal joint was a significant outcome after turf toe injury. ) Level IV evidence)  
Multiple-Choice Questions .

## First Metatarsophalangeal Joint Injection - Technique and Tips



The first metatarsophalangeal joint is the most common site of osteoarthritis (OA) in the foot and ankle. Intra-articular corticosteroid injections are widely used for this condition, but little is known about their use in practice. This study explored current practice within the UK National Health Service (NHS) relating to the administration of intra-articular corticosteroids for people with .

## Hallux Rigidus (Stiff Big Toe) - OrthoInfo - AAOS



To describe a longitudinal ultrasound-guided in-plane approach for injection into the first metatarsophalangeal (MTP) joint and assess its accuracy in a cadaveric model. Design. A prospective anatomical cadaver study model was used. A total of 10 first MTP joints using the described technique were injected with 0.5 mL of dye under ultrasound .

## PDF 1st metatarsophalangeal joint (MTPJ) osteoarthritis



Background First metatarsophalangeal (MTP) joint osteoarthritis (OA) is a common and painful problem that causes significant disability. There is limited research on assessment and treatment options, and the efficacy of current management strategies is unknown. The aim of this study was to determine how podiatrists and physical therapists in Australia and the United Kingdom (UK) manage people .



## Ultrasound-Guided First Metatarsophalangeal Joint Injections .



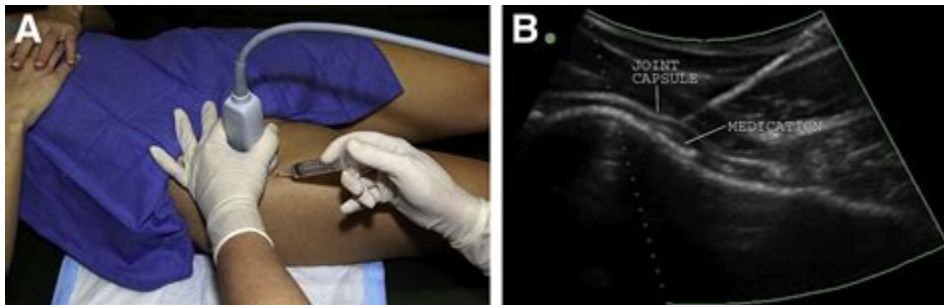
More than four steroid injections into a joint space in a given year is not recommended out of concern that steroids may accelerate cartilage aging and atrophy of connective tissue (relative contraindication). Adverse effects Iatrogenic infection (rare). Steroid arthropathy/progressive joint deterioration.

## Corticosteroids - first MTP joint injection - YouTube



Christopher S Sahler Jonathan S Kirschner corticosteroid; foot injection; metatarsophalangeal joint; musculoskeletal ultrasound. Coloring Agents / administration & dosage Injections, Intra-Articular / methods\* Metatarsophalangeal Joint / diagnostic imaging\* Ultrasonography, Interventional\* Cadaveric, Level V.

## Palpation-Guided Intra-articular Injection of the First . - Springer



The Foot and Ankle Online Journal 13 (3): 12 Intra-articular steroid injection is a common treatment modality for relief of pain and inflammation associated with degenerative joint disease. Use of .

# A multi-professional survey of UK practice in the use of intra .

Backhouse et al.  
Journal of Foot and Ankle Research (2023) 16:71  
https://doi.org/10.1186/s13047-023-00672-6

Journal of  
Foot and Ankle Research

## RESEARCH

## Open Access

# A multi-professional survey of UK practice in the use of intra-articular corticosteroid injection for symptomatic first metatarsophalangeal joint osteoarthritis

Michael R. Backhouse<sup>1,2\*</sup>, Jill Halstead<sup>3</sup>, Edward Roddy<sup>4,5</sup>, Vivek Dhukaram<sup>2</sup>, Anna Chapman<sup>2</sup>, Susanne Arnold<sup>1</sup> and Julie Bruce<sup>1,2</sup>

### Abstract

**Background** The first metatarsophalangeal joint is the most common site of osteoarthritis (OA) in the foot and ankle. Intra-articular corticosteroid injections are widely used for this condition, but little is known about their use in practice. This study explored current practice within the UK National Health Service (NHS) relating to the administration of intra-articular corticosteroids for people with painful first metatarsophalangeal joint (MTPJ) OA.

**Methods** A cross-sectional survey using Qualtrics online survey platform (Qualtrics, Provo, UT, USA), distributed through professional bodies, special interest groups, and social media.

**Results** One hundred forty-four healthcare professionals responded, including podiatrists (53/144; 39%), orthopaedic surgeons (28/144; 19%), podiatric surgeons (26/144; 17%) and physiotherapists (24/144; 16%). Half of respondents administered up to 25 corticosteroid injections per year (67/136; 49%) but some administered more than fifty (21/136; 15%). Injections were administered across the healthcare system but were most common in hospital settings (64/136; 44%) followed by community (38/136; 26%), with less delivered in primary care (11/136; 8%). Half of respondents routinely used image-guidance, either ultrasound or x-ray/fluoroscopy (65/136; 48%) although over one third used none (52/136; 38%). Imaging guidance was more common amongst medical professionals (21/31; 68%) compared to non-medical health professionals (45/105; 43%).

Overall, methylprednisolone acetate was the most common corticosteroid used. Medical professionals mostly injected methylprednisolone acetate ( $n = 15/27$ ; 56%) or triamcinolone acetonide ( $n = 11/27$ ; 41%), whereas pre-mixed methylprednisolone acetate with lidocaine hydrochloride was the most common preparation used by non-medical health professionals (41/85; 48%). When injecting non premixed steroid, lidocaine hydrochloride (15/35; 43%) was the most common choice of local anaesthetic for non-medical health professionals but medical professionals showed more variation between lidocaine hydrochloride (8/23; 35%) levobupivacaine hydrochloride (9/23; 39%) and bupivacaine hydrochloride (5/23; 22%).

**Conclusions** Multiple professional groups regularly administer intra-articular corticosteroids for symptomatic first MTPJ OA across a range of NHS healthcare settings. Overall, methylprednisolone acetate was the most commonly

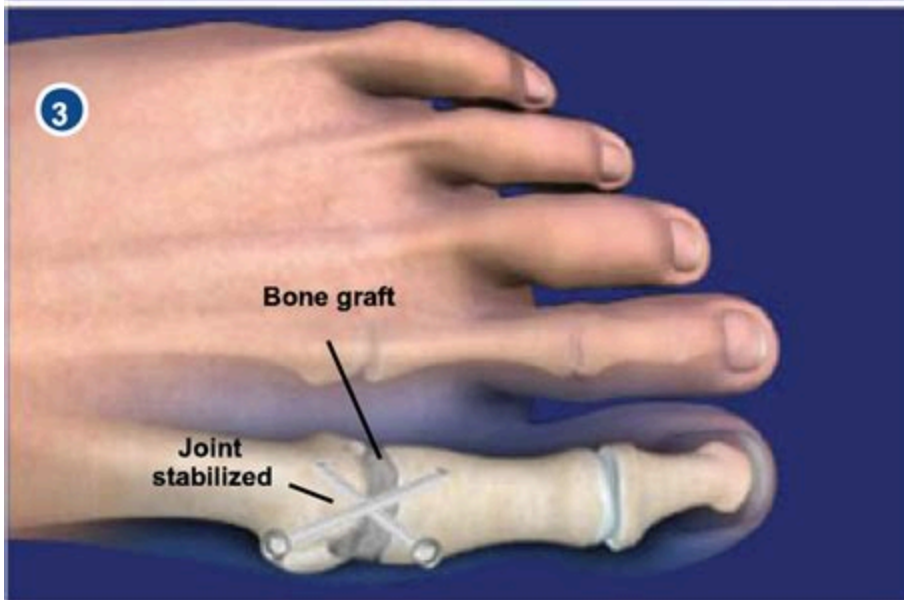
\*Correspondence:  
Michael R. Backhouse  
michael.backhouse@warwick.ac.uk  
Full list of author information is available at the end of the article



© The Author(s) 2023. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>. 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 in a credit line to the data.

The first metatarsophalangeal (MTP) joint is the most common arthritic site in the foot. 73 Also known as hallux rigidus, arthritis of the first MTP joint is characterized by decreased motion, pain, and osteophyte formation. Nearly 10% of adults have symptomatic hallux rigidus; however, radiographic evidence of arthritic change at the first MTP joint is present in 20% to 48% of adults older .

## **First Metatarsophalangeal Joint Injection - FPnotebook**





Diagnostic aspiration or therapeutic injection of the ankle or first metatarsophalangeal joints can be performed for management of advanced osteoarthritis, rheumatoid arthritis, and other.

### **Hallux rigidus: How do I approach it? - PMC - National Center for .**



Joint injection One of the first options you can consider is a steroid injection. This is not a cure for the degenerative changes in the joint and will not improve movement. But it may give some pain relief for a period of time. We cannot predict how long this may be. This injection can also be used as a diagnostic tool. If you get good pain

## Dislocations of the second and third metatarsophalangeal joints after .



Intra-articular steroid injection is a common treatment modality for relief of pain and inflammation associated with degenerative joint disease. Use of injectable steroid preparations is widely accepted as safe and effective for the treatment of osteoarthritis of the 1 st metatarsophalangeal joint.

- <https://telegra.ph/Cut-Mix-500-02-06>
- <https://telegra.ph/Testosterone-Injections-To-Lose-Weight-02-09>
- <https://drive.google.com/file/d/1bhNLJMIWtmbODpbqp1NEWz6U73aT-j00/view>