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**Appendix**

**1 - Should patients undergoing surgical debridement of diabetic foot ulcers receive routine VTE prophylaxis?**

**Search Terms:**

((diabetic foot ulcer OR diabetic foot ulcers OR dfu OR "Diabetic Foot"[Mesh] OR diabetic feet OR "Foot Ulcer"[Mesh] OR plantar ulcer OR lower extremity ulcer) AND (surgical debridement OR "Debridement"[Mesh] OR debridement OR debrided OR debride OR surgically debride)) AND (prophylaxis OR prophylaxed OR prophylactically OR "Embolism and Thrombosis"[Mesh] OR venous thromboembolism OR venous thrombosis OR pulmonary embolism OR embolus OR embolism OR thrombosis OR thromboses OR thrombus OR thromboembolisms OR deep vein thrombosis OR pe OR vte OR dvt OR blood clot OR blood clots OR anti-clotting OR antithrombotic OR anti-thrombotic OR anticoagulation OR anti-coagulation OR heparin OR lwwh OR low molecular weight heparin OR low-molecular-weight heparin OR "Heparin"[Mesh] OR "Heparin, Low-Molecular-Weight"[Mesh] OR "Dalteparin"[Mesh] OR dalteparin OR fragmin OR "Enoxaparin"[Mesh] OR enoxaparin OR lovenox OR "Nadroparin"[Mesh] OR nadroparin OR fraxiparin OR "Tinzaparin"[Mesh] OR tinzaparin OR innohep OR low dose unfractionated heparin OR low-dose unfractionated heparin OR lduh OR "Factor Xa Inhibitors"[Mesh] OR direct factor xa inhibitor OR apixaban OR Eliquis OR betrixaban OR bevyxxa OR edoxaban OR savaysa OR rivaroxaban OR "Rivaroxaban"[Mesh] OR Xarelto OR Indirect factor xa inhibitors OR fondaparinux OR "Fondaparinux"[Mesh] OR fondaparin OR arixtra OR direct thrombin inhibitors OR "Antithrombins"[Mesh] OR dabigatran OR Pradaxa OR ximelagatran OR exanta OR vitamin k antagonists OR vka OR warfarin OR "Warfarin"[Mesh] OR coumadin OR aspirin OR "Aspirin"[Mesh] OR salicylate OR "Salicylates"[Mesh])

**Total:** 244 search results (years 1990-2021)

**Databases Searched:** Pubmed

**Date of search:** 16 June 2021

**Filters**

Results by Year: 1990-Present (All Articles)

Results by Year: Pre-1990 (Only RCTs)

Language: English

***Inclusion Criteria:***

* Diabetic foot ulcer
* Surgical debridement performed
* Venous thromboembolism rates reported
* Thromboprophylaxis described
* English articles

***Exclusion Criteria:***

* Unavailable full-text manuscripts.

**2 - Is routine VTE prophylaxis needed for patients placed in walker boot immobilization?**

**Search Terms:**

**Medline:**

1. exp Venous thromboembolism/
2. exp Pulmonary embolism/
3. exp Thromboembolism/
4. exp Venous thrombosis/
5. exp Thrombosis/
6. (PE or DVT or VTE).mp
7. (venous occlusive thrombosis).mp
8. 1 or 2 or 3 or 4 or 5 or 6 or 7
9. exp Immobilization/
10. exp Occlusal Splints/
11. exp Splints/
12. exp Braces/
13. exp Foot Orthoses/
14. boot.mp
15. aircast.mp
16. immobili\*.mp
17. 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16
18. 8 and 17

**Embase:**

1. exp venous thromboembolism/
2. exp lung embolism/
3. exp thromboembolism/
4. exp vein thrombosis/
5. exp thrombosis/
6. (PE or DVT or VTE).mp
7. (venous occlusive thrombosis).mp
8. 1 or 2 or 3 or 4 or 5 or 6 or 7
9. exp immobilization/
10. exp occlusal splint/
11. exp splint/
12. exp brace/
13. exp foot orthosis/
14. boot.mp
15. aircast.mp
16. immobili\*.mp
17. 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16
18. 8 and 17

**PubMed:**

1. Venous thromboembolism [MeSH Terms]
2. Pulmonary embolism [MeSH Terms]
3. Thromboembolism [MeSH Terms]
4. Venous thrombosis [MeSH Terms]
5. Thrombosis [MeSH Terms]
6. PE or DVT or VTE
7. venous occlusive thrombosis
8. 1 or 2 or 3 or 4 or 5 or 6 or 7
9. Immobilization [MeSH Terms]
10. Occlusal Splints [MeSH Terms]
11. Splints [MeSH Terms]
12. Braces [MeSH Terms]
13. Foot Orthoses [MeSH Terms]
14. boot
15. aircast
16. immobili\*
17. 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16
18. 8 and 17

**Cochrane Database of Systematic Reviews:**

1. MeSH descriptor: [Venous thromboembolism]
2. MeSH descriptor: [Pulmonary embolism]
3. MeSH descriptor: [Thromboembolism]
4. MeSH descriptor: [Venous thrombosis]
5. MeSH descriptor: [Thrombosis]
6. PE or DVT or VTE
7. venous occlusive thrombosis
8. 1 or 2 or 3 or 4 or 5 or 6 or 7
9. MeSH descriptor: [Immobilization]
10. MeSH descriptor: [Occlusal Splints]
11. MeSH descriptor: [Splints]
12. MeSH descriptor: [Braces]
13. MeSH descriptor: [Foot Orthoses]
14. boot
15. aircast
16. immobili\*
17. 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16
18. 8 and 17

**CENTRAL:**

1. MeSH descriptor: [Venous thromboembolism]
2. MeSH descriptor: [Pulmonary embolism]
3. MeSH descriptor: [Thromboembolism]
4. MeSH descriptor: [Venous thrombosis]
5. MeSH descriptor: [Thrombosis]
6. PE or DVT or VTE
7. venous occlusive thrombosis
8. 1 or 2 or 3 or 4 or 5 or 6 or 7
9. MeSH descriptor: [Immobilization]
10. MeSH descriptor: [Occlusal Splints]
11. MeSH descriptor: [Splints]
12. MeSH descriptor: [Braces]
13. MeSH descriptor: [Foot Orthoses]
14. boot
15. aircast
16. immobili\*
17. 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16
18. 8 and 17

**Total Results: 11,269**

***Inclusion Criteria:***

* Randomised studies of VTE prophylaxis, which included patients placed in lower limb immobilisation in boot/brace/orthosis

*or*

* Randomised studies of boot/brace/orthosis immobilisation vs any other form of immobilisation/no immobilisation, and reporting the incidence of VTE
* VTE rates reported (symptomatic or asymptomatic detected on imaging)
* Adults (age >17)
* English language articles
* Primary research

***Exclusion Criteria:***

* Review articles, case reports, non-randomised observational studies
* Non-English language articles.

**3 - Does the weight-bearing status of the patient after foot and ankle surgery influence the selection of VTE prophylaxis?**

**Search Terms:**

(("Foot"[Mesh]) AND ("Weight-Bearing"[Mesh])) AND (“Thrombosis”[Mesh]); (("Foot"[Mesh]) AND ("Immobilization"[Mesh])) AND (“Thrombosis”[Mesh]); (("Ankle"[Mesh]) AND ("Weight-Bearing"[Mesh])) AND (“Thrombosis”[Mesh]); (("Ankle"[Mesh]) AND ("Immobilization"[Mesh])) AND (“Thrombosis”[Mesh]); (("Weight-Bearing"[Mesh]) OR ("Immobilization"[Mesh])) AND (“Thrombosis”[Mesh]); ((((("Weight-Bearing"[Mesh]) OR (weight bearing status[Title/Abstract])) OR (weight bearing[Title/Abstract])) AND ((((ankle surgery[MeSH Terms]) OR (ankle surgery[Title/Abstract])) AND (foot surgery[MeSH Terms])) OR (foot surgery[Title/Abstract]))) AND ("Venous Thromboembolism"[Mesh] OR "Venous Thrombosis"[Mesh] OR "pulmonary embolism" OR "deep vein thrombosis")) AND (((Prevention and Control[MeSH Subheading]) OR (prevention[Title/Abstract])) OR (prevent\*[Title/Abstract]) OR (prophylaxis[tw]))

***Inclusion Criteria:***

* Narrative review articles
* English Language
* Primary Research
* Description / Differentiation of weight bearing status
* Venous thromboembolism rates reported

***Exclusion Criteria:***

* Narrative review articles
* Commentary
* Non-English Language
* No specific description of weight bearing status.

**4 - Concerning VTE risk, which surgeries can be considered major, and which surgeries can be considered non-major in foot and ankle surgery?**

**Search Terms:**

((Venous Thrombosis[MeSH Terms]) OR (venous thromboembolism[MeSH Terms]) OR (pulmonary embolism[MeSH Terms]) OR (deep vein thrombosis[MeSH Terms]) OR (DVT) OR (deep venous thrombosis[MeSH Terms]) OR (deep venous thromboembolism[MeSH Terms]) OR (deep vein thromboembolism) OR (venous thromboembolism) OR (VTE)) AND ((ankle procedure) OR (foot and ankle procedure) OR (foot procedure) OR (lower extremity procedure) OR (ankle procedures) OR (foot and ankle procedures) OR (foot procedures) OR (lower extremity procedures) OR (ankle [MeSh terms]) OR (foot [MeSH Terms]) OR (foot injuries [MeSH Terms]) OR (ankle injuries [MeSH Terms]) AND ((Incidence [MeSH Terms]) OR (prevalence [MeSH Terms]) OR (Risk [MeSH Terms]) OR (Risk Assessment [MeSH Terms]) OR (Risk evaluation [MeSH Terms]) OR (rate)

**Databases Searched:** Pubmed, EMBASE, Cochrane Library

Output: Embase: 838; Pubmed: 2,907; Cochrane: 370 search results (years 1990-2021)

Total: 4,115 search results (years 1990-2021; excluding duplicates: 3,748)

**Filters**

Results by Year: 1990-Present (All Articles)

Language: English

***Inclusion Criteria:***

Inclusion criteria were (1) both clinical and preclinical studies with any level of evidence (2) published in peer-reviewed journals in English, (3) investigated the incidence of venous thromboembolism (VTE) after foot and ankle procedures.

***Exclusion Criteria:***

Studies in which data was missing, irrelevant, methodology was poor, large bias was expected, or those without an available full text were excluded. Abstracts, case reports, conference presentations, editorials, and expert opinions were excluded as well.

**5 - Is routine VTE prophylaxis required for patients undergoing forefoot and midfoot surgery who would be allowed to fully weight-bear?**

**Search Terms:**

(“Venous Thromboembolism”[Mesh] OR VTE[tw] OR VTED[tw] OR "Venous Thrombosis"[Mesh:NoExp] OR thrombosis[tw] OR thrombotic[tw] OR thromboemboli\*[tw] OR thromboprophyla\*[tw] OR deep vein thrombosis[tw] OR DVT[tw] OR "Pulmonary Embolism"[Mesh] OR pulmonary emboli\*[tw] OR pulmonary embolus[tw] OR "Pulmonary Infarction"[Mesh] OR pulmonary infarction\*[tw] OR pulmonary thrombosis[tw] OR "Heparin, Low-Molecular-Weight"[Mesh] OR heparin\*[tw] OR "Dalteparin"[Mesh] OR dalteparin[tw] OR "Enoxaparin"[Mesh] OR enoxaparin[tw] OR "Nadroparin"[Mesh] OR nadroparin[tw] OR "Tinzaparin"[Mesh] OR tinzaparin[tw] OR "Anticoagulants"[Mesh] OR "Anticoagulants"[Pharmacological Action] OR anticoagula\*[tw] OR "Antithrombins"[Mesh] OR antithrombins[tw] OR antithrombot\*[tw] OR "Factor Xa Inhibitors"[Mesh] OR xa inhibitor\*[tw] OR IXa inhibitor\*[tw] OR XIa inhibitor\*[tw] OR andexanet alfa[tw] OR "PRT064445" [Supplementary Concept] OR rivaroxaban[tw] OR apixaban[tw]) AND (“Foot/surgery”[Mesh] OR foot surgery[tw] OR foot injur\*[tw] OR foot fracture\*[tw] OR foot trauma[tw] OR "Forefoot, Human/surgery"[Mesh] OR forefoot surger\*[tw] OR midfoot surger\*[tw] OR “Foot Injuries/surgery”[Mesh] OR "Bunion, Tailor's/surgery"[Mesh] OR "Bunion/surgery"[Mesh] OR bunion surger\*[tw] OR "Hallux Limitus/surgery"[Mesh] OR "Hallux Rigidus/surgery"[Mesh] OR "Hallux Varus/surgery"[Mesh] OR “Hallux Valgus/surgery”[Mesh] OR "Hallux/surgery"[Mesh] OR hallux surger\*[tw] OR "Metatarsal Bones/surgery"[Mesh] OR "Metatarsal Valgus/surgery"[Mesh] OR metatarsal surger\*[tw] OR "Metatarsophalangeal Joint/surgery"[Mesh] OR metatarsophalangeal joint surgery[tw] OR "Metatarsus Varus/surgery"[Mesh] OR "Metatarsus/surgery"[Mesh] OR metatarsus surger\*[tw] OR "Morton Neuroma/surgery"[Mesh] OR morton neuroma surger\*[tw] OR "Plantar Plate/surgery"[Mesh] OR plantar plate surger\*[tw] OR "Tarsal Bones/surgery"[Mesh] OR “Hammer Toe Syndrome/surgery”[Mesh] OR hammertoe surger\*[tw] OR “Toe Joint/surgery”[Mesh] OR “Toes/surgery”[Mesh] OR toe surger\*[tw] OR toe injur\*[tw] OR toe fracture\*[tw] OR toe trauma[tw])

Total: 318 results

***Inclusion Criteria:***

* Venous thromboembolism rates reported
* Primary research
* English articles

***Exclusion Criteria:***

* Does not list VTE by anatomic region
* Less than 20 patients included in a surgery
* Narrative review articles
* Not in English

**6 - Is routine VTE prophylaxis needed for patients undergoing achilles tendon repair?**

**Search Terms:**

"(""Venous Thromboembolism""[Mesh] OR ""Venous Thrombosis""[Mesh] OR ""pulmonary embolism"" OR ""deep vein thrombosis"") AND (((Prevention and Control[MeSH Subheading]) OR (prevention[Title/Abstract])) OR (prevent\*[Title/Abstract]) OR (prophylaxis[tw])) AND ((achilles tendon repair) OR (achilles tendon surgery) OR (achilles tendon) OR (achilles tendon reconstruction))

***Inclusion Criteria:***

* English language articles published between 1990 to June 2021

***Exclusion Criteria:***

* 4 (book chapter)
* 7, 11, 18 (review article)
* 10 (meta-analysis of VTE in foot and ankle surgery)
* 12 (cost analysis)
* 14 (duplication, same patient group as paper 21)
* 15, 25, 27, 31, 33 (case report)
* 17 (duplication, same patient group as paper 21)
* 29 (sub-study of study reference 23)
* 32 (project protocol)
* 34 (letter)

**7 - Is there a role for routine VTE prophylaxis undergoing ankle and/or hindfoot fusion?**

**Search Terms:**

(“Venous Thromboembolism”[Mesh] OR VTE[tw] OR VTED[tw] OR "Venous Thrombosis"[Mesh:NoExp] OR thrombosis[tw] OR thrombotic[tw] OR thromboemboli\*[tw] OR thromboprophyla\*[tw] OR deep vein thrombosis[tw] OR DVT[tw] OR "Pulmonary Embolism"[Mesh] OR pulmonary emboli\*[tw] OR pulmonary embolus[tw] OR "Pulmonary Infarction"[Mesh] OR pulmonary infarction\*[tw] OR pulmonary thrombosis[tw] OR "Heparin, Low-Molecular-Weight"[Mesh] OR heparin\*[tw] OR "Dalteparin"[Mesh] OR dalteparin[tw] OR "Enoxaparin"[Mesh] OR enoxaparin[tw] OR "Nadroparin"[Mesh] OR nadroparin[tw] OR "Tinzaparin"[Mesh] OR tinzaparin[tw] OR "Anticoagulants"[Mesh] OR "Anticoagulants"[Pharmacological Action] OR anticoagula\*[tw] OR "Antithrombins"[Mesh] OR antithrombins[tw] OR antithrombot\*[tw] OR "Factor Xa Inhibitors"[Mesh] OR xa inhibitor\*[tw] OR IXa inhibitor\*[tw] OR XIa inhibitor\*[tw] OR andexanet alfa[tw] OR "PRT064445" [Supplementary Concept] OR rivaroxaban[tw] OR apixaban[tw]) AND (“ankle/surgery”[Mesh] OR ankle surgery[tw] OR ankle injur\*[tw] OR ankle fracture\* OR ankle fusion[tw] OR ankle arthrodesis[tw] OR calcaneocuboid fusion[tw] OR calcaneocuboid arthrodesis[tw] OR subtalar fusion[tw] OR subtalar arthrodesis[tw] OR talocalcaneal fusion[tw] OR talocalcaneal arthrodesis[tw] OR talonavicular fusion[tw] OR talonavicular arthrodesis[tw] OR tibiotalar fusion [tw] OR tibiotalar arthrodesis[tw] OR triple fusion[tw] OR triple arthrodesis[tw] OR tibiotalocalcaneal fusion[tw] OR tibiotalocalcaneal arthrodesis[tw])

**Total: 350 results**

***Inclusion Criteria:***

* Venous thromboembolism rates reported
* Primary research
* English articles

***Exclusion Criteria:***

* Does not list VTE by anatomic region
* Less than 20 patients included in a surgery
* Narrative review articles
* Not in English.

**8 - Is routine VTE prophylaxis required for patients undergoing total ankle arthroplasty?**

**Search Terms:**

((Venous Thrombosis[MeSH Terms]) OR (venous thromboembolism[MeSH Terms]) OR (pulmonary embolism[MeSH Terms]) OR (deep vein thrombosis[MeSH Terms]) OR (DVT) OR (deep venous thrombosis[MeSH Terms]) OR (deep venous thromboembolism[MeSH Terms]) OR (deep vein thromboembolism) OR (venous thromboembolism) OR (VTE)) AND ((Prophylaxis [MeSH Terms]) OR (prophylaxis [MeSH Term]) OR (Prevention)) AND ((total ankle replacement [MeSH Terms]) OR (Ankle replacement [MeSH Terms]) OR (Ankle replacement arthroplasty [MeSH Terms]) OR (Ankle Arthroplasty))

**Databases Searched:** Pubmed, EMBASE, Cochrane Library

**Output:** Embase: 88; Pubmed: 32; Cochrane: 17 search results (years 1990-2021)

**Total:** 137 search results (years 1990-2021).

**Filters:**

Results by Year: 1990-Present (All Articles)

Results by Year: Pre-1990 (Only RCTs)

Language: English

***Inclusion Criteria:***

* Clinical and preclinical studies with any level of evidence
* Published in peer-reviewed journals in English
* Investigated the effect of prophylaxis on venous thromboembolism (VTE) after total ankle arthroplasty, with or without prophylaxis.

Exclusion Criteria:

* Data was missing, irrelevant,
* Methodology was poor, large bias was expected,
* Without available full-text were excluded.
* Abstracts, case reports, conference presentations, editorials, and expert opinions.