

Clinical trials of UFH for thrombosis prevention in general surgery

TrialResults-center www.trialresultscenter.org

1 unfractionated heparin

Trial	Treatments	Patients	Trials design and methods
UFH vs no treatment			
Abernethy , 1974 n=63/62	UFH twice daily for 7 days versus no treatment	all other general surgery	
Abraham-Inpijn , 1979 n=20/20	UFH twice daily for 7 days versus no treatment	all other general surgery	
Bergqvist , 1980 n=53/58	UFH twice daily for 5 days versus no treatment	all other general surgery	
Caloghera , 1984 n=40/40	UFH 3 times daily for 7 days versus no treatment	all other general surgery	
Clarke-Pearson , 1983 n=95/105	UFH twice daily for 7 days versus no treatment	all other general surgery	
Gallus , 1973 n=100/109	UFH 3 times daily for A versus no treatment	all other general surgery	
Gallus , 1976 n=408/412	UFH 3 times daily for 7 days versus no treatment	all other general surgery	
Gordon-Smith , 1972 n=NA	UFH twice daily for 5 days versus no treatment	all other general surgery	
Groote Schuur , 1979 n=323/323	UFH 3 times daily for 6 days versus no treatment	all other general surgery	
Gruber n=119/113	UFH 3 times daily for 7 days versus no treatment	All other general surgery	
Kakkar (IMT) n=2111/2137	UFH 3 times daily for 7 days versus no treatment	All other general surgery	
Kettunen , 1974 n=83/117	UFH 3 times daily for 7 days versus no treatment	all other general surgery	

continued...

Trial	Treatments	Patients	Trials design and methods
Koppenhagen , 1982 n=162/50	UFH twice daily versus no treatment	all other general surgery	
Kraytman , 1976 n=21/28	UFH 3 times daily for 6 days versus no treatment	all other general surgery	
Kraytman , 1977 n=23/27	UFH 3 times daily for 6 days versus no treatment	all other general surgery	
Marchelli , 1983 n=30/30	UFH 3 times daily for ? versus no treatment	all other general surgery	
Multiunit , 1974 n=128/128	UFH twice daily for 7 days versus no treatment	all other general surgery	
Nicolaides , 1972 n=128/122	UFH twice daily for 7 days versus no treatment	all other general surgery	
Plante , 1979 n=42/66	UFH twice daily for 8 days versus no treatment	all other general surgery	
Sagar , 1974 n=264/236	UFH twice daily for 5 days versus no treatment	all other general surgery	
Spebar , 1981 n=24/19	UFH twice daily for 5-7 days versus no treatment	all other general surgery	
Ziemski , 1979 n=30/20	UFH 3 times daily for 2 days versus no treatment	all other general surgery	
UFH vs placebo			
Belch , 1980 n=24/25	UFH twice daily for 7 days versus placebo	all other general surgery	
Covey , 1975 n=53/52	UFH twice daily for 8 days versus placebo	all other general surgery	
Jourdan , 1984 n=21/21	UFH twice daily for 5 days versus placebo	all other general surgery	
Kakkar , 1972 n=39/39	UFH twice daily for 7 days versus placebo	All other general surgery	

continued...

Trial	Treatments	Patients	Trials design and methods
Kiil , 1978 n=650/663	UFH twice daily for 7 days versus placebo	All other general surgery	
Kraytman , 1977 n=25/22	UFH 3 times daily for 6 days versus placebo	all other general surgery	
Kruse-Blinkenberg , 1980 n=29/33	UFH 3 times daily for 8 days versus placebo	all other general surgery	
Lahnborg , 1975 n=58/54	UFH twice daily for 5 days versus placebo	all other general surgery	
Lahnborg , 1976 n=24/24	UFH twice daily for 5 days versus placebo	all other general surgery	
Lawrence , 1977 n=133/129	UFH twice daily for 5 days versus placebo	all other general surgery	
Marchetti , 1982 n=16/13	UFH 3 times daily versus placebo	all other general surgery	
Muiticentre , 1984 n=222/108	UFH twice daily for 5-7 days versus placebo	all other general surgery	
Ribaudo , 1975 n=75/75	UFH twice daily for A days versus placebo	all other general surgery	
Roberts , 1975 n=39/45	UFH twice daily for 7 days versus placebo	all other general surgery	
Strand , 1975 n=55/55	UFH twice daily for 7 days versus placebo	all other general surgery	
Taberner , 1978 n=50/50	UFH twice daily for 7 days versus placebo	all other general surgery	
Torngren n=47/62	UFH twice daily for 6-8 days versus placebo	all other general surgery	
Torngren , 1978 n=10/10	UFH 3 times daily for 6-8 days versus placebo	all other general surgery	
Torngren , 1978 n=66/62	UFH twice daily for 6-8 days versus placebo	all other general surgery	

continued...

Trial	Treatments	Patients	Trials design and methods
Wu , 1977 n=44/44	UFH twice daily for 7 days versus placebo	all other general surgery	
UFH vs aspirin			
Loew , 1977 n=60/67	UFH twice daily for 7 days versus aspirin	all other general surgery	
Vinazzer , 1980 n=402/404	UFH twice daily for 4 days versus aspirin	all other general surgery	
UFH vs DHE			
Muiticentre , 1984 n=226/110	UFH twice daily for 5-7 days versus DHE	all other general surgery	
Muiticentre 53,S4 , 1984 n=214/110	UFH twice daily for 5-7 days versus DHE	all other general surgery	
UFH vs oral anticoagulant			
van Geloven , 1977 n=74/80	UFH twice daily for 4 days versus Oral anticoagulant	all other general surgery	

4

References

Abernethy, 1974:

Abernethy EA, Hartsuck JM Postoperative pulmonary embolism. A prospective study utilizing low dose heparin. Am J Surg 1974;128:739-42 [4432994]

Abraham-Inpijn, 1979:

Abraham-Inpijn L Critical evaluation of low-dose heparin in laryngectomy. Arch Chir Neerl 1979;31:9-15 [443830]

Bergqvist, 1980:

Bergqvist D, Hallbk T Prophylaxis of postoperative venous thrombosis in a controlled trial comparing dextran 70 and low-dose heparin. World J Surg 1980;4:239-43 [6157256]

Caloghera, 1984:

Caloghera C, Bordos D, Miculit F, Aboubakr W, Teodorescu C, Vancea D [Prevention of postoperative thromboembolism with small doses of heparin] Rev Chir Oncol Radiol O R L Oftalmol Stomatol Chir 1984;33:161-7 [6238351]

Clarke-Pearson, 1983:

Clarke-Pearson DL, Coleman RE, Synan IS, Hinshaw W, Creasman WT Venous thromboembolism prophylaxis in gynecologic oncology: a prospective, controlled trial of low-dose heparin. Am J Obstet Gynecol 1983;145:606-13 [6338722]

Gallus, 1973:

Gallus AS, Hirsh J, Tuttle RJ, Trebilcock R, O'Brien SE, Carroll JJ, Minden JH, Hudecki SM Small subcutaneous doses of heparin in prevention of venous thrombosis. N Engl J Med 1973;288:545-51 [4568221]

Gallus, 1976:

Gallus AS, Hirsh J, O'Brien SE, McBride JA, Tuttle RJ, Gent M Prevention of venous thrombosis with small, subcutaneous doses of heparin. JAMA 1976;235:1980-2 [946507]

Gordon-Smith, 1972:

Gordon-Smith IC, Le Quesne LP, Grundy DJ, Newcombe JF, Bramble FJ Controlled trial of two regimens of subcutaneous heparin in prevention of postoperative deep-vein thrombosis. *Lancet* 1972;1:1133-5 [[4113052](#)]

Groote Schuur, 1979:

Failure of low-dose heparin to prevent significant thromboembolic complications in high-risk surgical patients: interim report of prospective trial. Groote Schuur Hospital Thromboembolus Study Group. *Br Med J* 1979;1:1447-50 [[380742](#)]

Gruber, O:

Gruber UF, Duckert F, Fridrich R, Torhorst J, Rem J Prevention of postoperative thromboembolism by dextran 40, low doses of heparin, or xantinol nicotinate. *Lancet* 1977;1:207-10 [[64746](#)]

Kakkar (IMT), O:

Prevention of fatal postoperative pulmonary embolism by low doses of heparin. An international multicentre trial. *Lancet* 1975;2:45-51 [[49649](#)]

Kakkar VV, Corrigan TP, Fossard DP, Sutherland I, Thirwell J Prevention of Fatal Postoperative pulmonary embolism by low doses of heparin. Reappraisal of results of international multicentre trial. *Lancet* 1977;1:567-9 [[65660](#)]

Kettunen, 1974:

Kettunen K, Poikolainen E, Karjalainen P, Oksala I, Alhava E, Rehnberg V, Huttunen H, Mattila M [Prevention of postoperative deep vein thrombosis with small doses of heparin] *Duodecim* 1974;90:834-8 [[4426267](#)]

Kopenhagen, 1982:

Kopenhagen K, Matthes M [Heparin-dihydroergot or heparin alone in thrombosis prophylaxis?] *Med Welt* 1982;33:216-23 [[7070283](#)]

Kraytman, 1976:

Kraytman M, Kutnowski M, Ansay J, Fastrez R [Prophylaxis of postoperative deep vein thromboses by means of weak doses of subcutaneous heparin (author's transl)] *Acta Chir Belg* 1976;75:519-29 [[1015181](#)]

Kraytman, 1977:

Kraytman M, Kutnowski M, Ansay J, Vandendris M, Fastrez R, Steinberger R [Prevention of postoperative venous thrombosis with small doses of subcutaneous heparin] *Acta Clin Belg* 1977;32:422-7 [[358713](#)]

Marchelli, 1983:

Marchetti V, Beati C, Pogliani EM, Vincre G [Low-dose calcium-heparin prophylaxis in thoracic surgery. Bleeding, changes in coagulation and fibrinolysis] *Minerva Med* 1983;74:1745-8 [[6866306](#)]

Multiunit, 1974:

Heparin versus dextran in the prevention of deep-vein thrombosis. A multi-unit controlled trial. *Lancet* 1974;2:118-20 [[4135556](#)]

Nicolaides, 1972:

Nicolaides AN, Dupont PA, Desai S, Lewis JD, Douglas JN, Dodsworth H, Fourides G, Luck RJ, Jamieson CW Small doses of subcutaneous sodium heparin in preventing deep venous thrombosis after major surgery. *Lancet* 1972;2:890-3 [[4116600](#)]

Plante, 1979:

Plante J, Boneu B, Vaysse C, Barret A, Gouzi M, Bierme R Dipyridamole-aspirin versus low doses of heparin in the prophylaxis of deep venous thrombosis in abdominal surgery. *Thromb Res* 1979;14:399-403 [[442014](#)]

Sagar, 1974:

Sagar S Heparin prophylaxis against fatal postoperative pulmonary embolism. *Br Med J* 1974;2:153-5 [[4825114](#)]

Plante J, Boneu B, Vaysse C, Barret A, Gouzi M, Bierme R Dipyridamole-aspirin versus low doses of heparin in the prophylaxis of deep venous thrombosis in abdominal surgery. *Thromb Res* 1979;14:399-403 [[442014](#)]

Spebar, 1981:

Spebar MJ, Collins GJ Jr, Rich NM, Kang IY, Clagett GP, Salander JM Perioperative heparin prophylaxis of deep venous thrombosis in patients with peripheral vascular disease. *Am J Surg* 1981;142:649-50 [[7316026](#)]

Ziemski, 1979:

Ziemski JM, Kostrzevska E, Marchlewski S, Wiczorek K, Rudowski W, Michalski R, Lopaciuk S, Kolakowski L, Sawicki F [Efficacy of small doses of heparin given during 2 to 6 days in the prevention of postoperative deep vein thrombosis] *Pol Tyg Lek* 1979;34:161-4 [432128]

Belch, 1980:

Belch JJ, Lowe GD, Pollock JG, Forbes CD, Prentice CR Low dose heparin in the prevention of deep-vein thrombosis after aortic bifurcation graft surgery. *Thromb Haemost* 1980;42:1429-33 [7368149]

Covey, 1975:

Covey TH, Sherman L, Baue AE Low-dose heparin in postoperative patients: a prospective, coded study. *Arch Surg* 1975;110:1021-6 [1100014]

Jourdan, 1984:

Jourdan M, McColl I The use of prophylactic subcutaneous heparin in patients undergoing hernia repairs. *Br J Clin Pract* 1984;38:298-300 [6477809]

Kakkar, 1972:

Kakkar VV, Corrigan T, Spindler J, Fossard DP, Flute PT, Crellin RQ, Wessler S, Yin ET Efficacy of low doses of heparin in prevention of deep-vein thrombosis after major surgery. A double-blind, randomised trial. *Lancet* 1972;2:101-6 [4113891]

Kiil, 1978:

Kiil J, Kiil J, Axelsen F, Andersen D Prophylaxis against postoperative pulmonary embolism and deep-vein thrombosis by low-dose heparin. *Lancet* 1978;1:1115-6 [77413]

Kraytman, 1977:

Kraytman M, Kutnowski M, Ansay J, Vandendris M, Fastrez R, Steinberger R [Prevention of postoperative venous thrombosis with small doses of subcutaneous heparin] *Acta Clin Belg* 1977;32:422-7 [358713]

Kruse-Blinkenberg, 1980:

Kruse-Blinkenberg HO, Gormsen J The influence of low dose heparin in elective surgery on blood coagulation, fibrinolysis, platelet function, antithrombin III and antiplasmin. *Acta Chir Scand* 1980;146:375-82 [7008475]

Lahnborg, 1975:

Leter: The consultants' contract. *Lancet* 1975;1:329-30 [46465]

Lahnborg G, Bergstrm K Clinical and haemostatic parameters related to thromboembolism and low-dose heparin prophylaxis in major surgery. *Acta Chir Scand* 1975;141:590-5 [55029]

Lahnborg, 1976:

Lahnborg G, Lagergren H, Hedenstierna G Effect of low-dose heparin prophylaxis on arterial oxygen tension after high laparotomy. *Lancet* 1976;1:54-6 [54579]

Lawrence, 1977:

Lawrence JC, Xabregas A, Gray L, Ham JM Seasonal variation in the incidence of deep vein thrombosis. *Br J Surg* 1977;64:777-80 [338089]

Marchetti, 1982:

Kopenhagen K, Matthes M [Heparin-dihydroergot or heparin alone in thrombosis prophylaxis?] *Med Welt* 1982;33:216-23 [7070283]

Muiticentre, 1984:

Dihydroergotamine-heparin prophylaxis of postoperative deep vein thrombosis. A multicenter trial. The Multicenter Trial Committee. *JAMA* 1984;251:2960-6 [6371278]

DiSerio FJ, Sasahara AA United States trial of dihydroergotamine and heparin prophylaxis of deep vein thrombosis. *Am J Surg* 1985;150:25-32 [3901790]

Ribaudo, 1975:

Ribaudo JM, Hoellrich RG, McKinnon WM, Shuler SE Evaluation of mini-dose heparin administration as a prophylaxis against postoperative pulmonary embolism: a prospective double-blind study. *Am Surg* 1975;41:289-95 [1093461]

Ribaudo JM, Hoellrich RG, McKinnon WM, Shuler SE Evaluation of mini-dose heparin administration as a prophylaxis against postoperative pulmonary embolization: a prospective double-blind study. *Rev Surg* 1975;32:297-9 [1198038]

Roberts, 1975:

Roberts VC, Cotton LT Failure of low-dose heparin to improve efficacy of peroperative intermittent calf compression in preventing postoperative deep vein thrombosis. *Br Med J* 1975;3:458-60 [[1098726](#)]

Strand, 1975:

Strand L, Bank-Mikkelsen OK, Lindewald H Small heparin doses as prophylaxis against deep-vein thrombosis in major surgery. *Acta Chir Scand* 1975;141:624-7 [[1108565](#)]

Taberner, 1978:

Taberner DA, Poller L, Burslem RW, Jones JB Oral anticoagulants controlled by the British comparative thromboplastin versus low-dose heparin in prophylaxis of deep vein thrombosis. *Br Med J* 1978;1:272-4 [[340005](#)]

Torngren, 0:

Torngren, 1978:

Trngren S, Forsberg K Concentrated or diluted heparin prophylaxis of postoperative deep venous thrombosis. *Acta Chir Scand* 1978;144:283-8 [[367024](#)]

Torngren, 1978:

Trngren S, Forsberg K Concentrated or diluted heparin prophylaxis of postoperative deep venous thrombosis. *Acta Chir Scand* 1978;144:283-8 [[367024](#)]

Wu, 1977:

Wu TK, Tsapogas MJ, Jordan FR Prophylaxis of deep venous thrombosis by hydroxychloroquine sulfate and heparin. *Surg Gynecol Obstet* 1977;145:714-8 [[333643](#)]

Loew, 1977:

Loew D, Brcke P, Simma W, Vinazzar H, Dienstl E, Boehme K Acetylsalicylic acid, low dose heparin, and a combination of both substances in the prevention of postoperative thromboembolism. A double blind study. *Thromb Res* 1977;11:81-6 [[329468](#)]

Vinazzar, 1980:

Vinazzar H, Loew D, Simma W, Brcke P Prophylaxis of postoperative thromboembolism by low dose heparin and by acetylsalicylic acid given simultaneously. A double blind study. *Thromb Res* 1980;17:177-84 [[7376128](#)]

Muiticentre, 1984:

Dihydroergotamine-heparin prophylaxis of postoperative deep vein thrombosis. A multicenter trial. The Multicenter Trial Committee. *JAMA* 1984;251:2960-6 [[6371278](#)]

DiSerio FJ, Sasahara AA United States trial of dihydroergotamine and heparin prophylaxis of deep vein thrombosis. *Am J Surg* 1985;150:25-32 [[3901790](#)]

Muiticentre 53,S4, 1984:

Dihydroergotamine-heparin prophylaxis of postoperative deep vein thrombosis. A multicenter trial. The Multicenter Trial Committee. *JAMA* 1984;251:2960-6 [[6371278](#)]

DiSerio FJ, Sasahara AA United States trial of dihydroergotamine and heparin prophylaxis of deep vein thrombosis. *Am J Surg* 1985;150:25-32 [[3901790](#)]

van Geloven, 1977:

van Geloven F, Wittebol P, Sixma JJ Comparison of postoperative coumarin, dextran 40 and subcutaneous heparin in the prevention of postoperative deep vein thrombosis. *Acta Med Scand* 1977;202:367-72 [[335793](#)]

2 About TrialResults-center.org

TrialResults-center is an innovative knowledge database that collects the results of RCTs and provides dynamic interactive systematic reviews and meta-analysis in the field of all major heart and vessels diseases.

The TrialResults-center database provides a unique view of the treatment efficacy based on all data provided directly from clinical trial results, offering a valuable alternative to personal bibliographic search, published meta-analysis, etc. Furthermore, it would allow comparing easily the various concurrent therapeutic for the same clinical condition.

Rigorous meta-analysis method is used to populate TrialResults-center: widespread search of published and non published trials, study selection using pre-specified criteria, data extraction using standard form.

TrialResults-center is continually updated on a weekly basis. We continually search all new results (whatever their publication channel) and these news results are immediately added to the database with a maximum of 1 week.

TrialResults-center is non-profit and self-funded.