sound with venography in 126 limbs of 106 patients who presented with clinical DVT or pulmonary embolism. A Parks 801 ultrasonic detector was used over the femoral and popliteal veins with calf compression before and after occlusion of the long saphenous vein at the knee. DVT was confirmed by venography in 44 limbs and was confined to the calf in 10 of these. Ultrasound detected 3 calf thromboses and 29 of 34 more extensive thromboses. The five failures with thrombus proximal to the calf were associated with partial occlusion (1) or extensive collateral circulation (4). Of the 76 limbs normal on venography 21 were thought to have DVT by ultrasound; these false positives could be attributed to oedema (11), haematoma (4), lymphocyst (1), injured muscle (1), cellulitis (1) or excessive tenderness (2) and were unexplained in 1. The results indicate that this test is more accurate than clinical signs alone, but users must be aware of its limitations, particularly the causes of false positive and false negative results.

J. A. McBride, A. G. G. Turpie, V. Kraus and C. Hiltz (Hamilton Civic Hospitals, Hamilton, Ontario, Canada): Failure of Aspirin and Dipyridamole to Influence the Incidence of Leg Scan Detected Venous Thrombosis after Elective Hip Surgery.

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Drugs known to affect platelet function have been shown to be effective in the prevention of venous thrombosis after surgery. A double-blind randomized trial of aspirin plus dipyridamole was carried out to investigate the prophylactic value of the drug combination in the prevention of venous thrombosis detected by 125 Iodine-labelled fibrinogen leg scanning after elective hip surgery. Aspirin 900 mg plus dipyridamole 100 mg were given once pre-operatively and twice daily for 10 days postoperatively, or until the patient was fully ambulant. 43 patients were entered into the trial, 22 in the control group and 21 in the treated group. Both groups were similar with respect to age, sex and factors known to predispose towards venous thrombosis. 8 patients (36.7%) in the control group and 8 patients (38.1%) in the treated group developed leg scan-detected deep vein thrombosis. The thrombi were detected between the 1st and 17th post-operative day and were found as frequently in the operated limbs as in the non-operated limbs in both groups. It is concluded that prophylaxis with aspirin 900 mg and dipyridamole 100 mg twice daily does not influence the incidence of leg scan-detected deep vein thrombosis after elective hip surgery.


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100 post-operative subjects were observed following total hip replacement using 125I-fibrinogen (125I-Fg) and impedance plethysmography (IPG) with thigh cuff. Phlebotograms were obtained if these tests indicated venous thrombosis. Also, lung scan was obtained if clinical evidence of pulmonary embolism developed. Sustained significant isotope localization occurred in 40. 32 of these had abnormal IPG. Four patients had minor pulmonary embolism, which was associated with abnormality of 125I-Fg or IPG. All major obstructive venous thrombosis and all moderately extensive thrombosis was associated with abnormal IPG. Only minute thrombi were not correctly classified by IPG. The following conclusions are supported by this experience. 1) If prospectively applied in patients at risk, the combination of both techniques (125I-Fg, IPG) is capable of detecting all silent venous thrombosis even minute thrombi of negligible significance. 2) IPG is capable of detecting all major obstructive and all moderately extensive thrombi, that is, all thrombosis of clinical significance arising in the leg. 3) Minute thrombi will not be detected by IPG alone and small emboli resulting from detachment of such minute thrombi would be unheralded unless monitoring includes 125I-Fg.