

Deep venous thrombosis: a continuing problem

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The incidence of deep vein thrombosis after major operations in patients over the age of 40 approaches 30% if no prophylactic measures are used.¹ Many patients discharged from hospital are still at risk at home and the question arises whether prophylaxis should be continued after patients have been discharged. To try to answer this question we followed up patients, most of whom received prophylaxis for deep vein thrombosis during their stay in hospital, for up to six weeks after their discharge from hospital.

Patients, methods, and results

Patients over the age of 40 having major operations were studied. All patients gave informed consent, and only those who were suitable for scanning of the uptake of fibrinogen labelled with iodine-125 were included. Patients were entered into the study two days before discharge from hospital. Before entry all patients had a full non-invasive venous assessment including scanning of the uptake of fibrinogen labelled with iodine-125,² Doppler ultrasonography,³ strain gauge plethysmography to measure maximum venous outflow,⁴ and, if indicated, contrast venography to exclude pre-existing deep vein thrombosis.

Of the 57 patients studied, 28 were men and 29 women. The mean age was 62.7 (SD 12.7) years. During their stay in hospital 52 patients received prophylaxis for deep vein thrombosis in the form of wearing graduated elastic compression stockings, taking low doses of heparin, having intermittent pneumatic impression, or both taking low doses of heparin and wearing graduated compression stockings. Five patients received no prophylaxis. All patients were encouraged to walk soon after operation.

Deep vein thrombosis was diagnosed and treated in six patients before discharge; four of them had not received prophylaxis. Prophylaxis was discontinued in

the remaining 50 patients who had no signs of deep vein thrombosis when discharged.

Patients were visited in their homes on alternate days and studied by Doppler ultrasonography and scanning of radioactively labelled fibrinogen. A further injection of radioactive fibrinogen was given when the total count over the heart dropped below 50 counts per second. In giving up to three injections of radiolabelled fibrinogen we were able to study the patients for up to three or four weeks after discharge. During the sixth week after discharge all patients had non-invasive venous assessment and venography was done to confirm deep vein thrombosis. Thirteen of the 51 patients who had not developed deep vein thrombosis at discharge did so during the six weeks of follow up, one during the first three days, seven between four and six days, three between seven and 10 days, and two after more than 10 days.

Comment

Our results show that the risk of developing thromboembolic disease can extend beyond a stay in hospital. Many of the risk factors in hospital for developing deep vein thrombosis persist after discharge. On leaving hospital, many patients remain immobile and, indeed, may be less mobile at home than they were in hospital.

Our results suggest that the incidence of venous thrombosis in patients after discharge may be considerably greater than was originally thought. Continuing with prophylaxis for longer may be necessary to reduce this risk still further. Patients developing deep vein thrombosis in hospital, where it can be diagnosed and treated, may fare better than those who develop deep vein thrombosis at home, where it may not be diagnosed as easily.

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2 Negus D, Pinto DJ, LeQuesne LP, Brown N, Chapman M. 125-I-labelled fibrinogen in the diagnosis of deep vein thrombosis and its correlation with phlebography. *Br J Surg* 1968;55:835-9.

3 Sigel B, Felix WR Jr, Popky GL, Ipsen J. Diagnosis of lower limb venous thrombosis by Doppler ultrasound technique. *Arch Surg* 1972;104:174-9.

4 Barnes RW, Collicott PE, Mozersky DJ, Sumner DS, Strandness DE. Non-invasive quantitation of maximum venous outflow in acute thrombophlebitis. *Surgery* 1972;72:971-9.

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Delayed communication between hospitals and general practitioners: where does the problem lie?

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The poor standard of communications between hospitals and general practitioners after patients have been discharged has long been noted.^{1,2} I sought the reasons behind the general practitioners' delay in receiving such communications.

Patients, methods, and results

All acute admissions to a district general hospital from this four partner practice of 7600 patients were monitored between November 1986 and May 1987. A record of each admission was compiled consisting of the name of the patient, address, probable diagnosis, specialty concerned, date of admission, and date of

receipt of both discharge letter and summary. A total of 104 patients were admitted, of whom seven died in hospital. The average length of stay was 7.4 days.

Discharge letters were given to the patient for delivery by hand to their general practitioner. Eighteen such letters were never received. The average delay for receipt of the other 86 was 4.3 days, with 34 (40%) being received within two days and 75 (88%) within one week (table). The consultant's name was stated in 84 (98%) letters, the hospital's name in 83 (96%), the diagnosis in 84 (98%), and the arrangements for follow up in 53 (62%).

Discharge summaries were posted to the general practitioner; only one communication was by telephone, about the death of a patient. Twenty six (25%) discharge summaries were never received. For the 78 that arrived the average delay was 25.3 days. Most of this time was taken by typing (20.8 days) rather than by delays in the post. The longest delay was 114 days. Nine (12%) summaries arrived within one week and 30 (39%) within two weeks after discharge (table).

A spot check carried out shortly after the end of the study showed that 1080 discharge summaries were waiting to be typed in the hospital. This represents 5%

Delay (days)	No (%) of discharge letters received (n=86)	No (%) of discharge summaries received (n=78)
0-2	34 (40)	1 (1)
3-7	41 (48)	8 (10)
8-14	8 (9)	21 (27)
15-21	2 (2)	15 (19)
22-28	1 (1)	8 (10)
29-35		8 (10)
36-42		4 (5)
43-49		6 (8)
≥50		7 (9)

of the total yearly workload (K Stonham, personal communication).

Comment

My results show unacceptably poor communication between hospitals and general practitioners. Dover and Lowe-Beer showed that it was better to give the initial notification letter to the patient to deliver by hand,⁴ and, indeed, an average delay of just over four days seems satisfactory for most admissions. It is, however, difficult to condone or ignore a failure to deliver in 17% of cases. Perhaps the letter's envelope should be marked, "This must be delivered to your general practitioner's surgery as soon as possible."

The reasons why a quarter of discharge summaries were not delivered and the reasons for the long average delay of nearly four weeks from the patient's discharge

to the summary's arrival are undoubtedly multifactorial. The finding that on one day 5% of the total number of yearly summaries were dictated but untyped in a hospital's typing pool suggests, however, that most of the problem is secretarial. No management in industry or efficiently run professional organisation would accept such a backlog, and more secretarial staff are urgently required.

The failure of discharge summaries to arrive leads to errors, omissions, confusion, and all that follows from poor communication. Ideally, they should arrive within one week after the patient's discharge, but this occurred in only 12% of cases. In addition, some initial guidance should be given by an experienced doctor about the purpose and format of these summaries. House officers have to set aside time for ward rounds, clinics, and theatre sessions; discharge summaries are equally important and time should be allocated for their dictation. Most hospital doctors, having never worked in general practice, have little idea of the relevance and importance of the summaries they produce.

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- 2 Bado W, Williams CJ. Usefulness of letters from hospitals to general practitioners. *Br Med J* 1984;288:1813-4.
- 3 Tulloch AJ, Fowler GH, McMullan JJ, Spence JM. Hospital discharge reports: content and design. *Br Med J* 1975;iv:443-6.
- 4 Dover SB, Lowe-Beer TS. The initial hospital discharge note: send out with the patient or post? *Health Trends* 1984;16:48.

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Colposcopy in teenagers

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The national prevalence of cervical precancerous lesions has increased by 60% in the past 15 years,¹ and the mean age of maximal incidence has steadily dropped so that young women in their teens or early 20s are frequently seen with preinvasive cervical cancer. It has also been suggested that the progression of such lesions to invasive cancer may occur more rapidly in younger women.² Recent guidelines for cervical screening advocate starting at the age of 20.^{3,4} We present here our data on colposcopy in teenagers in a large area clinic.

Case report

During 1982-5, 3635 women were referred to the Lothian area colposcopy clinic, 121 (3.3%) of them when they were aged under 20. Colposcopy was carried out using the acetic acid technique. In patients with histologically proved cervical intraepithelial neoplasia grade II or III local ablation therapy of the entire transformation zone was performed using either the Sharplan carbon dioxide laser or Semm's cold coagulator. The mean age of the teenagers was 18 years 5 months (range 16 years 8 months to 19 years 9 months). Forty patients were or had been pregnant (18 were parous, 17 had had therapeutic termination of pregnancy, and five were pregnant at the time of referral). Eighty six were taking the combined oral contraceptive pill and two had an intrauterine contraceptive device in situ. Seventy four were smokers. The main source of referral was the general practitioner (55 patients) but 29 were referred from genitourinary clinics, 25 from gynaecology clinics, 10 from family planning clinics,

and two from antenatal clinics. One hundred patients were referred on the grounds of abnormal findings on cervical cytology, of whom only four had a frankly positive smear and 17 had external genital warts. Twenty one had negative smears but were referred because of external genital warts.

Colposcopic examination was satisfactory in 118 patients. In the remaining three patients the upper limit of the transformation zone was not seen despite the use of oral oestrogen, and they underwent cone biopsy. The colposcopic and histological findings of the patients with abnormal smears (100) and those with external genital warts but normal cytology (21) are shown in the table. Among the 38 women with external genital warts 26 (68%) had histologically proved cervical intraepithelial neoplasia. Among the whole group 34 women had colposcopic evidence of a cervical condyloma, nine of whom had had negative findings on cytology. Histological cervical intraepithelial neoplasia was present in 27 of them.

Colposcopic and histological findings in 121 teenagers

	Suspicious smear	Positive smear	Warts and negative smear
No of subjects	96	4	21
Mean (SD) No (and range) of abnormal smears before referral	1.9 (0.5), 1-4	2.2 (0.5), 1-4	
Mean (SD) duration (and range) of abnormal cytology (months)	10.2 (7.5), 2-48	7.5 (4.6), 3-14	
No of subjects with:			
Satisfactory colposcopy	93	4	21
Normal colposcopy/ histology	9	0	7
Koilocytosis only	4	0	2
CIN I	18	0	7
CIN II	36	2	5
CIN III	29	2	0
Koilocytosis and CIN	53	4	10

CIN = Cervical intraepithelial neoplasia.