

Management of bleeding varices in the elderly

S W Hosking, N C Bird, A G Johnson, D R Triger

Abstract

In 207 consecutive patients the outcome of bleeding varices was compared in those aged under 65 (n=146) and those aged over 65 (n=61). All patients were seen during seven years and were treated by active initial and maintenance sclerotherapy. Alcoholic cirrhosis was commoner in younger patients (68 (47%) v 12 (20%)) and cryptogenic cirrhosis commoner in older patients (21 (34%) v 19 (13%)). Mortality due to the first bleed was dependent on the severity of liver disease and was unrelated to age. Survival corrected for age (life table analysis) was 65% at one year and 60% at two years for both groups of patients.

It is concluded that patients should not be denied active treatment for bleeding varices on the basis of age alone. In order to obtain optimum results early endoscopy and sclerotherapy is essential.

Introduction

Upper gastrointestinal bleeding in the elderly carries a worse prognosis than in younger patients, the prognosis being particularly poor when bleeding is due to varices.¹ Until recently shunt surgery or conservative treatment was the only option available; shunt surgery carries a very high risk of encephalopathy in older patients, and half of all patients treated conservatively rebleed within six months.² Injection sclerotherapy has now become accepted as an effective alternative to shunt surgery and is suitable for all ages. We report our experience of treating elderly patients with this technique and compare the results with those obtained in younger patients to ascertain whether an active sclerotherapy programme benefits the elderly.

Patients and methods

Between 1980 and 1987 we admitted 207 patients to our acute gastrointestinal unit with a first variceal bleed. Sixty one were over 65 at their initial presentation. All patients received injection sclerotherapy within 12 hours of admission, but this was preceded by balloon tamponade in those who were bleeding at their initial endoscopy. Most patients had sclerotherapy performed under sedation with a flexible endoscope, 21 having the procedure under a general anaesthetic. Patients in whom bleeding was still uncontrolled had emergency surgery.

All patients surviving their first bleed were managed by maintenance sclerotherapy, apart from 14 (all under 65) who had oesophageal transection and devascularisation as part of a controlled trial. Maintenance sclerotherapy (irrespective of age) consisted of injections every three weeks until all varices were thrombosed. Patients then attended for endoscopy every three months for a year and every six months thereafter. If a patent varix was detected subsequently follow up every three weeks was reinstated until all varices were thrombosed. Patients who rebled were managed in the same way as for their first bleed.

Results

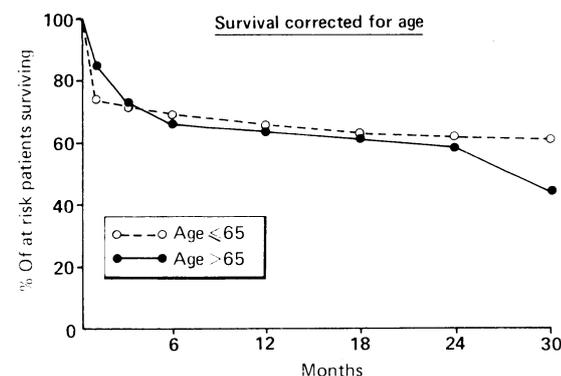
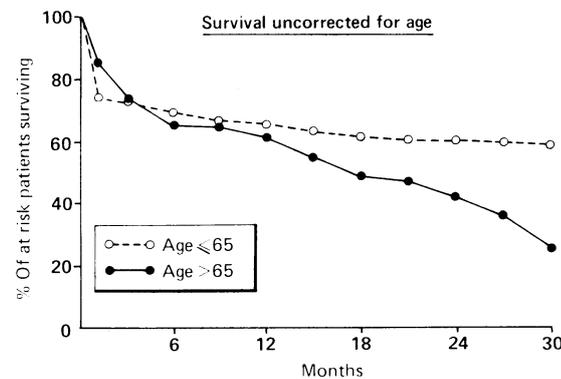
Of the 61 patients aged over 65 at their first presentation, just over half were women. By contrast, among the younger patients there were more men. There was no significant difference in sex ratio with the

various aetiologies according to age. Of the over 65s, 25 (41%) were aged 66-70, 21 (34%) were aged 71-75, 10 (16%) were aged 76-80, and 5 (8%) were over 80. Table I shows the sex ratios, aetiologies, and Child's grades of liver disease in the two groups.

Mortality due to the first bleed was higher in younger patients (39/146; 27%) than in older patients (10/61; 16%), but this difference was not significant when corrected for Child's grade. During median follow ups of 25 and 15 months in younger and older patients, respectively (range 1-60 months for both groups), crude survival was considerably worse in older patients (figure). Survival corrected for age by life table analysis, however, was virtually identical for both groups, being 65% at one year and 60% at two years (figure). In patients over 65 cumulative survival appeared to be better in women than men, being 60% v 50% at one year and 56% v 38% at 18 months

TABLE I—Details of patients studied. Figures are numbers (percentages) of patients

	Age group (years)	
	≤65	>65
No of patients	146	61
Men: women	85:61	28:33
Aetiology of liver disease:		
Alcohol	68 (47)	12 (20)
Cryptogenic	19 (13)	21 (34)
Primary biliary cirrhosis	22 (15)	10 (16)
Chronic active hepatitis	12 (8)	5 (8)
Extrahepatic	15 (10)	5 (8)
Miscellaneous	10 (7)	8 (13)
Child's grade:		
A	49 (34)	19 (31)
B	46 (32)	28 (46)
C	51 (35)	14 (23)



Crude cumulative survival (top) and age corrected (actuarial) survival in young and old patients

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respectively, though these differences may be slightly misleading owing to the greater natural longevity of women. During the whole period 40 of 66 deaths in patients aged under 65 were related to bleeding compared with only 12 of the 38 deaths in the older group (χ^2 test, $p < 0.001$); in these intercurrent disease was the more common cause. Analysis of patients aged over 70 compared with those aged 66-70 showed a similar outcome, except that deaths related to bleeding accounted for one fifth of all deaths in the older group. The equivalent figure in the group aged 66-70 was 52% (13 deaths). Virtually all deaths related to bleeding occurred within six months of initial presentation. Rebleeding occurred in a greater proportion of elderly patients (χ^2 , $p < 0.01$) and also more often (table II).

TABLE II—Treatment and outcome in patients studied. Figures are numbers (percentages) of patients

	Age group (years)	
	≤65	>65
No of patients	146	61
Mortality due to first bleed	39 (27)	10 (16)
Patients requiring balloon tamponade	51 (35)	16 (26)
Emergency surgery for bleeding	5 (3)	4 (7)
Patients who rebled	61 (42)	38 (62)
Bleeding risk factor (per patient month)	0.09	0.12
Deaths (bleeding related: non-bleeding-related):		
Months 0-6	36:8	10:10
Months 7-12	1:4	1:4
Months 13-18	1:3	1:3
Months 19-24	1:0	0:2

Comment

These results show that elderly patients with bleeding varices managed in an active sclerotherapy programme have a similar outcome to younger patients managed the same way. Twenty four (40%) of the elderly patients were transferred from other hospitals, but as survival in these was similar to patients from our own hospital, bias within groups seems unlikely. Though the aetiology of liver disease was in different proportions in the two groups, analysis of survival

within subgroups showed it to be independent of aetiology. Based on the evidence of clinical trials, most younger patients with bleeding varices are now managed—at least initially—by injection sclerotherapy.^{2,3} Not unreasonably, clinicians caring for the elderly have been reserved about the benefits of sclerotherapy in their patients, as these trials included very few elderly patients. Also such patients are often admitted to geriatric wards where emergency access to endoscopy is not readily available; and endoscopy is an essential requirement for sclerotherapy.

Our results showing the benefits of active management of bleeding varices in the elderly are supported by a study in Cologne of 61 elderly patients.⁴ Though full details of recruitment of patients were not given, those workers achieved 50% survival in both young and old groups at 24 months using a similar regimen to ours. The increased rebleeding rate seen in our elderly patients was also noted in a study of 14 patients reported by Roberts *et al* and led to more hospital admissions but seldom caused death. We emphasise that both the group in Cologne and we performed endoscopy and sclerotherapy within 12 hours of admission to hospital. This not only reduces blood loss but also reduces hepatic decompensation, which is an important cause of death. We believe that active treatment of an elderly patient bleeding from varices is well worth while and should not be denied on the basis of age alone.

- 1 Hyams DE, Fox RA. The gastrointestinal system—the liver and biliary system. In: Brocklehurst JC, ed. *Textbook of geriatric medicine and gerontology*. Edinburgh: Churchill Livingstone, 1985:557-88.
- 2 Macdougall BRD, Westaby D, Theodossi A, Dawson JL, Williams R. Increased long term survival in variceal haemorrhage using injection sclerotherapy. *Lancet* 1982;ii:124-7.
- 3 Terblanche J, Bornman PC, Kahn D, *et al*. Failure of repeated injection sclerotherapy to improve long term survival after oesophageal variceal bleeding. *Lancet* 1985;iii:1328-32.
- 4 Schellong H, Huber P, Stutzer H. Ergebnisse der Behandlung der Oesophagusvarizenblutung 70-bis 90-jähriger Patienten: eine prospektive Untersuchung. *Dtsch Med Wochenschr* 1987;112:402-5.
- 5 Roberts CM, Carey B, Faizallah R, *et al*. Injection sclerotherapy for oesophageal varices in the elderly. *Age Ageing* 1983;12:139-43.

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Human papillomavirus infection and cervical intraepithelial neoplasia in women with renal allografts

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Abstract

An increased prevalence of cervical cancer has been observed in immunosuppressed women, but controlled studies are rare. Biopsy specimens from 49 women with renal allografts and 69 non-immunosuppressed controls (with no history of cervical intraepithelial neoplasia, vulval warts, or abnormal results of cervical smear tests) were assessed for colposcopic appearance, cytological and histological diagnosis, and the presence of human papillomavirus types 6/11 and 16/18 DNA sequences. At colposcopy 26 (53%) of the women with allografts had cervical abnormalities compared with 20 (29%) of the controls. The prevalence of cervical intraepithelial neoplasia was significantly higher in the women with allografts (24 (49%) compared with 7 (10%)). The overall rate of detection of human papillomavirus DNA did not differ significantly between the two groups. There was, however, a significant difference in the rate of detection of human papillomavirus type

16/18 DNA (27% in the women with allografts and 6% in the controls).

These data confirm that pathological and virological changes affecting the cervix are significantly increased in immunosuppressed women and emphasise the need for regular colposcopic examination.

Introduction

An increased prevalence of malignancy in general¹ and of both intraepithelial and invasive neoplasia of the female genital tract has been observed in immunosuppressed patients.^{2,5} Porreco *et al* reported a 14-fold increase in the prevalence of cervical intraepithelial neoplasia in women with renal allografts over that in women of the same age in the general population,⁶ and this was confirmed by others.⁷⁻¹¹ In 1977 zur Hausen suggested that human papillomavirus might be implicated in the pathogenesis of neoplasia of the lower genital tract.¹¹ Analysis of the results of a large number

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