people in the community.³ About two thirds of people in psychogeriatric or geriatric wards and private nursing homes were incontinent of urine, which concurred with earlier findings.² Around one third of residents in local authority and private residential homes were incontinent of urine, which also agreed with earlier work.¹

These findings, which covered the whole range of long term care settings, showed a substantial overlap of incontinence and physical dependency between nursing and residential care. More acute and geriatric patients were catheterised which, although in some cases would have been for the management of an acute illness, could also indicate some inappropriate usage.

In conclusion, the high prevalence of urinary, faecal, and double incontinence and the widely divergent use of aids in different settings indicates the need for

greater specialist attention for these problems and their management.

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Conflict of interest: None.

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Contamination with blood during management of epistaxis

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The management of medical emergencies is known to expose medical staff to the risks of blood contamination,¹ including infection with HIV and hepatitis B virus.² Epistaxis is one of the commonest otolaryngological emergencies, requiring treatment that may range from simple chemical cautery to major arterial ligation. We assessed the risk of blood contamination to junior medical staff during the treatment of acute epistaxis and determined patient opinion regarding the junior doctors' use of protective clothing.

Patients, methods, and results

Fifty consecutive cases of acute epistaxis treated by two junior medical staff were prospectively studied. Clean protective theatre clothing with gloves, mask, full face visor, hat, and apron was worn during the treatment of all 50 cases. After treatment, all items of clothing were examined thoroughly for visible blood contamination. Patients were invited to fill in a confidential questionnaire asking whether they felt each specific item of protective clothing their doctor had worn was both appropriate and acceptable to them.

One patient stopped bleeding with manual pressure and required no further treatment. Contamination occurred in 69% (34/49) of actively treated cases. In 27 cases clothing in addition to the gloves was contaminated (55% of all cases). Aprons were soiled in 25 cases, gowns in 22, visors in seven, and masks in six. Contamination varied according to the treatment required (table). If patients were treated with chemical or electrical cautery, contamination extended beyond

the gloves in 38%, compared with 74% if a nasal pack was required.

Forty nine questionnaires were returned (98%). Forty eight patients found it acceptable and appropriate for doctors to wear protective theatre dress and 46 recognised the need for a protective mask/visor; 15 felt it would be inappropriate for staff to treat them while wearing smart work clothes.

Comment

We have shown that a high incidence of blood contamination occurs during the treatment of epistaxis, especially if a pack is required. A considerable proportion of blood splashes occurred in the facial area, implying a very real risk of viral transfer through the conjunctivae or buccal mucosa if no facial protection is worn. Although the management of epistaxis is an emergency classified by the Department of Health as a category A(i) procedure,² in many departments in the United Kingdom the minimum of protective clothing is worn.³ Perhaps this is because junior staff underestimate the incidence of blood splashes⁴ and because cases are usually managed in treatment rooms adjacent to the ward or outpatient clinic, along with other ward or clinic work for which medical staff traditionally wear smart attire. In some accident and emergency departments, after the discovery of high contamination rates,¹ staff now wear protective clothing when treating all patients and have found such garments to be adequate for skin protection³ and perfectly acceptable to the public, providing they are clean, tidy, and professional.⁵ We have shown that in today's infection conscious climate, most patients find the routine wearing of protective dress acceptable during the treatment of epistaxis. There is now a strong case for extending the use of protective clothing to include other medical staff engaged in emergency care.³

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Conflict of interest: None.

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Incidence of blood contamination in 50 cases of acute epistaxis according to treatment. Values are numbers (percentages)

Treatment	No contamination (n=15)	Contamination	
		Gloves alone (n=7)	Beyond gloves (n=27)
Cautery (n=26)	13 (50)	3 (12)	10 (37)
Nasal packing (n=23)	2 (9)	4 (17)	17 (74)