Wound management by aged care specialists

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Abstract

As the population ages, wound management increasingly requires the expertise and resources of specialists in aged care. This paper presents a survey of the wound management practices and knowledge of Australian geriatricians. Seventy five per cent felt they had sufficient knowledge to manage a lower limb ulcer, but only 41 per cent were comfortable advising on the management of more complex ulcers. Twenty four per cent were unaware of any specialist wound clinic available to see their patients. For 39 per cent of the doctors, more than 10 per cent of their patients had lower limb ulcers although it was not usually the patients' primary problem.

These aged care doctors used a range of wound management products but 6.5 per cent indicated that they used gauze dressings and only 42 per cent always, or nearly always, recommended compression for an uncomplicated venous ulcer. Some 65 per cent always or nearly always had access to a nurse to assist them with dressings. Fifty six per cent never or almost never used a written protocol when managing wounds and only 22 per cent always or nearly always used a risk assessment tool to estimate pressure ulcer risk.

It is concluded that comprehensive wound management education would be valuable for these aged care specialists, and that there is a need for more wound clinics staffed by geriatricians.

Introduction

Australia's population is ageing rapidly, increasing the number of people with age-related diseases including leg ulceration, pressure ulcers and chronic wounds. Whilst the majority of older people are medically managed by their general practitioner and specialists without extensive aged care training, patients with more complex needs may be referred to geriatricians and other specialists with additional aged care expertise. Additionally, it has been demonstrated that older patients of a specialist wound clinic are likely to have multiple medical diagnoses and functional impairments best managed by an aged care specialist [1, 2].

Thus, it is important that geriatricians and other aged care specialists have adequate knowledge of wound management, and that there are sufficient specialists in aged care with additional wound management expertise to staff wound management clinics.

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Little is known, however, about aged care specialists' knowledge of wound management. To date there has been no Australian survey of this. This study aims to redress this by presenting the results of a questionnaire sent to all members of the Australian Society for Geriatric Medicine (AGSM) which is the only professional body for Australian medical specialists in aged care. Almost all Australian geriatricians are members of the ASGM, but membership is open to other doctors with a major interest in aged care, as well as to trainee geriatricians.

Methods

A questionnaire was developed to assess wound management knowledge and practice. Samples of questions were:

1. *Do you feel your clinical knowledge of wound management is sufficient for you to act as the advising doctor for a patient with a lower limb ulcer?*
   ☐ *Yes* ☐ *No*

9. *How complete is your knowledge of moist wound management principles and product?*
   ☐ *Quite complete* ☐ *Not very complete*
   ☐ *Moderately complete* ☐ *Quite incomplete*

There were 18 questions in all, on four pages. The questionnaire was piloted amongst five geriatricians and feedback incorporated from these geriatricians.

In January 2001, the questionnaire was mailed to all listed members of the ASGM. A covering explanatory note was included. The questionnaire required 5-10 minutes to complete. Responses were accepted until May 2001. The survey was anonymous and no follow up reminders were sent out. There was no payment for completion of the questionnaire.

The results were statistically analysed in October 2001 using the Statistical Package for Social Services (SPSS). Results are presented as percentages of those answering each question. For each question, response rates ranged from 98-100 per cent of those returning the questionnaire.

Whilst comments on each question were not requested, a large number were received and are included in the results, even though many more comments would have been expected if specifically sought.

Results

A total of 356 questionnaires were mailed out and 127 were returned (35.6 per cent of those mailed). Most were returned within 4 weeks of the mailout.

The profession, age and estimated weekly numbers of patients seen are shown in Table 1. Of the 127 responders, 19 were not regularly managing patients – some indicated they were health administrators or retired. Of these 19, 18 indicated their age; of these, 14 (78 per cent) were above the age of 50 compared to 30 (28.9 per cent) of the 107 in clinical practice who indicated their age. The remaining results are for the 108 responders regularly seeing patients.

Clinicians were asked what proportion of patients they saw had a wound, and what proportion had a wound as their primary management problem. These results are shown in Table 2.

The first clinical question was *"Do you feel your clinical knowledge of wound management is sufficient for you to act as the advising doctor for a patient with a lower limb ulcer?"* Some 75 per cent felt they did have sufficient knowledge, and 24 per cent felt they did not – one respondent said *"it depends"*.

When asked whether they felt comfortable acting as the advising doctor for a patient with a straightforward lower limb ulcer, 87 per cent said they did and 12.9 per cent said they did not. For a more complex lower limb ulcer (for example, a large non-healing ulcer of as yet uncertain aetiology), 40.7 per cent said they were generally comfortable acting as advising doctor whilst 58.3 per cent said they did not; one respondent was only partially comfortable. The clinicians were then asked if they generally preferred to refer on patients with more complex lower limb ulcers to other

Table 1. Profession, age and weekly numbers of patients seen by respondents.

	Percentage
Profession	
Geriatrician	82.4
Other specialist	5.6
General practitioner	5.6
Trainee geriatrician	5.6
Hospital medical officer	0.9
Age (yrs)	
20-30	2.4
30-40	32.3
40-50	29.1
50-60	22.0
60-70	7.9
Above 70	4.7
Not stated	1.6
Weekly number of distinct patients seen	
0-10	6.5
10-20	8.3
20-30	31.4
30-40	29.6
40-50	11.1
50-100	5.6
Above 100	7.4

Table 2. Wounds seen in clinical practice.

	Percentage
Proportion of patients seen who have a wound	
0-5%	21.5
5-10%	39.3
10-20%	25.2
20-50%	14.0
Above 50%	0.9
Proportion of patients seen who have a wound as their primary management problem	
0-5%	72.0
5-10%	24.3
10-20%	2.8
20-50%	1.8
Above 50%	0

specialists – 71.9 per cent said they did, 26.2 per cent said they did not and 1.8 per cent said their practice varied.

When questioned on their awareness of a specialist wound management service available to see their patients, 75.9 per cent said they were aware of such a service and 24.1 per cent were unaware. Two respondents identified that they could refer to community nurses with wound management expertise, but were not aware of an additional multidisciplinary wound clinic.

The clinicians were then asked if the service was reasonably geographically convenient. Of the 82 who were aware of the service, 24.4 per cent said it was not convenient, 73.2 per cent said it was and 2.4 per cent said it was only partly convenient. When questioned about the acceptability of the waiting time for the service, 49.5 per cent said it was acceptable, 3.3 per cent said it was too long and 47.3 per cent were unaware of the waiting time.

Clinicians were then asked about their own management of patients with wounds such as lower limb and pressure ulcers; their responses are shown in Table 3. Additionally, they were asked about the completeness of their knowledge of moist wound management principles and products: 8.3 per cent said their knowledge was quite complete, 52.8 per cent said it was moderately complete, 27.8 per cent said it was not very complete, 9.3 per cent felt it was quite incomplete and 1.9 per cent failed to respond to this question.

Some clinicians specified that they use several products for uncomplicated lower limb ulcers, which explains why the total percentage in Table 3 exceeds 100 per cent. Some stated that they used products in sequence, or that their choice of product depended on the nature of the ulcers. Comments on the use of compression included concerns about the cost and compliance, limiting the frequency of recommending it.

Clinicians were asked about how long they spent assessing new patients with lower limb ulcers; these results are shown in Table 4. They were also asked about their access to a nurse to dress the wounds of their ambulatory patients. Some 19 respondents did not see ambulatory patients, so the results for the remaining 89 respondents are shown in Table 5.

Finally, clinicians were asked about their use, or access to the results of, an assessment tool of risk for pressure ulceration for inpatients under their care. The results for the 105 respondents who managed inpatients are shown in Table 6.

Table 3. Wound management practices.

	Percentage
Use of a written protocol for a lower limb or pressure ulcer	
Never, or almost never	57.4
Sometimes	25.9
Usually	12.0
Nearly always or always	1.9
No answer	2.9
Preferred wound product for uncomplicated lower limb venous ulcer	
Simple gauze dressing	6.5
Zinc dressing	18.5
Hydrocolloid film or paste	45.4
Alginate	11.1
Iodine cadaxemer	1.9
Foam	8.3
Hydrogel	13.0
Other	11.1
Several – unspecified which	0.9
No answer	1.9
Recommendation of compression bandaging for a standard venous ulcer	
Always, or nearly always	41.7
Usually	28.7
Sometimes	18.5
Never or almost never	9.3
"Depends"	0.9

Discussion

The response rate of 35.6 per cent, whilst not extremely high, is fair for an unsolicited and unrewarded mail questionnaire. That some 15 per cent of respondents were not practising clinical medicine suggests considerable goodwill and willingness to respond by the recipients of the survey. These non-clinicians were considerably older than the responding clinicians, suggesting that the non-clinicians included retired and semi-retired members of the ASGM.

The responding clinicians were mainly geriatricians (82.4 per cent) and most practised in both ambulatory (82.4 per cent) and inpatient (97.2 per cent) settings. Their median age of 40-50 years is representative of that of all consultant geriatricians – a recent workforce survey by the Royal Australasian College of Physicians found the mean age of consultant physicians to be 47 years [3]. These were busy consultant clinicians, with a median clinical load of 30-40 distinct patients per week, or around five per day. Most of the

Table 4. Time spent assessing a new patient with a lower limb ulcer.

Time (minutes)	Percentage
0-15	36.1
15-30	32.4
30-45	18.5
Above 45	11.1
No answer	1.9

Table 5. Access to a nurse to assist in dressing wounds of ambulatory patients.

	Percentage
Always or nearly always	65.2
Usually	11.2
Sometimes	14.6
Never or almost never	9.0

Table 6. Use of (or access to results of) a risk assessment tool for pressure ulceration risk of inpatients.

	Percentage
Always or nearly always	21.9
Usually	16.2
Sometimes	24.8
Never or almost never	37.1

extremely busy respondents, seeing over 100 patients a week, were general practitioners (who may join the ASGM) but these were only 5.6 per cent of all responding clinicians.

The responding clinicians were seeing a considerable number of patients with wounds – a median of 5-10 per cent of their patients, with 44.9 per cent having above 10 per cent of patients with wounds. However, the median number of patients with a wound as their primary problem was less than 5 per cent of patients seen, but 29 per cent had more than 8 per cent of their patients with a wound as their primary care need.

Only 75 per cent of respondents felt they had sufficient clinical knowledge of wound management to act as the advising doctor. The alarming information here is that it was not 100 per cent of these aged care specialists. It was higher (87 per cent) for uncomplicated lower limb ulcers, but it was much lower (40.7 per cent) for more complex ulcers. Fortunately, a significant proportion of respondents (72 per cent) were happy to refer on more complex patients to other specialists, including 96.2 per cent of those who felt insufficiently skilled to act as the advising doctor.

Whilst this willingness to refer is beneficial to patient management, it is desirable that 100 per cent of aged care specialists feel sufficiently trained to manage at least uncomplicated ulcers. However, 10 out of the 14 (71.4 per cent) clinicians who felt uncomfortable acting as advising doctor for a patient with an uncomplicated lower limb ulcer identified themselves as a geriatrician. Therefore, it appears that current training in geriatric medicine may not always include sufficient training in wound management to handle even patients with less complicated ulcers.

Some programmes rotate trainees through wound management clinics but there are insufficient clinics in Australia to ensure such specific exposure for all trainees. Many such clinics are run by non-geriatricians and trainees in geriatric medicine have limited access to them. Indeed, it is likely that most training in wound management is through exposure to patients outside of wound management clinics, and by supervisors (trainers) who do not themselves work in such a clinic.

This limited availability of clinics specialising in wound management is reflected in the number of clinicians who were unaware of a service available to see their patients (24.1 per cent). Of the 75.9 per cent who were aware of a service, nearly a quarter (24.4 per cent) said it was not convenient for the majority of their patients, although 45 of the 48 (91.7 per cent) who were aware of the waiting time felt it was acceptable. This availability of clinics to see patients is, of course, quite separate from the even more limited availability of clinics and their staff to educate advanced trainees in geriatric medicine.

Only 13.9 per cent of clinicians usually, nearly always or always used a written protocol to assist them in managing patients with wounds. This is of even greater concern considering that 37 per cent said their knowledge of moist wound management principles was either incomplete or not very complete. This lack of use of written protocols may reflect the still incomplete evidence base in wound management from which to design protocols and practice guidelines, as well as a reluctance by clinicians in general to utilise guidelines even when available. However, these results again show a need for greater training and knowledge – only if clinicians were better informed could a case be made for less need for written protocols.

The relative lack of knowledge and training may explain the proportion of clinicians (6.5 per cent) who still identified simple gauze dressings as an appropriate product for a lower limb ulcer, although this proportion may be less than for other specialists. Of more concern, 28.7 per cent of respondents said they never, almost never or only sometimes recommended compression for a standard lower limb venous ulcer. This may be partly mitigated by the likelihood that elderly patients have more difficulty than younger patients in applying compression, but is still too high a proportion not recommending what is, by broad consensus, standard care [4, 5].

The wide range of other products used for uncomplicated venous ulcers is acceptable – there is no consensus here, and most of these products have been shown to be effective. However, the majority of wound management clinics would favour zinc, hydrocolloid or iodine cadaxomer for an uncomplicated venous ulcer. It is reassuring that hydrocolloid was the respondents' most popular dressing. The limited number recommending iodine cadaxomer probably is due to the limited knowledge of this product until recent times.

The median time clinicians spent assessing a new patient was 15-30 minutes. Some clinicians said they spent longer if the patient had other problems, as is so often the case amongst older people. In the study by Pearson & Woodward [1, 2], 10 per cent of patients over the age of 65 attending a wound clinic had a Mini Mental State Examination score of less than 24, suggesting a dementia. Some 63 per cent either used a gait aid or were non-ambulatory, 26 per cent used three or more community support services and 79 per cent of patients had three or more medical co-morbidities. Therefore, it would seem that more than 30 minutes is often required for a suitably comprehensive assessment of these older patients with wounds. Perhaps the time actually spent reflects the busy clinical practice of these clinicians, as discussed above.

Only 76.4 per cent of the clinicians seeing ambulatory patients had access to a nurse at least usually to assist with dressings. Increased availability of nursing assistance would improve efficiency in the clinical setting. It is possible that without a nurse available, wounds are simply not being examined (avoiding the need to replace the patients' current dressings), less appropriate dressings are being applied by the (busy) clinician himself/herself, or patients are being sent away with a temporary dressing only. Additionally, nurses' knowledge of wound management is a valuable resource that is lost when no nurse is available.

Some 61.9 per cent of clinicians regularly seeing inpatients did not usually use or have access to the results of a risk assessment tool to determine risk of pressure ulceration. This is contrary to the recently released *Australian Clinical Practice Guidelines for the Prediction and Prevention of Pressure Ulcers* [6] and it is hoped that the wide dissemination of these guidelines will improve clinical practice by all clinicians.

Summary

This is the first survey of Australian geriatricians' knowledge of wounds and their wound management priorities. Whilst many respondents were comfortable with the field, some clearly felt undertrained. One must wonder whether other doctors dealing with wounds (e.g. general practitioners) feel even less well trained.

Recommendations

The content of undergraduate and postgraduate medical curricula should be examined for content related to wounds and wound management and adjusted if (as this questionnaire suggests is likely) the content is found to be inadequate. This will help to ensure sufficient knowledge of wound management is available to all doctors.

Wound management can be a complex clinical area, as can be the overall care of older patients. Aged care specialists are experts in complex care and knowledge of wound management is a particularly important part of this expertise. This survey has revealed considerable room for improvement in this knowledge and subsequent practice.

One way to respond to this training need would be to increase the number of wound clinics either run by or involving geriatricians and to which trainees would have access. These clinics would also be available to more complex patients with wounds and would be able to produce appropriate practice guidelines to assist in the management of patients not attending the clinic. State health departments and hospitals should give this a high priority. In the absence of such exposure being available on site, supervisors of trainees in geriatric medicine should try to ensure an external rotation of their trainees through a wound clinic.

Widespread dissemination of the *Australian Clinical Practice Guidelines for the Prediction and Prevention of Pressure Ulcers* [6]

would also be of great assistance in improving geriatricians' knowledge of this common problem. Practising clinicians who feel their training in wound management has been suboptimal should pursue additional training themselves. We cannot afford to have our aged care specialists less than comfortable with managing these common clinical problems.

References

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