Does long-term follow-up have a role for node negative squamous carcinoma of the vulva? The Gateshead experience

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Summary

A retrospective review was performed of 138 cases of squamous vulval cancer referred to Gateshead between 1986 and 1997, with a median follow-up of 48 months. Eighteen recurrences were detected, 11 within one year of surgery. All nine patients with groin/distant recurrence (including 4 presenting initially with local recurrence only) died of vulval cancer. Vulval pain [9], bleeding [3] or other symptoms heralded all recurrences. Routine review was ineffective in detecting recurrence. Eight cases were detected by general practitioners, three by specialists, and one was self-diagnosed. Six of these had had clinical review less than two months previously. Follow-up does not appear to offer early detection or survival advantages. Patient education, with symptom-triggered rapid clinic access, may be more effective. Prospective research is indicated to assess both the effectiveness and psychological implications of routine follow-up and alternative strategies.

Key words: Vulval cancer; Negative lymph nodes; Recurrence; Follow-up.

Introduction

The effectiveness of long term follow-up in endometrial cancer [1-3] and cervical cancer [4] has been questioned in recent publications. Very few asymptomatic cases of disease recurrence are detected by routine clinic review, and survival rates after recurrence do not differ between patients whose recurrence was identified at routine follow-up and those who initiated visits after symptoms developed [5]. The routine follow-up schedule for gynaecological oncology patents in Gateshead is review with clinical examination every three months for one year, bi-annually during the second year, and annually thereafter. Ovarian, cervical and endometrial cancer patients are generally reviewed for ten years, whilst cases of vulval cancer are monitored indefinitely.

Twenty to 30 new cases of vulval cancer are managed at Gateshead annually. Corrected 5-year survival for 100 cases managed by the triple incision surgical approach has been reported as 74.6%, increasing to 92.3% for node negative cases [6]. Reviewing the mode of presentation of disease recurrence, this paper assesses the value of routine long-term follow-up for this good prognostic group.

Materials and Methods

Of 244 newly diagnosed cases of squamous vulval cancer referred to Gateshead between 1986 and 1997, 83 had histologically confirmed positive groin nodes. Node negative squamous vulval carcinoma cases were identified from the department's clinical database, and the case notes reviewed. One hundred and thirty-eight cases with full details of clinical presentation, surgery and histopathology comprised the study population. Where necessary, referring consultants and general practitioners were contacted to augment the clinical records. Data were analysed using SPSS 8.0.0 statistical software. Standard statistical tests including Chi-Square and Kaplan-Meier survival analyses were performed.

Results

Patient ages ranged from 24 to 93 years, with a median of 73 years. Twenty percent of patients were aged over 80 years at the time of surgery. Seventy cases were FIGO (1995) Stage 1B, 46 Stage 2, 20 Stage 3 and two Stage 4. Thirty-one of 47 patients (69%) aged less than 65 years presented with Stage 1 disease, compared with 37 of 91 patients (42%) aged 65 and above (p=0.005). One hundred and sixteen patients (84%) underwent groin node dissection through separate incisions [6], with the primary tumour excised by radical vulvectomy, radical ano-vulvectomy or radical local excision. Extensive anterior tumours were treated by *en bloc* radical vulvectomy and bilateral groin dissection in 11 cases (8%), and 11 patients (8%) with small lateral primary lesions underwent radical local excision and unilateral groin node dissection.

The median duration of follow-up was 47.5 months. The range was 18-139 months, except for two supra-regional referrals lost to follow-up after four months and eight months, respectively.

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Table 1. – *Case Summaries, Mode of Diagnosis of Recurrence: Node Negative Squamous Vulval Carcinoma*

Case	Age	FIGO stage (1995)	Squamous Differentiation	Interval to Recurrence (months)	Site of Disease at Diagnosis of Recurrence	Practitioner Responsible for Clinical Diagnosis of Recurrence	Presenting Symptom of Recurrence	Sign Identified by Practitioner Diagnosing Recurrence	Routine Review Interval at time of Diagnosis of Recurrence (months)	Completed Months from Clinic Review to Recurrence Diagnosis	Duration from Recurrence to Death* / Last Seen# (months)	Cause of Death / Current Status
1	72	3	poor	1.0	distant	General Practitioner	systemic	multiple	3	1	4.3*	vulval Ca
2	87	2	well	1.4	local+groin	Clinical Oncologist	groin lump	groin mass	–	–	2.4*	vulval Ca
3	71	1B	well	5.2	local	Dermatologist	vulval pain	vulval lesion	3	1	22.4*	vulval Ca
4	79	1B	poor	5.3	local	Routine Follow-Up	vulval pain	vulval lesion	3	3	1.9*	adenoCa lung
5	78	1B	moderate	5.7	local+groin	Lymphoedema Clinic	vulval pain	vulval+groin	3	1	5.4*	vulval Ca
6	65	2	well	5.8	local	Routine Follow-Up	vulval lump	vulval lesion	3	3	23.5#	no disease
7	78	2	well	6.5	local+groin	General Practitioner	groin lump	groin mass	3	1	3.8*	vulval Ca
8	71	2	poor	7.1	local	General Practitioner	bleeding	vulva lesion	3	0	11.3*	vulval Ca
9	80	3	well	8.5	local	General Practitioner	vulval pain	vulval lesion	3	2	2.5*	vulval Ca
10	61	1B	well	8.8	local	General Practitioner	bleeding	vulval lesion	3	1	26.8#	no disease
11	79	1B	well	8.8	local	General Practitioner	bleeding	vulval lesion	12	4	13.6*	heart disease
12	80	2	moderate	9.2	groin	Routine Follow-Up	groin pain	groin mass	3	4	1.5*	vulval Ca
13	46	3	well	36.8	local	Routine Follow-Up	vulval pain	vulval lesion	6	6	18.9#	no disease
14	69	1B	moderate	42.5	local	Routine Follow-Up	vulval pain	vulval lesion	3	3	14.5*	vulval Ca
15	82	2	well	48.0	local	Routine Follow-Up	vulval lump	vulval lesion	4	4	37.3#	no disease
16	77	1B	moderate	61.1	local	General Practitioner	vulval pain	vulval lesion	12	3	79.1#	no disease
17	74	1B	moderate	70.0	local	Patient Reported	vulval pain	vulval lesion	12	7	38.0#	no disease
18	75	1B	poor	85.4	local	General Practitioner	vulval pain	vulval lesion	6	3	34.3*	heart disease

There were 18 tumour recurrences (13%), 13 initially considered to be confined to the vulva, and five with evidence of groin or distant metastases at the time of diagnosis (Table 1). The median interval from surgery to recurrence was 8.7 months (range 1.0-85.4 months). Twelve of the 18 recurrences were diagnosed within the first 12 months. There was no difference in the rate of recurrence comparing the form of surgical dissection (*en bloc*, separate groin incisions, and unilateral groin dissection) (p=0.53).

Nine deaths were attributable to vulval cancer, including all five patients with groin or distant metastases identified at detection of recurrence. The other four cases presented with only local recurrence, but all developed evidence of groin or pelvic disease within four months. In addition, there was one peri-operative death. Thirty-seven patients have died from other causes, including three patients with local disease recurrence. Ninety-one patients are alive and disease-free, including six with successfully treated local vulval cancer recurrence. The overall 5-year survival was 66.4%. With no deaths attributable to vulval cancer after five years, the corrected 5-year and 10-year survivals (excluding deaths from other causes) were 91.1% (Kaplan Meier). The only two recurrences in the cohort of 47 patients aged less than 65 years were successfully treated.

All five cases presenting with groin or distant metastases had recurrence confirmed within 12 months of surgery. Three of the four cases with groin or distant metastases detected shortly after presentation with local recurrence, also presented within the first year. Thus only one patient who presented with recurrent disease beyond 12 months postoperatively died of her disease. Case 14 *(Table 1)* presented 42 months after initial surgery, and succumbed 14 months later to metastatic disease that appears to have arisen from recurrent carcinoma. All other recurrences beyond nine months proved to be confined to the vulva, and were successfully treated.

All 18 cases had symptomatology at the time of detection of recurrence *(Table 1)*. Nine patients complained of vulval pain, and three patients complained of vulval bleeding. A vulval lump was detected by two patients, whilst two others noticed a groin lump. One patient complained of systemic symptoms (pain, cough and loss of weight), and the other described groin pain. Five of six recurrences beyond 12 months complained of vulval pain, and the other noticed a vulval lump.

One patient (Case 2, Table 1) had progressive disease detected during adjuvant radiotherapy, performed because of incomplete deep surgical resection margins following *en bloc* radical vulvectomy for an aggressive periclitoral tumour. Excluding this patient, all were undergoing regular clinic review at the time of diagnosis of recurrence, 11 on a 3-month schedule *(Table 1)*. Eleven cases were under regular clinic review in our department and the other six were under the care of the referring gynaecologist. However, recurrence was detected during a routine follow-up clinic review in only six cases. The interval from the last clinic review to diagnosis of recurrence was three months or less for 12 of the 17 patients. Excluding Case 2, six of the 11 patients who presented outside routine follow-up had been seen in clinic less than two months previously, and for nine of the 11 the interval since review was less than four months.

Presentation to a general practitioner with symptoms was the most common mode of recurrence detection, accounting for eight patients *(Table 1)*. Physicians detected recurrence in three cases (including Case 2, detected

by a clinical oncologist), and one patient requested an early clinic appointment suspecting recurrence because of vulval pain. Of the 11 patients undergoing a 3-month review at the time of detection of recurrence, the diagnosis was made during routine clinic review in only four cases. There is clear evidence that symptoms suggesting recurrence were presented at routine review in two further cases. However, inexperienced medical staff failed to make the diagnosis, which was subsequently made by another practitioner within one week. There is also evidence of patients delaying presentation of symptoms until their routine clinic review. One elderly patient undergoing a scheduled 3-month review suffered from vulval pain for "more than two months" before reporting it at her routine appointment, and a premenopausal woman waited for nine weeks until her 6-month review to report vulval pain.

Of the six cases of recurrence detected by routine clinic review, five initially had disease confined to the vulva, and one had groin involvement. Of the 11 cases undergoing routine review whose recurrence was detected outside this process, eight initially had evidence of vulval disease only. Two of the six patients with recurrence detected in routine clinic follow-up proved to have metastatic disease and died of vulval cancer. Including Case 2, detected before commencing follow-up, seven of the 12 patients whose recurrence was detected outside their regular clinic review succumbed to metastatic disease.

Discussion

Five hundred and eighty-four consultant gynaecologists in the United Kingdom practise 106 different cancer patient follow-up protocols [7]. The expressed purposes of follow-up included patient reassurance, outcome data collection, detection of early recurrence and medico-legal defensive practice. There has been only limited research assessing patient preferences and psychological aspects of long-term follow-up after cancer surgery, particularly pertaining to gynaecological cancer [8]. Bradley *et al.* [9] involved 12 gynaecological cancer patients in qualitative interviews, and concluded that the reassurance gained from follow-up visits is valued by patients and fulfills a psychological need. However, the issues are complex, as the semi-structured interviews also highlighted patients' feelings of apprehension and vulnerability prior to follow-up appointments. Whilst this supports earlier data suggesting follow-up appointments initiate anxiety [8], longitudinal quantitative psychological assessment of patients undergoing breast cancer follow-up suggest regular follow-up visits temporarily decrease psychological distress and fear of recurrence [10]. All research in this field must be interpreted in the context of the medical model that traditionally promotes long-term cancer patient follow-up, establishing and reinforcing patient expectations.

This retrospective review highlights both the high incidence of symptoms experienced by patients with recurrent vulval cancer, and the ineffectiveness of routine follow-up in detecting recurrence. Recurrence after squamous vulval cancer surgery with negative groin nodes is uncommon, and in our series asymptomatic recurrence was not detected. Recurrence in the groin and beyond has a poor prognosis, whilst local recurrence is usually successfully treated, no matter whether it is detected within or outside routine follow-up.

Disease recurrences can be missed within the setting of a busy follow-up clinic, particularly by inexperienced staff. Cases have been highlighted where diagnosis was paradoxically delayed by routine follow-up because patients deferred presentation of symptoms until planned clinic visits. We suggest that promoting awareness of the symptoms of pain, bleeding and lumps, and replacing arbitrary follow-up schedules with symptom-triggered rapid clinic access, is unlikely to delay and may expedite detection of recurrence. Such a strategy may also fulfill the psychological needs of patients, who describe clinic visits as particularly reassuring at times of critical incidents, such as unexpected symptomatology [9]. The cost-effectiveness of routine follow-up is questioned by the limited research data [5], and minimising the existing schedule may enable redirection of funds into other aspects of the oncology service.

Most disease recurrences and all but one fatal recurrence in our series of node-negative squamous vulval cancer were diagnosed within the relatively high-risk first postoperative year. Regular patient contact during this period may be of value, providing a forum for clinical review by experienced staff, patient education, and psychological support.

Conclusion

Long term follow-up is an established tradition in oncology practice. However, when evaluated in the management of gynaecological cancer patients, no evidence of benefit in terms of early diagnosis of recurrence or improved survival has been demonstrated. This series questions the value of follow-up in node negative squamous vulval carcinoma. Data on the psychological aspects of follow-up and patient preferences are complex and inconclusive. Prospective research is indicated to assess both the effectiveness and psychological implications of alternative strategies.

References

[1] Allsop J. R., Preston J., Crocker S.: "Is there any value in the long term follow up of women treated for endometrial cancer?". *Br. J. Obstet. Gynaecol.*, 1997, *104*, 119.

[2] Owen P., Duncan I. D.: "Is there any value in the long term follow up of women treated for endometrial cancer?". *Br. J. Obstet. Gynaecol.*, 1996, *103*, 710.

[3] Salvesen H. B., Akslen L. A., Iverson T.: "Recurrence of endometrial carcinoma and the value of routine follow up". *Br. J. Obstet. Gynaecol.*, 1997, *104*, 1302.

[4] Ansink A., Lopes A. Db, Naik R., Monaghan J. M.: "Recurrent Stage 1B cervical carcinoma: evaluation of the effectiveness of routine follow up surveillance". *Br. J. Obstet. Gynaecol.*, 1996, *103*, 1156.

[5] Eastwood A., Melville A., Kleijen J.: "Guidance on Commissioning Cancer Services. Improving Outcomes in Gynaecological Cancer. The Research Evidence". *NHS Centre of Reviews and Dissemination*, University of York for the NHS Executive, 1999.
[6] Grimshaw R. N., Murdoch J. B., Monaghan J. M.: "Radical vulvectomy and bilateral inguinal-femoral lymphadenectomy through separate incisions – experience with 100 cases". *Int. J. Gynecol. Cancer*, 1993, *3*, 18.
[7] Kerr-Wilson R. H;, McCrum A.: "Follow-up of patients with gynaecological cancer". *Aust. N. Z. J. Obstet. Gynaecol.*, 1995, *35*, 298.
[8] Auchincloss S. S.: "After treatment. Psychosocial issues in gynecologic cancer survivorship". *Cancer*, 1995, *76 (10 Suppl.)*, 2117.
[9] Bradley E. J., Pitts M. K., Redman C. W. E., Calvert E.: "The experience of long term hospital follow-up for women who have suffered early stage gynaecological cancer: a qualitative interview study". *Int. J. Gynecol. Cancer*, 1999, *9*, 491.
[10] Kiebert G. M., Welvaart K., Kievit J.: "Psychological effects of routine follow up on cancer patients after surgery". *Eur. J. Surg.*, 1993, *159*, 601.

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