VULVAR AND VAGINAL MELANOMA

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CLINICAL FINDINGS AND TREATMENT

	Age	Localisation	Clinical status of lymph node	Surgical status of lymph node	AJCC		Surgery	Adjuvant therapy
					TNM	stage		
1	63	Labium major	Negative	Negative	T4aN0M0	IIB	WE	Immunotherapy
2	81	Vagina	Negative	Negative	T4aN0M0	IIB	WE	
3	77	Vagina	Negative	Positive	T4bN1M0	IIIA	WE+GD	
4	74	Labium minor	Negative	Positive	T4bN3M1a	IV	WE+GD	Immunotherapy
5	73	Labium minor	Negative	Negative	T4aN0M0	IIB	WE+GD	Immunotherapy
6	73	Vagina	Negative	Negative	T4aN0M0	IIB	WE+GD	Immunotherapy
7	56	Mons pubis	Negative	Negative	T1aN0M0	IA	WE+GD	Immunotherapy
8	47	Labium minor	Negative		T1aNxM0	IA	WE	Immunotherapy
9	75	Labium major	Negative	Positive	T4bN1bM0	IIIB	RV+GD	Immunotherapy
10	69	Labium major	Negative	Negative	T3aN0M0	IIA	WE	Immunotherapy
11	60	Labium major	Negative	Negative	T3bN0M0	IIB	RV+GD	Immunotherapy

WE- wide excision, RV- radical vulvectomy, GD- groin dissection

Introduction

Primary melanoma of the lower genital tract is a rare disease but the second most common neoplasm, it represents 5 percent of all melanomas and about 10 percent of all malignancies of this region.

Material and methods This study reports the clinical and histolopathological findings, treatment and outcome of 8 patients with vulvar melanoma and 3 patients with vaginal melanoma managed at the Regional Melanoma Center at University Hospital in Ostrava between 2000 and 2007. Patients were ranging in the age from 47 to 81, with mean age of 77. The first symptoms noticed by the patients were pruritus or bleeding. All of the initial lesions were nodular pigmented tumors and eight of them were ulcerated and bleeding lesions.There were several surgical treatment options according to localisation, diameter, depth of the tumor and clinical nodal status, cause superficial lesions may need only wide local exision, thus avoiding the morbidity associated with a more radical operation. All patients were retrospectively staged according to the AJCC staging system. Primary tumors were assessed according to Breslow and Clark microstaging system and histologic slides were evaluated for the folowing factors: ulceration cell type lymphangioinvasion, angioinvasion, neurotropismus, mitotic activity, immune response, satelites and positivity of the HMB 45, S 100 and Melan A antibodies.

Recurrences were classified as local, nodal or distant. The time to recurrence was calculated from the date of primary surgery to the date that reccurence was documented. Length of follow up was calculated from the date of primary surgery to the date of death or the date of last contact for those who remained disease-free.

HISTOPATHOLOGICAL FINDINGS

	Breslow mm	Clark	Ulceration	Histological type	Lymph/ Angio-invasion	Neuro-tropismus	Mitotic activity
1	5	IV	+	Epiteloid cells	-/-	-	+++
2	13	V	+	Epiteloid cells	-/+	-	+++
3	27	V	+	Epiteloid cells	+/+	+	+++
4	8	V	+	Epiteloid cells	+/-	+	
5	14	IV	+	Spindle cells	+/-	-	
6	7	V	+	Epiteloid cells		-	+++
7	0,6	III	+	Spindle cells		-	
8	0,5	II	-	Epiteloid cells	-/-	-	0
9	6	III	+	Epiteloid and spindle cells	+/-	-	+
10	5	IV	-	Spindle cells	+/-	+	+
11	3,7	IV	+	Spindle cells	-/-	-	++

OUTCOME

	Site of reccurence	Time to reccurence (Months)	Treatment option	OS (Months)	Status
1	Regional Distant	64 72	GD Chemotherapy	80	
2	Local and distant	3	Without therapy	14 +	DOD
3	Local	14 21 24 28	Excision Excision Excision Excision	31 +	DOD
4	Local Locoregional	6 13	Excision Radiotherapy Chemotherapy	15 +	DOD
5	Local Distant	5 46	Excision Pelvic lymphadenectomy	53	NED
6	Locoregional and distant	10	Excision	15 +	DOD
7				40	NED
8	Local	7 20 36	Excision Excision Excision	37	NOD
9				12	NED
10				7	NED
11				3	NED

GD- groin dissection, DOD- death of disease, NED- no evidence of disease

Results

Wide excision were done in 4 cases, wide excision with groin dissection and sentinel node detection (SLND) in 7 cases. The initial lesions in our serie were diagnosed at stage III-IV in 7 cases, adjuvant imunotherapy was used in 7 cases. Locoregional recurrence were at 8 cases, all of them had surgical treatment, 2 patienst palative radiotherapy and 1 patient paliative chemotherapy for distant metastases.Progressoin of the disease was the primary cause of death for 5 patients, only 1 patient survives with no evidence of disease during the 36 months follo,w up period.Median survival was 37 months.

Discussion

FIGO staging system is of minimal prognostic value, cause the major prognostic factor for risk of reccurence and survival in vulvar and vaginal melanoma is lesion depth, whether measured by absolute depth from the stratum granulosum (Breslow) or by histologic levels (Clark) and presence of ulceration. Historically, melanoma of the vulva has been treated with radical vulvectomy and un block inguinofemoral lymphadenectomy. Recent studies showed that elective regional node dissection was no more beneficial than therapeutic node dissection at time of regional reccurence. Wide local excision with selective lymph node dissection may yield equal survival rates with reduced morbidity. Patients with superficial lesions less than 1.00 mm may be spared the morbidity of radical resection. Patients with well – lateralized lesions, regardless of depth, may also be treated with a wide local excision with adequate margins and sentinel lymph node detection (SLND). Patients with central mucosal lesion require radical surgery, cause wide local excision may note effect adequate margins. **Patients with lesions deeper than 1,00 mm have a high risk of nodal or distant metastases that is unlikely to be decreased, even with the use of radical vulvectomy and bilateral inguinofemoral lymphadenectomy.** SLND has emerged as one of the most powerfull predictors of reccurence and survival with high detection rate, low false negativity and little morbidity. It identifies patients with subclinical nodal involvement who may benefit from complete lymphadenectomy and adjuvant therapy and has become widely accepted for tumors with Breslow between 1,0O – 4,00 mm. SLND is also indicated in thin tumors with Breslow less than 1mm with negative prognostic factors as presence of ulceration, high mitotic rate and age under 60 years. As with thin melanomas, the role of SLND in patients with thick tumors is also evolving but we can conclude that SLND provided essential prognostic information. It may be reasonable to consider SLND in the setting of patients who had not undergone SLND previously and who developed a local recurrence near the prior excision site or intransit metastases. Patients with positive SLN should underwent complete inguinofemoral lymphadenectomy. From these reasons SLND is strongly supported and recommended in patients with vulvar and vaginal melanomas.

Conclusions

Prognosis of vulvovaginal melanoma is poor cause of late diagnosis and advanced stage in elderly women with absence of preventive gynecological examinations as well as underestimating non typical symptoms of the patients. Public self-examination education programs along with greater physician awareness may account for the increased detection of cutaneous melanoma in early stage disease. When in doubts, it is better to consult melanoma centers and special centers for vulvovaginal diseases. Great caution should be used less aggressive surgery of primary tumor and lymphatic mapping with sentinel node detection and selective node dissection to predict lymphatic spreading and necessity of elective lymphadenectomy and usefullness of adjuvant immunotherapy.

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