VALUE OF SURGICAL LYMPH NODE ASSESSMENT FOR PATIENTS WITH VULVAR MELANOMA

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Objective: Investigate the utilization and outcomes of lymphadenectomy (LND) for patients with vulvar melanoma.

Methods: Patients with vulvar melanoma, known depth of tumor invasion, no distant metastases, with/without inguinal lymph node sampling/dissection (LND) were identified. Median overall survival (OS) was compared with log-rank test. A Cox model was constructed to control for confounders.

Results: 1286 patients were included; 808 (62.8%) underwent LND. 8.6% of patients had chemotheraphy and/or radiation therapy. Performance of LND was associated with younger age (median 66 vs 76 years, p<0.001), private insurance (42.9% vs 27.8%, p<0.001), tumor ulceration (65.9% vs 58.6%, p=0.01), deeper tumor invasion (p<0.001) and radical vulvectomy (26.4% vs 12.1%, p<0.001). Rate of LND was 55.9% when invasion ≤2 mm, 73.6% when 2.1–4 mm and 64.3% when >4 mm. LN metastases were found in 288 patients (35.6%); 26.3% when depth of invasion ≤1 mm, 20.8% when 1.01–2.0 mm, 35.9% when 2.01–4.0 mm and 50.5% when >4 mm (p<0.001). Patients with LND had better OS than those who did not (median OS 49.08 vs 35.91 months, p<0.001). Following stratification by Breslow thickness, patients with LND had better OS with invasion 1.01–2.0 mm (median OS 83.32 vs 44.45 months, p<0.001), 2.01–4.0 mm (median OS 52.57 vs 28.16 months, p<0.001) and >4.0 mm (median OS 31.93 vs 21.32 months, p<0.001) but not <1 mm (p=0.44). After multivariable analysis, LND was associated with better OS (HR: 0.78, 95% CI: 0.67, 0.92).

Conclusions: For patients with vulvar melanoma with at least 1 mm invasion, LND is associated with better OS.