Malignant melanoma of unknown primary site in patient with pustulosis plantaris

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ABSTRACT

We reported a 57 year old woman treated for 2 years because of pustulosis plantaris (periodic exacerbations and remissions). In July 2013 she reported to the Outpatient Surgery because of a tumor in the left groin area. The biopsy revealed: metastases melanomatosis in lymphonodus. The patients was in October at the surgical removal of lymph nodes from left groin area (lymphadenectomy groin - ilio - obturatorii right). Full diagnostic was carried out and searching of of primary foci to no results. In the patient revealed the presence of BRAF and she was qualified to study of drug vemurafenib.

KEY WORDS: malignant melanoma, metastasis, vemurafenib, pustulosis plantaris, BRAF inhibitors, lymph node

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Indirect immunofluorescence (IF): HMB45(+), Ki-67 (5–8% cell nuclei of MM), CD3+ (in T lymphocytes in the lymph nodes), CD20+ (B lymphocytes in the lymph nodes), CK7 (-), CK20 (-), CKPan (-), vimectin (+), S100 (+).

The patients was in October at the surgical removal of lymph nodes from left groin area (lymphadenectomy groin - ilio - obturatorii right).

The result of biopsy: a) lymphadenitis reactiva 0/5, Melan A (-); b) melanoma metastaticum in lymphonoduli (1/4). Subcapsular and interstitial infiltrates on the total length of 8 cm, without exceeding the fibrous capsule.

Full diagnostic was carried out, including: abdominal ultrasonography, positron emission tomography and three months searching of primary foci to no results.

In the patient revealed the presence of BRAF and she was qualified to study of drug vemurafenib.

DISCUSSION

Surgery is still the most important treatment modality to guarantee the highest survival ratio of melanoma patients. The adequacy of the surgical approach is a crucial aspect in face of the initial clinical appearances of the disease. Although more than 90% of melanomas have a cutaneous origin, occasionally it is discovered as a secondary deposit without evident primary site [1, 2].

Authors from Greece was to systematically review published literature and analyse data on incidence, presentation, therapeutic interventions, survival and prognostic factors in patients with malignant melanoma of unknown primary site (MUP) [3]. 4348 patients with MUP were reported along with 132,643 patients with Melanoma of Known Primary (MKP). The incidence of MUP was 3.2%. MUP patients harbouring nodal disease had a median overall survival ranging between 24 and 127 months, 5-year survival rate between 28.6% and 75.6% and 10-year survival rate between 18.8% and 62.9%. MUP patients with visceral disease had median survival times between 3 and 16 months, and 5-year survival rates between 5.9% and 18%.

There were 1067 patients with lymph node involvement among 4433 total cases. Involved nodes ranged from 1 to 34 (302 with LNs of the groin). From the studies giving gender details related to nodal involvement there were 33 males and 33 females with groin nodes. 6 patients had a history of spontaneous regression 9 months to 4 years before lymph node dissection. Lymph node dissection either radical or modified was the gold standard of treatment for nodal disease. 474 patients were managed with an immunotherapeutic or chemotherapeutic regimen. Drugs included were: interferon α, interleukin 2, dacarbazine, procarbazine, cisplatin, cyclophosphamide, etoposide, lomustine, dactinomycin, vincristine, methotrexate, thiotepa, CCNU, methyl CCNU, BCNU, phenylalanine mustard and estramustine.

Our Patients was received vemurafenib (BRAF inhibitors). Vemurafenib is approved for treatment of advanced disease harbouring BRAF V600E and V600K mutations [4].

Various theories have been developed concerning the appearance of the MUP phenomenon. The incidence of spontaneous regression of metastases from malignant melanoma is approximately one per 400 patients, and possible mechanisms include immunologic, endocrine, inflammatory and tumour nutritional factors [5]. Partial regression has been reported in 9–46% of primary melanomas. Complete spontaneous regression of metastatic melanoma is very rare, with an estimated incidence of 0.22–0.27% [3].

The relatively favourable long-term survival of patients with MUP supports the belief that, in the context of regional lymph node disease, MUP constitutes a manifestation of stage III disease rather than stage IV (M1a) distant lymph node disease. Therefore, patients who have metastatic melanoma in a regional node in the absence of a known primary site should undergo completion lymph node dissection. These patients also should be considered for adjuvant treatment trials that were designed for patients with stage III disease.

QUESTIONS

1. Do you seek further primary foci?
2. Is it possible that primary focus of malignant melanoma could be located on the foot (patient have a pustulosis plantaris) and it was desquamation during illness?
3. Whether there has been regressed malignant melanoma?
4. In the history of the patient (two years earlier) was removed nevus on her stomach (diagnosis: nevus atypical) or re-examine this nevus?

References

1. Drljevic I, Drljevic K. Dermoscopy of head melanoma-case studies and review of references. Our Dermatol Online 2012; 3: 123-125.
2. Abdulaziz A, Andruszkiewicz J, Brzezinski P. In anticipation of the biopsy. Tumor on the leg. Our Dermatol Online 2014; 5: e1.
3. Kamposioras K, Pentheroudakis G, Pectasides D et al. Malignant melanoma of unknown primary site. To make the long story short. A systematic review of the literature. Crit Rev Oncol Hematol 2011; 78: 112-126.
4. Gadiot J, Hooijkaas AI, Deken MA et al. Synchronous BRAF(V600E) and MEK inhibition leads to superior control of murine melanoma by limiting MEK inhibitor induced skin toxicity. Onco Targets Ther 2013; 6: 1649-58.
5. Blessing K, McLaren KM. Histological regression in primary cutaneous melanoma: recognition, prevalence and significance. Histopathology 1992; 20: 315-322.

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