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A familial syndromic association between cutaneous malignant melanoma and neural system tumours: reply from authors

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mechanism of immune-privilege collapse to that in alopecia areata may play some role in our case, and cause subsequent lymphocytic infiltration into the follicular epithelium, causing the follicular mucinosis. Various adverse effects of imatinib have been reported in the literature, but to our knowledge follicular mucinosis has never been reported previously.

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References

- 1 Druker BJ, Sawyers CL, Kantarjian H *et al.* Efficacy and safety of a specific inhibitor of the BCR-ABL tyrosine kinase in chronic myeloid leukemia. *N Engl J Med* 2001; **344**: 1031–7.
- 2 Kantarjian H, Sawyers C, Hochhaus A *et al.* (The International STI571 CML Study Group). Hematologic and cytogenetic responses to imatinib mesylate in chronic myelogenous leukemia. *N Engl J Med* 2002; **346**: 645–52 (Erratum in: *N Engl J Med* 2002; **346**: 1923).
- 3 Lancer HA, Bronstein BR, Nakagawa H *et al.* Follicular mucinosis: a detailed morphologic and immunopathologic study. *J Am Acad Dermatol* 1984; **10**: 760–8.
- 4 Crowson AN, Magro CM. Antidepressant therapy. A possible cause of atypical cutaneous lymphoid hyperplasia. *Arch Dermatol* 1995; **131**: 925–9.
- 5 Magro CM, Crowson AN. Drug-induced immune dysregulation as a cause of atypical cutaneous lymphoid infiltrates: a hypothesis. *Hum Pathol* 1996; **27**: 125–32.
- 6 Clark SH, Duvic M, Prietol VG. Mycosis fungoides-like reaction in a patient treated with Gleevec. *J Cutan Pathol* 2003; **30**: 279–81.
- 7 Paus R, Ito N, Takigawa M, Ito T. The hair follicle and immune privilege. *J Invest Dermatol Symp Proc* 2003; **8**: 188–94.
- 8 Aswald JM, Lipton JH, Aswald S, Messner HA. Increased IFN- γ synthesis by T cells from patients on imatinib therapy for chronic myeloid leukemia. *Cytokines Cell Mol Ther* 2002; **7**: 143–9.

A familial syndromic association between cutaneous malignant melanoma and neural system tumours

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SIR, Nielsen *et al.* recently published the results of an analysis of Swedish patients with four primary tumours, at least one of which was a cutaneous malignant melanoma (MM).¹ In this group there was a significantly higher than expected incidence of neural system tumours (NST) including meningioma, nonacoustic neurinoma and astrocytoma. The authors concluded that the association between multiple MM and NST might form a previously undescribed new syndrome.

In fact, a syndromic association between MM and NST has been described previously. In 1993, Kaufman *et al.* described a three-generation family where MM, cerebral astrocytoma or

both developed in eight family members.² Subsequently, our group surveyed 904 consecutive MM patients for the occurrence of NST within their first- and second-degree relatives.³ In that study, 15 Jewish families consisting of MM patients and at least one NST-affected relative were identified. The NST consisted of astrocytoma, medulloblastoma, glioblastoma multiforme, ependymoma, glioma, meningioma and acoustic neurinoma. Additionally, 10 patients with two primary tumours, MM and NST, meningioma in nine and acoustic neurinoma in one, were described.³ Further analyses from France⁴ and Finland⁵ confirmed the notion of familial cosegregation of MM–NST. Large-scale epidemiological studies in Scandinavia have confirmed an increased risk of NST in relatives of MM patients and an increased risk of MM as a second primary tumour among NST patients.⁶ Thus, familial–syndromic association of MM and NST has been recognized as a rare autosomal dominant familial cancer syndrome since the early 1990s and was designated as the Melanoma and Neural System Tumour syndrome (MM–NST, OMIM 155755).

The underlying genetic defect was sought only in a handful of MM–NST families. Analysis of two families with the MM–NST syndrome showed hemizygous germline deletion at the 9p21 region that ablated both *CDKN2A* (p16) and p14^{ARF}.⁷ Analysis of 11 families with two or more cases of glioma revealed a hemizygous germline deletion in *CDKN2A* in one family with both glioma and melanoma.⁸ In another family with MM and NST (mainly astrocytoma), deletion was found in the p14^{ARF}-specific exon 1 β . The deletion, leading to loss of p14^{ARF} function, did not affect p16.⁹

However, in other MM–NST families analysed, including the pedigree described by Nielsen *et al.*, no germline mutations were identified in *CDKN2A* and other known familial MM candidate genes.^{1,10} The inherited predisposition to the MM–NST syndrome in these families probably lies at other, yet unknown genes.

In conclusion, the association of MM and NST is a well-established rare autosomal dominant trait whose underlying genetic defect is yet unknown in the majority of cases.

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References

- 1 Nielsen K, Ingvar C, Masback A *et al.* Melanoma and non-melanoma skin cancer in patients with multiple tumours—evidence for new syndromes in population-based study. *Br J Dermatol* 2004; **150**: 531–6.
- 2 Kaufman DK, Kimmel DW, Parisi JE, Michels VV. A familial syndrome with cutaneous malignant melanoma and cerebral astrocytoma. *Neurology* 1993; **43**: 1728–31.

- 3 Azizi E, Friedman J, Pavlovsky F *et al.* Familial cutaneous malignant melanoma and tumors of the neural system. *Cancer* 1995; **76**: 1571–8.
- 4 Bahuau M, Vidaud D, Kujas M *et al.* Familial aggregation of malignant melanoma/dysplastic naevi and tumors of the neural system: an original syndrome of tumor proneness. *Ann Genet* 1997; **40**: 78–91.
- 5 Paunu N, Pukkala E, Laippala P *et al.* Cancer incidence in families with multiple glioma patients. *Int J Cancer* 2002; **97**: 819–22.
- 6 Hemminki K, Zhang H, Czene K. Familial and attributable risks in cutaneous melanoma: effects of patient and age. *J Invest Dermatol* 2003; **120**: 217–23.
- 7 Bahuau M, Vidaud D, Jenkins RB *et al.* Germ-line deletion involving the *INK4* locus in familial proneness to melanoma and neural system tumors. *Cancer Res* 1998; **58**: 2298–303.
- 8 Tachibana I, Smith JS, Sato K *et al.* Investigation of germline PTEN, p53, p16(*INK4A*)/p14(*ARF*), and CDK4 alterations in familial glioma. *Am J Med Genet* 2000; **92**: 136–41.
- 9 Randerson-Moor JA, Harland M, Williams S *et al.* A germline deletion of p14^{ARF} but not CDKN2A in a melanoma–neural system tumor syndrome family. *Hum Mol Genet* 2001; **10**: 55–62.
- 10 Alao JP, Mohammed MQ, Retsas S. The *CDKN2A* tumour suppressor gene: no mutations detected in patients with melanoma and additional unrelated cancers. *Melanoma Res* 2002; **12**: 559–63.

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SIR, We are grateful for the comments made by Scope *et al.* describing the possibility of an association between neural system tumours and melanoma. The Swedish data by Hemminki *et al.*¹ were not published when we submitted our manuscript and we therefore had no chance of referring to their findings.

Our study² did not address heredity as such, only the presence of associated tumours among individuals with four or more tumours of which at least one was a melanoma. Pedigree data are under evaluation and it is therefore premature to conclude that the association described by us follows a dominant inheritance. A recessive mechanism may be as pertinent in this extremely predisposed group of patients. Further pedigree analysis will help to solve this matter.

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References

- 1 Hemminki K, Zhang H, Czene K. Familial and attributable risks in cutaneous melanoma: effects of proband and age. *J Invest Dermatol* 2003; **120**: 217–23.
- 2 Nielsen K, Ingvar C, Måsbäck A *et al.* Melanoma and non-melanoma skin cancer in patients with multiple tumours – evidence for new syndromes in a population based study. *Br J Dermatol* 2004; **150**: 531–6.

Eosinophilic cellulitis associated with molluscum contagiosum

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SIR, Eosinophilic cellulitis is a rare dermatosis that has a clinical picture resembling acute cellulitis and a characteristic histopathology with dermal oedema and dense eosinophilic infiltration, which is called the flame figure.^{1,2} Although the aetiology and pathogenesis of this condition are still unknown, various associated disorders, such as several viral infectious diseases, have been documented.^{2–5} Recently, it has been reported that cryosurgery for molluscum contagiosum (MC) may be one of the triggering factors of eosinophilic cellulitis.⁴ Furthermore, a case of hypereosinophilic syndrome (HES), in which the initial diagnosis of eosinophilic cellulitis was made, has been reported to be concomitant with MC.⁶ Interestingly, some have reported overlapping clinical and histopathological findings in eosinophilic cellulitis and HES,⁷ which are also characterized by peripheral eosinophilia and eosinophilic infiltration of tissues. In this communication, we present an additional rare case of eosinophilic cellulitis closely associated with untreated MC.

A 10-year-old Japanese boy was referred to us for further investigations of a suspected acute cellulitis with a 7-day history of an asymptomatic erythematous rash that had developed over the left lower abdomen and rapidly enlarged. He had experienced a similar episode 7 months previously on almost the same region, but the condition had resolved spontaneously. His birth history was unremarkable. There was no history of a scratch or bite by either animals or arthropods. He had no history of atopic diseases and had not taken any drugs.

On physical examination, a rosy, well-defined, oedematous, erythematous plaque with a diameter of approximately 20 cm on the left lower abdomen extending to the left inguinal region was observed. The plaque was not painful, but there was a burning sensation. A superficial inguinal lymph node was palpable, but the patient was afebrile. A whitish papule covered with crust was visible near the centre of the affected skin.

Histology of a biopsy taken from this papular lesion revealed typical features of MC in the epidermis (Fig. 1A). The dermis was patchily infiltrated mainly by histiocytes and lymphocytes and a dense perivascular and diffuse infiltrate of