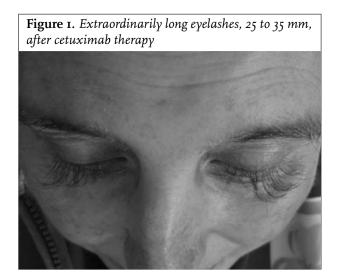
Progressive trichomegaly

S. Vano-Galvan^{1*}, P. Moreno-Martin², P. Jaén¹

¹Dermatology Service, Ramon y Cajal Hospital, University of Alcala, Madrid, Spain, ²Ophthalmology Service, La Princesa University Hospital, Madrid, Spain, ^{*}corresponding author: tel.: +34 67662 77 42, fax: +34 913735088, e-mail: sergiovano@yahoo.es

CASE REPORT

A 62-year-old woman presented with a four-week history of progressive growth of her eyelashes that induced visual discomfort and inconvenienced her while blinking. Her medical history consisted of hypertension, hyperuricaemia and obesity. The diagnosis of T3N2CMo squamous cell carcinoma of the oropharynx had been made in this patient and she was treated with radiotherapy plus concomitant cetuximab. Radiotherapy was delivered with concomitant boost technique, lateral parallel opposed fields to the primary tumour and upper neck (70 Gy/40 fractions/42 days). Cetuximab was administered one week before radiotherapy at a 400 mg/m² loading dose, followed by 250 mg/m² weekly during radiotherapy. She noted a change in her eyelashes within several weeks of starting the drug. Examination of her ocular adnexa demonstrated coarse, brittle, irregular and aberrant bilateral eyelash growth (figure 1) without associated hypertrichosis. The rest of physical examination was within normal limits. She had not had any other recent changes in her medications and denied application of cosmetic products. Laboratory tests did not reveal thyroid hormones abnormalities.



WHAT IS YOUR DIAGNOSIS?

See page 36 for the answer to this photo quiz.

© 2009 Van Zuiden Communications B.V. All rights reserved.

PROGRESSIVE TRICHOMEGALY ANSWER TO PHOTO QUIZ (ON PAGE 35)

DIAGNOSIS

The recent development of progressive trichomegaly during treatment with epidermic growth factor receptor (EGFR) inhibitor led us to make the diagnosis of acquired trichomegaly of the eyelashes induced by cetuximab.

Trichomegaly, the excessive growth of eyelashes, is a relatively rare cosmetic disorder that has been described as part of congenital syndromes, in human immunodeficiency virus I infection, associated with an autoimmune disease, or after certain drugs such as latanoprost, phenytoin, zidovudine, penicillamine, cyclosporine and interferon alpha. Other described causes of acquired trichomegaly include porphyria, malnutrition, anorexia nervosa, hypothyroidism, and pregnancy.

Recent communications have reported that EGFR inhibitors used in the treatment of certain malignancies can also lead to symptomatic adnexal and ocular surface changes.¹⁻⁴

EGFR inhibitors are a new class of biologically targeted anticancer agents recently introduced in the management of cancers unresponsive to standard chemotherapeutic agents. Cetuximab has been recently approved by the US FDA for head and neck squamous cell carcinoma, in association with radiotherapy. During treatment with EGFR inhibitors, changes of the hair can be noticed.

Trichomegaly of the eyelashes has been described in association with cetuximab,¹⁻³ erlotinib⁴ and gefitinib. In pathogenesis, EGFR inhibition results in dysregulated

keratin gene expression within the hair follicle and results in premature maturation (terminal differentiation) of the epithelial cells of the hair follicle causing the observed trichomegaly.²

In our case, trichomegaly of the eyelashes was reported after starting cetuximab with complete regression of these symptoms two months after stopping administration of cetuximab; the patient did not receive other trichomegalyinducing drugs. These arguments are in favour of the relationship between cetuximab and trichomegaly. Cetuximab can be added to the list of drugs responsible for trichomegaly of the eyelashes.

REFERENCES

- Melichar B, Nemcová I. Eye complications of cetuximab therapy. Eur J Cancer Care. 2007;16:439-43.
- Zhang G, Basti S, Jampol LM. Acquired trichomegaly and symptomatic external ocular changes in patients receiving epidermal growth factor receptor inhibitors: case reports and a review of literature. Cornea. 2007;26:858-60.
- Bouché O, Brixi-Benmansour H, Bertin A, Perceau G, Lagarde S. Trichomegaly of the eyelashes following treatment with cetuximab. Ann Oncol. 2005;16:1711-2.
- Lane K, Goldstein SM. Erlotinib-associated trichomegaly. Ophthal Plast Reconstr Surg. 2007;23:65-6.

© 2009 Van Zuiden Communications B.V. All rights reserved.