Microscopic examination of the specimen revealed a tumor formed by basaloid cells. It demonstrated infiltrative margins in the dermis with a background of dense inflammatory cell infiltrate. Tumorous growth resulted in loss of epidermis in some areas; hence the diagnosis was ulceroinfiltrative basal cell carcinoma (BCC) with negative surgical margins (Figure 2a, 2b, 2c, 2d, page 58).

**DISCUSSION**

BCC is the most frequent malignancy in humans, which grows in skin containing hair follicles and arises without precursors. BCCs are locally invasive without producing metastasis, with rare exceptions.1,2 These tumors are stroma dependent and they exhibit distinct epithelial-stromal-inflammatory patterns that correlate with BCC subtype and tumor progression.3 Clinical subtypes include nodular, cystic, pigmented, sclerosing or morpheaform, and superficial BCC.4 In this patient, there was a family history of BCC; both his mother and brother had BCC on their faces but their lesions were nodular.

BCC’s with a linear appearance are extremely rare. The linear type of basal cell carcinoma was first described in 1985, by Lewis in a 73-year-old man with a linear, pigmented lesion on the left cheek.5 Although 33 cases have been reported in the literature, linear BCC has not been defined as a distinct clinical entity in textbooks.5,12

Marvikakis et al, in a review of previous case reports, defined the linear BCC as a relatively straight edged lesion with a length-to-width ratio of at least 3:1. According to their review, the most common histological subtype was nodular BCC which was detected in 20 cases.11 Our case was an ulceroinfiltrative BCC with a length-to-width ratio of 6:1.

Mohs’ micrographic surgery was the choice of treatment in 22 cases.13 Some authors suggest that a margin-controlled excision should be considered for linear BCC.11,13 Surgical excision at the level of the superficial cervical fascia deeply with a 10 mm lateral margin was performed in our case because he had a long history and the tumor had grown linearly and had become ulcerated. The margins were negative histologically. The patient was living without recurrences at time of publication of this report. The majority of linear BCCs were observed to align along relaxing skin tension lines.11 According to Lim et al, the linear behavior of these tumors may be due to stromal interactions with relaxing skin tension lines.11 The lesion in our case was also located on a relaxing tension line on the neck.

Sunlight is the main etiologic factor for BCC. The immunosuppressed or persons exposed to radiation have a higher incidence, as do those with a genetic predisposition.2,4 Peschen suggested that physical or surgical trauma might play a role in the development of linear BCCs.7 The lesion in our case was on a sun-exposed area and there was also a family history of nodular BCC.

Linear BCC must not be confused with linear unilateral basal cell nevus and nevoid basal cell carcinoma syndrome.14 Linear unilateral basal cell nevus is a rare benign follicular hamartoma, and nevoid basal cell carcinoma syndrome or Gorlin syndrome, is an inherited disorder complex that presents with multiple BCCs, pitting of the palmar and plantar surfaces, jaw cysts, and other skeletal and neurologic abnormalities.4 These symptoms and findings were not present in our case. Linear BCC is an uncommon morphologic variant. Physicians should be aware of this rare appearance of BCC and refer them for surgical excision. The histologic appearance of BCC may mimic adenoid cystic carcinoma, desmoplastic trichoepithelioma, eccrine carcinoma, Merkel cell carcinoma, metastatic breast carcinoma, microcystic adnexal carcinoma, mucinous carcinoma, and sebaceous carcinoma.15
what's your diagnosis?

REFERENCES

1. Ponten F, Lundeberg J. Principles of tumor biology and pathogenesis of basal cell carcinomas and squamous cell carcinomas. In: Bolognia JL, Jorizzo JL, Rapini RP, editors. Dermatology. Edinburgh: Mosby; 2003. p. 1663-1676.
2. Anwar U, Al Ghazal SK, Ahmad M, Sharpe DT. Horrifying basal cell carcinoma forearm lesion leading to shoulder disarticulation. Plast Reconstr Surg 2006;117:9e-9e.
3. Kaur P, Mulvaney M, Carlson A. Basal cell carcinoma progression correlates with host immune response and stromal alterations: a histologic analysis. Am J Dermatopathol 2006;28:293-307.
4. Barton RM. Malignant tumors of the skin. In: Mathes SJ, editor. Plastic Surgery. Tumors of the head, neck and skin. Philadelphia: Saunders Elsevier; 2006;5:273-304.
5. Lewis JE. Linear basal cell epithelioma. Int J Dermatol 1985; 24:124-125.
6. Lewis JE. Linear basal cell epithelioma. Int J Dermatol 1989; 28:682-684.
7. Peschen M, Lo JS, Snow SN, Mohs FE. Linear basal cell carcinoma. Cutis 1993;51:287-289.
8. Warnth TL, Lewis JE. Giant linear basal cell epithelioma. Int J Dermatol 1994;33:284.
9. da Silva MO, Dadalt P, Santos OL, Ishida CE, Sodre CT, Macieira JP. Linear basal cell carcinoma. Int J Dermatol 1995;34:488.
10. Chopra KF, Cohen PR. Linear basal cell carcinomas: report of multiple sequential tumors localized to a radiotherapy port and review of the literature. Tex Med 1997;93:57-59.
11. Lim KK, Randle HW, Roenigk RK, Brodland DG, Bernstein SC, Marck I. Linear basal cell carcinoma: report of seventeen cases and review of the presentation and treatment. Dermatol Surg 1999;25:63-67.
12. Mavrikakis I, Malhotra R, Barlow R, Huigol SC, Selva D. Linear basal cell carcinoma: a distinct clinical entity in the periorcular region. Ophthalmology 2006;113:338-342.
13. Mavrikakis I, Malhotra R, Selva D, Huigol SC, Barlow R. Linear basal cell carcinoma: a distinct clinical entity. J Plast Reconstr Aesthet Surg 2006;59:419-423.
14. Shumaker PR, Lane K, Harford R. Linear unilateral basal cell nevus: a benign follicular hamartoma simulating multiple basal cell carcinomas. Cutis 2008;78:122-124.
15. Denkler K, Kvett WF. Management of non-melanoma skin cancer. In: Mathes SJ, editor. Plastic Surgery. Tumors of the head, neck and skin. Philadelphia: Saunders Elsevier; 2006;5:291-296.

errata

Volume 27; 6 (November-December 2007): 421-426
Predictors of obstructive sleep apnea in snorers

On page 421, in the abstract, 41.5% of the female group had obstructive sleep apnea, not 39%.

On page 422, under results, OSA was seen more in non-Qatari subjects (86 of 116 [74.1%]) than in Qatari subjects (40 of 75[53.3%]) (P< 0.05), not in 84 non-Qatari and 38 Qatari subjects.

On page 423, in Table 1, the mean age in females in the RDI positive group is 51.8±8.2 years and the mean age in the RDI negative group is 50.3±10.7 years. The statistical analysis shown in the table compares the positive RDI group versus the negative RDI group in the same gender. The ANOVA test was used to derive the significance of age difference for males and females in the positive RDI group.

On page 424, the frequency of PSG diagnosed OSA was 66% as mentioned in the abstract and not 72.5%, as it appeared in the text.