

Alopecia Neoplastica due to Metastatic Colon Adenocarcinoma

Ülker Gül¹, Arzu Kılıç^{1*}, Ayşe Akbaş², Erkan Aslan¹ and Murat Demiriz³

¹Ankara Numune Education and Research Hospital, 2nd Dermatology Clinic, Onur Sok. No. 47/11 Anıttepe, Ankara 06570, ²Atatürk Education and Research Hospital, Dermatology Clinic, Ankara, and ³Gülhane School of Medicine, Pathology Department, Ankara, Turkey. E-mail: kilicarzu2004@yahoo.com, kilicarzu@gmail.com

Accepted May 24, 2006.

Sir,

The occurrence of cutaneous metastasis from colon carcinoma is uncommon, and usually presents as nodular lesions (1). We report here a patient with colon carcinoma that developed a metastasis to the scalp, an uncommon site, with an unusual presentation: "alopecia neoplastica".

CASE REPORT

A 46-year-old woman attended our clinic in March 2004 for hair loss that had been present for the last 2 months. Her medical history showed that she had undergone total thyroidectomy for a papillary carcinoma in 1992; and hemicolectomy, total abdominal hysterectomy and bilateral salpingo-oophorectomy in August 2004 for colon adenocarcinoma. However, she did not undergo any chemotherapy or radiotherapy for these diseases. The patient did not report any previous dermatological diseases at the site of the alopecia.

On physical examination, the patient was cachectic and oedema was detected on the dorsum of the feet.

On dermatological examination, a hairless area was seen, starting from the parietal and frontal regions and extending to the vertex. On the frontal region of the scalp there were grouped millimetric papules (Fig. 1). Routine laboratory tests were within normal levels. Histopathological examination of the biopsy from the area of the alopecia revealed signet ring cells and metastasis of adenocarcinoma (Fig. 2). Depending on both clinical and histopathological findings, the patient was diagnosed with alopecia neoplastica.



Fig. 1. Alopecia and grouped papules of the scalp in the 46-year-old woman.

DISCUSSION

The overall incidence of cutaneous metastasis from visceral carcinomas ranges from 0.7% to 9% (2). The incidence of cutaneous metastasis from colon carcinoma is less than 4% (3, 4). In women, it ranks seventh after breast, melanoma, ovary, unknown primary, oral cavity and lung carcinomas as a source of cutaneous metastasis (1). The cutaneous metastases of colon carcinoma are usually localized on the abdomen and trunk, usually presenting as asymptomatic single or multiple nodules. The presence of cutaneous metastasis is usually an indicator of a widespread disease and of poor prognosis (1, 3, 4).

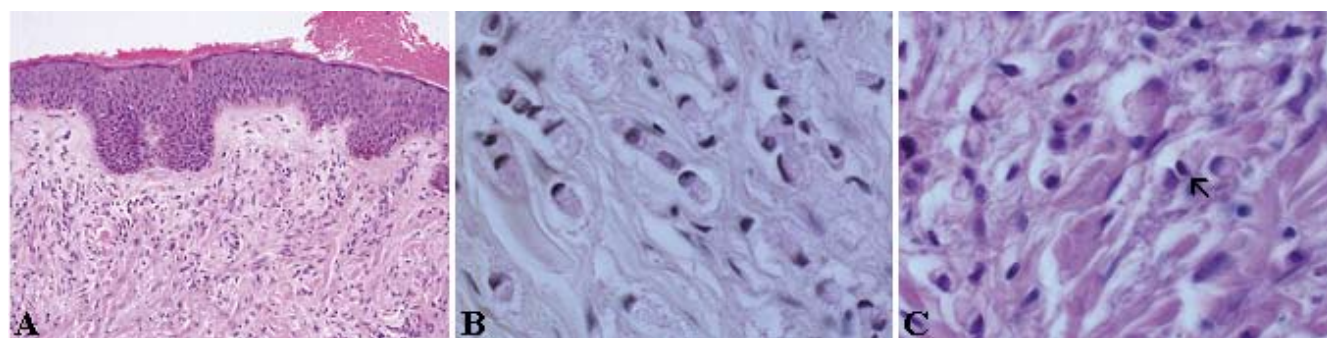


Fig. 2. (A) Diffuse infiltration of the uniform cell type between the collagen bundles (haematoxylin and eosin (H&E) $\times 100$). (B) The cells stained with mucin (H&E $\times 400$) and (C) the signet ring cell (H&E $\times 400$).

The scalp is a relatively common site of cutaneous metastasis (5), usually presenting as single or multiple nodules (1, 3–5). Alopecia neoplastica is characterized by single or multiple areas of cicatricial alopecia, which is the result of the neoplastic process involving the hair follicle and the surrounding skin (5–8).

To the best of our knowledge, there are only 7 reports of alopecia neoplastica associated with metastatic tumours. Four of these are breast carcinomas (7–10), one gastric carcinoma (5), one desmoplastic (6) and one placental site trophoblastic tumour (11). There is no published report in the literature indicating alopecia neoplastica from colon adenocarcinoma to our knowledge.

Survival from the time of diagnosis of carcinoma cutis usually ranges from 3 to 34 months, average 18 months (1, 4). In our patient hair loss started in a small area 5 months after the diagnosis of colon carcinoma. Unfortunately, the patient ignored this symptom and hair loss progressed rapidly. When she presented at our clinic, there was a widespread hairless area that could easily be confused with other causes of hair loss. Six months after the diagnosis of alopecia neoplastica, the patient died.

REFERENCES

1. Wong NS, Chang BM, Toh HC, Koo WH. Inflammatory metastatic carcinoma of the colon: a case report and review of the literature. *Tumori* 2004; 90: 253–255.
2. Lookingbill DP, Spangler N, Sexton FM. Skin involvement as the presenting sign of internal carcinoma. A retrospective study of 7316 cancer patients. *J Am Acad Dermatol* 1990; 22: 192–196.
3. Sgambati SA, Barrows GH. Cutaneous metastasis of colon carcinoma: a case report. *Conn medicine* 1993; 57: 665–667.
4. Proffer LH, Czarnik KL, Sartori CR. Colon carcinoma cutis: a case report. *Cutis* 1999; 63: 301–302.
5. Kim HJM, Lee E. Alopecia neoplastica in a patient with gastric carcinoma. *Br J Dermatol* 1999; 141: 1122–1124.
6. Crotty K, McCarthy W, Quinn M, McCarthy S. Alopecia neoplastica caused by desmoplastic melanoma. *Australas J Dermatol* 2003; 44: 295–298.
7. Mallon E, Dawber RP. Alopecia neoplastica without alopecia: a unique presentation of breast carcinoma scalp metastasis. *J Am Acad Dermatol* 1994; 31: 319–321.
8. Archer CB, Smith NP. Alopecia neoplastica responsive to tamoxifen. *J Rs Soc Med* 1990; 83: 647–648.
9. Haas N, Hauptmann St. Alopecia neoplastica due to metastatic breast carcinoma vs. extramammary Paget's disease: mimicry in epidermotropic carcinoma. *J Eur Acad Dermatol Venereol* 2004; 18: 708–710.
10. Carson HJ, Pelletiere EV, Lack E. Alopecia neoplastica simulating alopecia areata and antedating the detection of primary breast carcinoma. *J Cutan Pathol* 1994; 21: 67–70.
11. Yuen YF, Lewis EJ, Larson JT, Wilke MS, Rest EB, Zachary CB. Scalp metastases mimicking alopecia areata. First case report of placental site trophoblastic tumor presenting as cutaneous metastasis. *Dermatol Surg* 1998; 24: 587–591.