Spitz Naevus of the Glans Penis: An Unusual Location

Satoru Aoyagi[1], Kazuko C. Sato-Matsumura[1], Masashi Akiyama[1], Shintaro Tanimura[1], Hideomi Shibaki[2] and Hiroshi Shimizu[1]

[1]Department of Dermatology, Hokkaido University Graduate School of Medicine, N15 W7, Kita-ku, Sapporo, 060-8638, Japan and [2]Shibaki Dermatology Clinic, Sapporo, Japan. E-mail: saoyagi@med.hokudai.ac.jp

Accepted December 16, 2003.

Sir,

Spitz naevus is a solitary, benign melanocytic tumour that usually occurs during childhood and adolescence. The most common locations for the occurrence of Spitz naevi are on the face and extremities. To our knowledge, a solitary Spitz naevus located on the glans penis has not previously been reported. We here describe the first such case.

CASE REPORT

A 22-year-old man presented with a pigmented lesion on the glans penis, which had occurred 6 years previously and had been slowly growing in size. Physical examination showed a dome-shaped dark brown nodule, 9 mm in diameter, with a pinkish erythema in the centre of the glans penis (Fig. 1). An excision biopsy was made, and histological examination of a magnified portion of the upper dermis revealed spindle cells grouped within demarcated nests and epithelioid cells grouped within poorly demarcated nests (Fig. 2). The tumour cells were relatively uniform in size and showed no atypia. Eosinophilic globules at the dermal–epidermal junction, Kamino bodies, were observed. Immunohistochemical analysis demonstrated that the cytoplasm of the tumour cells was positive for S-100 protein, but not for HMB-45 (Dako Cytomation, Kyoto, Japan). Only 0.2% of tumour cells were positive for Ki-67 (MIB-1, Dako Cytomation) and proliferating cell nuclear antigen (PC10, Dako Cytomation). These findings strongly suggested that the tumour was a Spitz naevus (1). Over the 2 years and 5 months since the excision, there has been no sign of any recurrence.

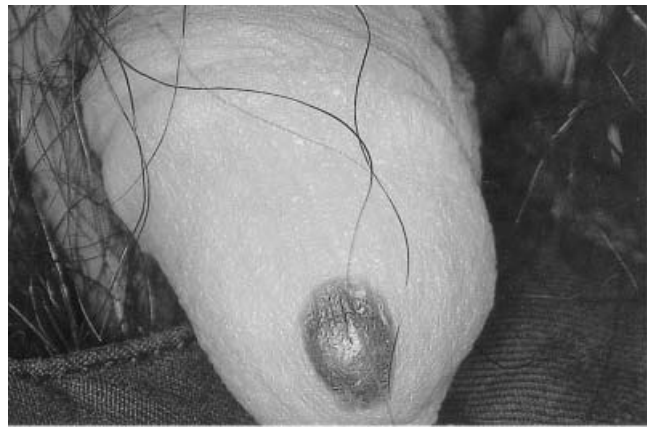

Fig. 1. Spitz naevus on the patient's glans penis: a dome-shaped dark brown nodule with a pinkish colour in the centre of the lesion.

DISCUSSION

Our case is unique because to our knowledge a solitary Spitz naevus on the glans penis has never been

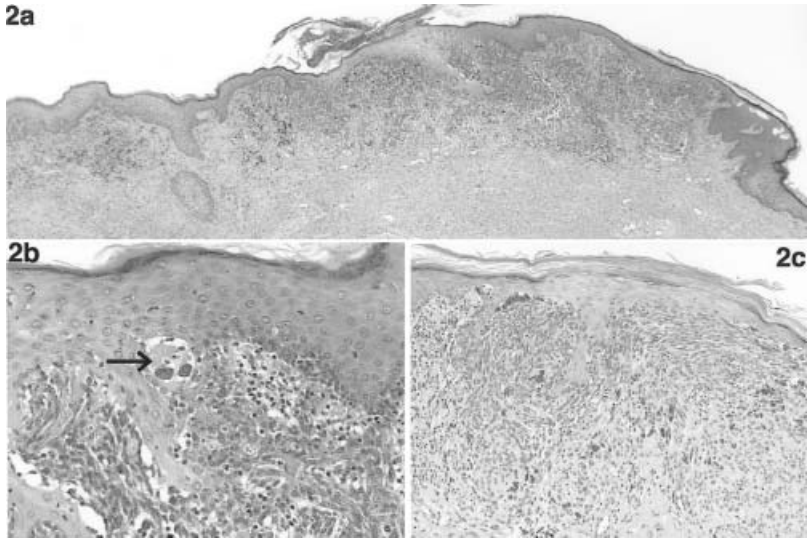

Fig. 2. Histopathologically, the tumour is well-circumscribed, relatively symmetrical, and is restricted to the superficial and mid dermis (a) (H&E, original magnification ×4). The high-power view shows an eosinophilic Kamino body (arrow) in the epidermis (b) (H&E, original magnification ×20). The spindle-shaped tumour cells with melanin pigment nested within the dermal–epidermal junction (c) (H&E, original magnification ×20).

DOI: 10.1080/00015550410025912

described previously. The most frequent locations in children with Spitz naevus are on the face, head and neck, whereas in adults, the leg is the most common site (2). Penile involvement of Spitz naevus is extremely rare, considering the hundreds of previously reported cases (2–4). There has been only one Russian report that described a solitary Spitz naevus on the anterior surface of the penile epidermis in a 31-year-old man (5). Even among multiple Spitz naevi, a variant of Spitz naevus, only two cases with penile lesions have been reported (6, 7).

The clinical appearance of Spitz naevus can be divided into four basic types: 1) light-coloured and soft, 2) light-coloured and hard, 3) dark-coloured, and 4) multiple or agminated forms (2). There is a significant relationship between clinical type and anatomical location. Light-coloured types are most frequently localized on the head and neck, while dark-coloured naevi are more frequently localized to the lower extremities. Except for the unusual location, the present Spitz naevus was a typical dark-coloured solitary Spitz naevus.

Differential diagnosis of the Spitz naevus on the glans penis should include malignant melanoma (8, 9), blue naevus (10) and lentigines (11). Special attention should be paid to a solitary Spitz naevus that develops on the glans penis, because the glans is the most common site of penile malignant melanoma, with over two-thirds of the lesions occurring in this location (8). The differentiation between Spitz naevus and melanoma is often difficult because of their similar clinical and histopathological features. Due to its aggressive behaviour, penile malignant melanoma is usually treated by total resection with wide margin or penile amputation, which will seriously deteriorate the patient's quality of life (8, 9). Therefore, we emphasize the need for careful clinical and histopathological assessment in determining the benign or malignant nature of the pigmented lesions on the glans penis and Spitz naevus should certainly be included in the differential diagnosis.

REFERENCES

1. Bergman R, Malkin L, Sabo E, Kerner H. MIB-1 monoclonal antibody to determine proliferative activity of Ki-67 antigen as an adjunct to the histopathologic differential diagnosis of Spitz nevi. J Am Acad Dermatol 2001; 44: 500–504.
2. Coskey RJ, Mehregan A. Spindle cell nevi in adults and children. Arch Dermatol 1973; 108: 535–536.
3. Weedon D, Little JH. Spindle and epithelioid cell nevi in children and adults. A review of 211 cases of the Spitz nevus. Cancer 1977; 40: 217–225.
4. Casso EM, Grin-Jorgensen CM, Grant-Kels JM. Spitz nevi. J Am Acad Dermatol 1992; 27: 901–913.
5. Filippov SV, Kniaz'kin IV, Anichkov NM, Zeziulin PN, Shinkarenko AV, Bykov NM. Spitz nevus (juvenile nevus) of the penile skin. Arkh Patol 2002; 64: 46–48.
6. Monfrecola G, Ianniello S, Donofrio V, DeRosa G. Multiple agminated Spitz nevi of the penis. J Eur Acad Dermatol 1994; 3: 189–193.
7. Dawe RS, Wainwright NJ, Evans AT, Lowe JG. Multiple widespread eruptive Spitz naevi. Br J Dermatol 1998; 138: 872–874.
8. Begun FP, Grossman HB, Diokno AC, Sogani PC. Malignant melanoma of the penis and male urethra. J Urol 1984; 132: 123–125.
9. Stillwell TJ, Zincke H, Gaffey TA, Woods JE. Malignant melanoma of the penis. J Urol 1988; 140: 72–75.
10. Izquierdo MJ, Pastor MA, Carrasco L, Moreno C, Kutzner H, Sangueza OP, et al. Epithelioid blue naevus of the genital mucosa: report of four cases. Br J Dermatol 2001; 145: 496–501.
11. Kopf AW, Bart RS. Tumor conference #43: penile lentigo. J Dermatol Surg Oncol 1982; 8: 637–639.