Warty dyskeratoma on the scalp in a Thai patient: A Case Report.

Somsak Towanabut MD,

Oraya Kwangsukstid MD.

ABSTRACT:

TOWANABUT S, KWANGSUKSTID O. WARTY DYSKERATOMA ON THE SCALP IN A THAI PATIENT: A CASE REPORT. THAI J DERMATOL 2011; 27: 284-288.

INSTITUTE OF DERMATOLOGY –MINISTRY OF PUBLIC HEALTH,BANGKOK,THAILAND.

Warty dyskeratoma is an uncommon benign epidermal tumor presented clinically as a skin-colored to brown papule, plaque or nodule with central keratotic plugging and commonly located on the head and neck in late adult. Histological examination is necessary for diagnosis.We report a 75-year-old female Thai patient with a crusted verrucous plaque on the scalp for a year and pathological findings of focal acantholytic dyskeratosis is reported as a case of warty dyskeratoma. The clinicopathological feature is discussed on the basis of available knowledge from the reference literature.

Key words: Warty dyskeratoma

บทคัดย่อ :

สมศักดิ์ โตวณะบุตร, อรยา กว้างสุขสถิตย์ รายงานผู้ป่วยหญิงไทยโรค WARTY DYSKERATOMA บนหนังศีรษะ วารสารโรคผิวหนัง 2554; 27: 284-288.

สถาบันโรคผิวหนัง กรมการแพทย์ กระทรวงสาธารณสุข

Warty dyskeratoma เป็นเนื้องอกของผิวหนังชนิดไม่ร้ายแรงที่พบน้อย โดยมีลักษณะเป็นตุ่ม ผื่น หรือ ก้อนเดี่ยว สีเนื้อหรือออกสีน้ำตาล มีกระจุกขี้ไคลตรงกลางและมักพบบนหนังศีรษะ หน้าและลำคอในผู้สูงวัย การวินิจฉัยที่จำเป็นคือการตรวจทางจุลพยาธิวิทยา รายงานฉบับนี้เป็นการนำเสนอผู้ป่วยหญิงไทยอายุ 75 ปี มาตรวจด้วยอาการผื่นแข็งและผิวขรุขระบนหนังศีรษะเป็นมานาน1ปีและผลการตรวจทางจุลพยาธิวิทยาเป็น focal acantholytic dyskeratosis พบว่าเข้าได้กับโรค warty dyskeratoma ความสัมพันธ์ระหว่างอาการแสดงและจุลพยาธิวิทยาได้อธิบายไว้ในภาคอภิปราย

คำสำคัญ: เนื้องอกของผิวหนังหวอดตี้ ดิสเคอราโตม่า

Warty dyskeratoma is an uncommon benign epidermal tumor that first described by Frederick J. Szymanski in 1957[1]. The etiology of warty dyskeratoma is unknown. It occurs in the middle-aged or older person[1,2] as a solitary verrucous, crusted skin-colored to red brown papule with central pore and keratotic plug. The common location are on the head and neck. Lesion can be found in the other parts of the body such as subungual area[10], trunk[1,11], lower extremities[3,12],vulva[13]and oral cavity[6,7,8,14]

The diagnosis is almost depended upon the recognition of the typical histopathologic finding[1 ,2,15]. Few cases of warty dyskeratoma have been reported especially in Thailand.

We report a case of warty dyskeratoma in an old Thai female patient and review the clinical and histologic feature of this condition.

Case report

A seventyfifth-year-old-Thai woman from Phang-nga came to the Institute of Dermatology with an asymptomatic verrucous plaque on the scalp for a year. The lesion gradually enlarged peripherally and indurated without erosion or bleeding.

She also had scalp psoriasis for 20 years. The disease was well controlled by tar shampoo, topical triamcinolone acetonide solution and desoximethasone solution.

Physical examination revealed solitary well defined verrucous, slightly crusted, skin colored to light brown plaque with keratotic plug stucked on vertex of the scalp. Approximatedly 3cm. x 3cm. in size (figure 1). Differential diagnoses included seborrheic keratosis, verruca vulgaris and hypertrophic actinic keratosis.

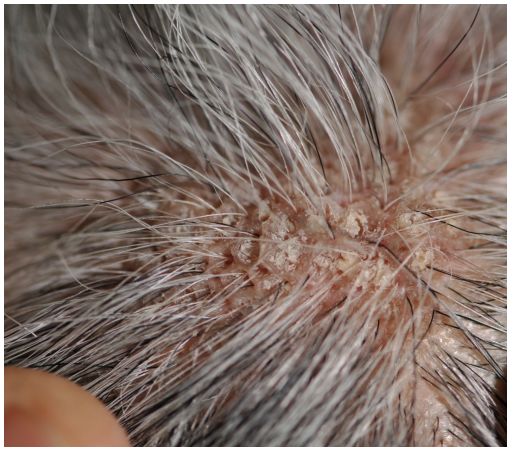

Figure 1 The lesion on scalp.

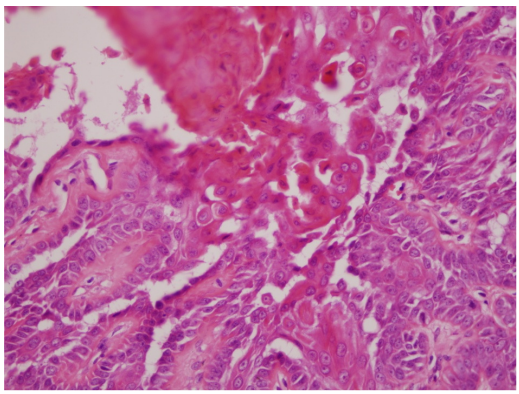

Figure 2 Histopathological examination (x40)

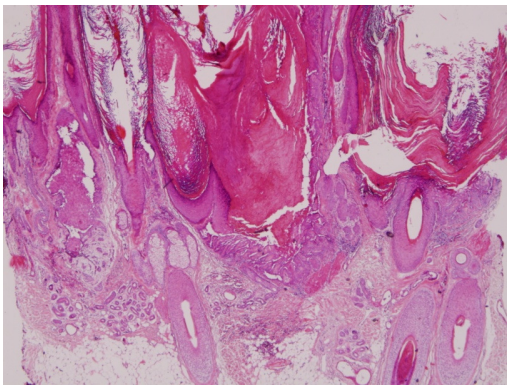

Figure 3 Histopathological examination (x200)

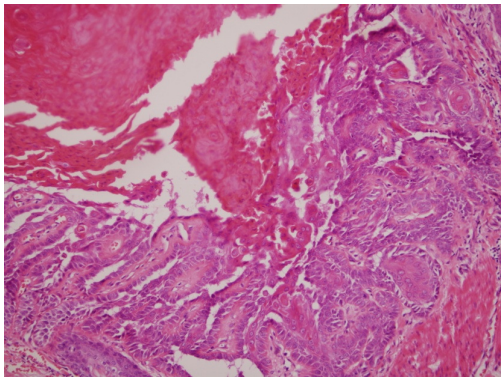

Figure 4 Histopathological examination (x400)

Histopathological examination of the lesion on the scalp area revealed a circumscribed, cup-shaped, invaginating lesion extending into the underlying dermis (figure 2). The central depression is filled with a pluq of keratinous material containing numerous acantholytic, dyskeratotic cells in its upper portion focally and the lower portion is occupied by numerous villi (figure 3 and 4). These findings were consistent with *warty dyskeratoma*.

The patient refused totally excision and she was treated with topical 10% salicylic acid oinment.

Discussion

Warty dyskeratoma is the name first given by Szymanski[1] in 1957 to a rare solitary benign cutanoeus papule or nodule that is usually found on the head or neck in an elderly person. The age of patient vary from 43-66 years old and the tumors had been presented from six months to a few years[1,2]. Warty dyskeratoma demonstrates no genetic predisposition. It is more prevalent in men, usually appearing in both White and

Negro[2] patient but also reported in Asia especially from India[3]and Japan[4].

The etiology of warty dyskeratoma is unknown, but ultraviolet light[5], viral infections[2], intraoral trauma[6]or chronic irritation, such as tobacco usage[7,8] have been postulated to play a role. Recently, There was a study revealed that PCR analysis for HPV-DNA from warty dyskeratoma lesions were negative[9]. Multiple lesions of warty dyskeratoma were described in three patients with renal failure[4].

Warty dyskeratoma presents commonly as a solitary verrucous, crusted skin colored to red brown papule with central pore and keratotic plug with slow growth. The common locations are on the scalp, cheek, temple, forehead, postauricular area and nose but may be found less commonly on the subungual area[10], trunk[1,11], lower extremities[3,12], vulva[13]and oral cavity[14], especially on the hard palate[6,8], buccal mucosa and alveolar ridge[7]. It's typically range in size from several millimeters to 2 cm.in diameter[2]. Mulitple lesions have been reported[4,5]. Most warty dyskeratoma are asymptomatic, but they occasionally have pruritus, burning[2], bleeding or intermittently cheesy material[15] discharge.

Typical histopathologic finding of warty dyskeratoma revealed large, cup-shaped invagination connected with the surface by a channel filled with keratinous material which contains numerous acantholytic, dyskeratotic, dyskeratotic cells in its upper portion. The lower portion is occupied by numerous villi, often lined with a single layer of basal cells and project upward from the base of the cup-shape invagination[1,16,17]. In electron microscopy, there are similar ultrastructural changes in the different variants of epidermolytic hyperkeratosis[17]. The histopathological pattern is characteristic and useful for definite diagnosis. Focal acantholytic dyskeratosis[11,18] is histopathological differential diagnosis includes Darier's disease, linear epidermal nevus, actinic keratosis, Grover's disease, acantholytic dyskeratotic acanthoma[19] and even acantholytic variant of malignant skin tumor include squamous cell carcinoma[20].

Warty dyskeratoma may resemble Darier's disease, Hailey-Hailey disease, seborrheic keratosis[14],verruca vulgaris, hyperketrophic actinic keratosis and squamous cell carcinoma[18].

There have been reported that warty dyskeratoma coexisted with other skin lesions[2], including verrucous xanthoma, actinic keratosis, squamous cell carcinoma[15],basal cell carcinoma and adnexal carcinoma.

Warty dyskeratoma is benign, The treatment of choice would appear to be adequate local excision[18],The lesion is resistant to x-ray and, if inadequately removed by desiccation, curettage or even excision, tend to recur[1,2]. Topical tazarotenic acid was successful used as alternative treatment for multiple warty dyskeratoma on the trunk and extremities[21]. Malignant transformation or metastasis has not been reported[1,2,15].

References

1. Szymanski FJ. Warty dyskeratoma. Arch Dermatol 1957;75:567-72.
2. Graham JH, Helwig EB. Isolated dyskeratosis folliculitis. AMA Arch Dermatol 1958;77:377-89.
3. Panja RK. Warty dyskeratoma. J Cutan Pathol 1977;4:194-200.
4. Azuma Y, Matsukawa A. Warty dyskeratoma with multiple lesions. J Dermatol 1993;20:374-7.
5. Griffiths TW, Hashimoto K, Sharata HH, Ellis CN. Multiple warty dyskeratomas of the scalp. Clin Exp Dermatol 1997;22:189-91.
6. Harrist TJ, Murphy GF, Mihm MC Jr. Oral warty dyskeratoma. Arch Dermatol 1980;116:929-31.
7. Kaugars GE, Lieb RJ, Abbey LM. Focal oral warty dyskeratoma. Int J Dermatol 1984;23:123-30.
8. Mesa ML, Lambert WC, Schneide LC, Reibel J. Oral warty dyskeratoma. Cutis 1984:33:293-4, 296.
9. Kaddu S, Dong H, Mayer G, Kerl H, Cerroni L. Warty dyskeratoma-"follicular dyskeratoma": analysis of clinicopathologic features of a distinctive follicular adnexal neoplasm. J Am Acad Dermatol 2002; 47:423-8.
10. Baran R. Perrin C. Focal subungual warty dyskeratoma. Dermatology 1997;195:278-80.
11. Omelecki A, Lesiak A, Narbutt J, et al. Plaque form of warty dyskeratoma-acantholytic dyskeratotic acanthoma. J Cutan Pathol 2007;34:494-96.
12. Storino WD, Bennin B, Vahl R. Warty dyskeratoma of the leg. Arch Dermatol 1976;112:1616.
13. Duray PH, Merino MJ, Axiotis C. Warty dyskeratoma of the vulva. Int J Gynecol Pathol 1983;2:286-93.
14. Gorlin RJ, Peterson WC. Warty dyskeratoma: a note concerning its occurrence in the oral mucosa. Arch Dermatol 1967;95:292-3.
15. Niren NM, Waldman GD, Barsky S. Warty dyskeratoma. Cutis 1982;29:79-81,94.
16. Kirkham N. Tumors and cysts of the epidermis. In: Elder DE, Elenitsas R, Johnson BL, Murphy GF, Xu X, editors. Lever's histopathology of the skin. 10th ed. Philadelphia: Lippincott William and Wilkins 2009; 806-7.
17. Weedon D. Acanthoma. In: Weedon D , editor. Weedon's skin pathology. 3rd ed. New York: Churchill Livingstone; 1997. P. 671.
18. Ackerman AB. Focal acantholytic dyskeratosis. Arch Dermatol 1972;106:702-6.
19. Ko CJ, Barr RJ, Subtil A, McNiff JM. Acantholytic dyskeratotic acnathoma: a variant of a benign keratosis. J Cutan Pathol 2008;35:298-301.
20. Ackerman AB, Troy JL, Rosen LB, Jerasus S, White CR, King DF. Warty dyskeratoma vs. squamous –cell carcinoma with acantholytic cells. In: Ackerman AB, editor. Differential diagnosis in dermatology II. Philadelphia: Lea & Febieger; 1988. P. 90-3.
21. Abramovits W, Abdelmalek N. Treatment of warty dyskeratoma with tazarotenic acid. J Am Acad Dermatol 2002;46:S4.