Virus Diseases

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Ren-Gui Chen, Ping Li, Chen Wang, Ming-Yu Xia, Xin-Feng Wu, Cheng Tan, and Ru-Zhi Zhang

Abstract

This chapter consists of neonatal herpes simplex virus infection, bilateral herpes zoster, giant verruca vulgaris with cutaneous horns, papillomatosis of external auditory canal, bowenoid papulosis, and asymmetric periflexural exanthema.

R.-G. Chen
Department of Dermatology, The Affiliated Xinhua Hospital of Shanghai Second Medical University, Shanghai, China

P. Li
Department of Dermatology, Cangzhou Central Hospital, Cangzhou, China

C. Wang, M.D.
Department of Dermatology, China-Japan Friendship Hospital, Beijing, China

M.-Y. Xia, M.D.
Electron Microscope Room, Nanjing Medical University, Nanjing, China

X.-F. Wu, M.D.
Institute of Dermatology, Chinese Academy of Medical Sciences and Peking Union Medical College, Nanjing, China

C. Tan, M.D.
Department of Dermatology, Affiliated Hospital of Nan Jing University of Chinese Medicine, Nanjing, China
e-mail: tancheng@yeah.net

R.-Z. Zhang, M.D. (✉)
Department of Dermatology, The Third Affiliated Hospital of Suzhou University, Changzhou, China

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1.1 Neonatal Herpes Simplex Virus Infection [1]

- Neonatal herpes simplex virus infection (NHSI) is an uncommon but severe, life-threatening condition that is more common in preterm infants and acquired maternal IgG deficiency neonates. If left untreated, neonatal herpes has a high death rate.
- Transmission usually occurs in utero (if the infection occurs in early pregnancy, potentially accompanied by a variety of congenital malformations) or during delivery (the most frequent route) and the postnatal period.
- The lesions are characterized by clusters of blisters on the erythema. If the infection spreads, likely manifestations include seizures, lethargy, respiratory distress, hepatosplenomegaly with hepatitis, and thrombocytopenia.

Fig. 1-1-1 Generalized lesions all over the body including erythema, petechiae, umbilicated vesicles, and hemorrhagic bullae on the base of erythema

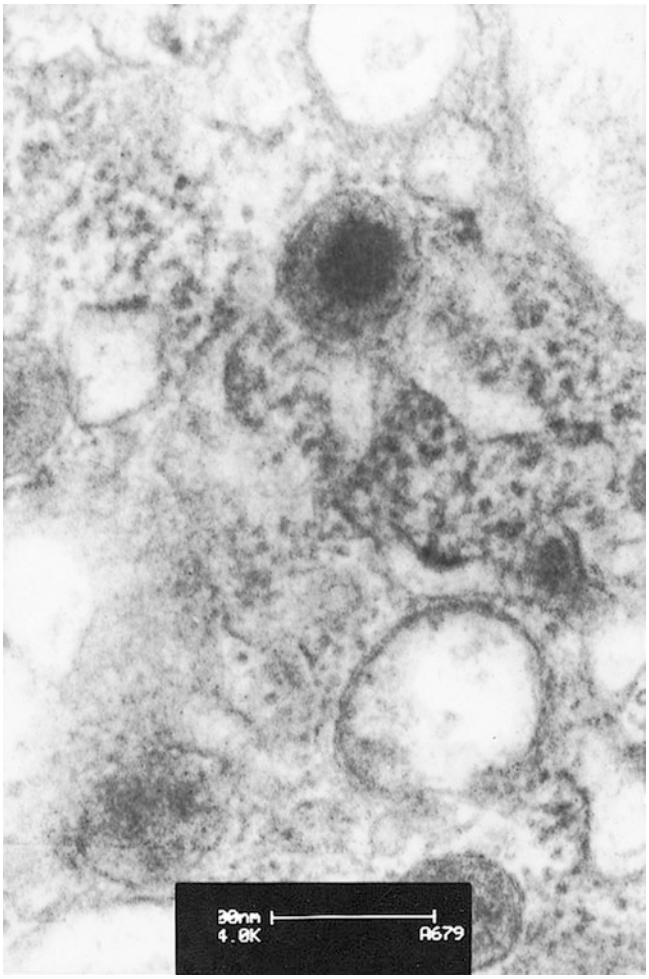

Fig. 1-1-2 Detectable particles of HSV in the biopsied lesion under TEM (×20,000)

1.2 Bilateral Herpes Zoster [2]

- Bilateral asymmetrical distribution of herpes zoster is an uncommon disease, especially in immunocompetent adults.
- Its pathogenesis may be related to body fluids and cellular immune function.
- It is more common in patients undergoing radiotherapy or chemotherapy after surgery, using immunosuppressive agents and high-dose glucocorticoid treatment.

Fig. 1-2-1 Groups of vesicles are situated on an erythema based on the left chest, back, and right buttock

1.3 Giant Verruca Vulgaris with Cutaneous Horns [3]

- Multiple huge verruca vulgaris complicated by huge cutaneous horns is very rare and resistant to conventional therapy.
- This condition is associated with infection by HPV-2a, an HPV subtype, infection which is prone to develop into giant verruca vulgaris complicated by huge cutaneous horns.
- Oral acitretin A, Chinese herbal medicine, and interferon injection combined with radiotherapy are often used to treat patients.

Fig. 1-3-1 Hundreds of giant confluent yellowish-brown, hard cutaneous horns on both hands and feet. The horn size ranged from 0.5 to 5 cm in diameter and from 0.5 to 21 cm in length

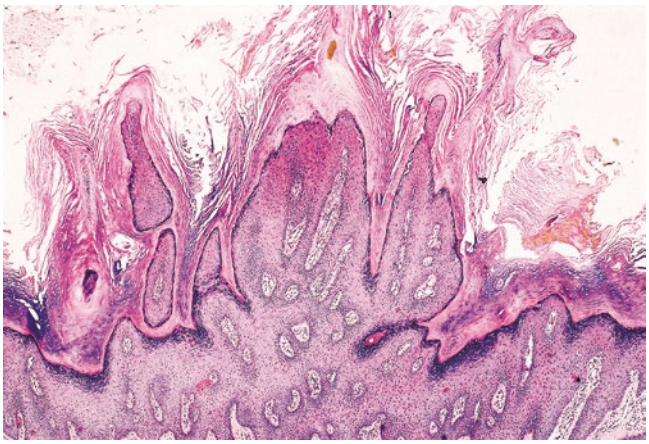

Fig. 1-3-2 Hyperkeratosis, acanthosis, and papillomatosis. Rete ridges elongate and curve inward at both margins (HE stain, ×100)

1.4 Papillomatosis of the External Auditory Canal [4]

- Papillomatosis of the external auditory canal (PEAC) characterized by single or multiple dark-brown verrucous papules (measuring 0.5–1.2 cm in diameter) is the most common benign tumor of the ear and is produced by infection with HPV6.
- PEAC frequently occurs in adult men who have a history of repeated turning of an ear knife in the EAC and then using an ear brush.
- Histopathological examination displays a few vacuolated epithelial cells within the upper stratum Malpighi. Malignant changes in 4 (2%) of 191 cases with PEAC have been reported.

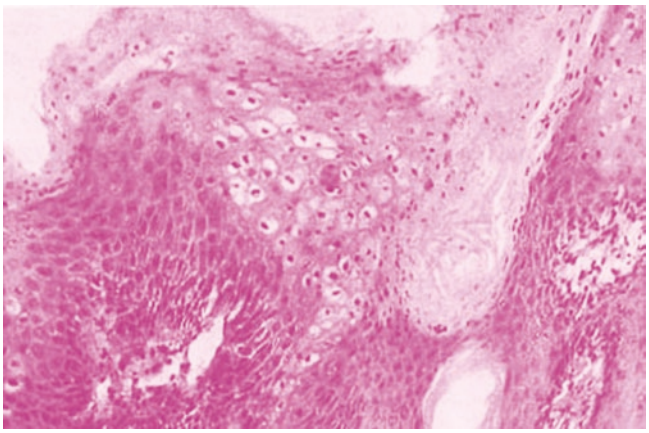

Fig. 1-4-2 Acanthosis and papillomatosis with a few vacuolated cells in the upper stratum Malpighi (HE stain, ×100) (Reproduced with the permission from [7])

Fig. 1-4-1 Two dark-brown verrucous papules in the right external auditory canal

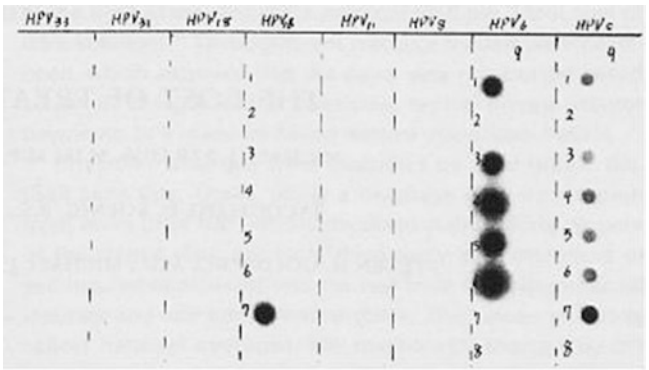

Fig. 1-4-3 HPV DNA Type 6 was detected using polymerase chain reaction (Reproduced with the permission from [7])

1.5 Bowenoid Papulosis [5]

- Bowenoid papulosis (BP) is caused by human papilloma virus (HPV), mostly the HPV-16 subtype, and is characterized by papules on the penis and vulva and occasionally on the oral, periungual, and neck surfaces.
- BP is considered an intermediate phase between squamous carcinoma in situ and genital warts. The histopathology reveals dysplastic changes.
- Treatment can be conservative, including electrofulguration, cryotherapy, excision, CO_2 laser vaporization, photodynamic therapy, and local application of antiviral agents.

Fig. 1-5-1 Grouped fiat, smooth, violet red papules on the scrotum and penis

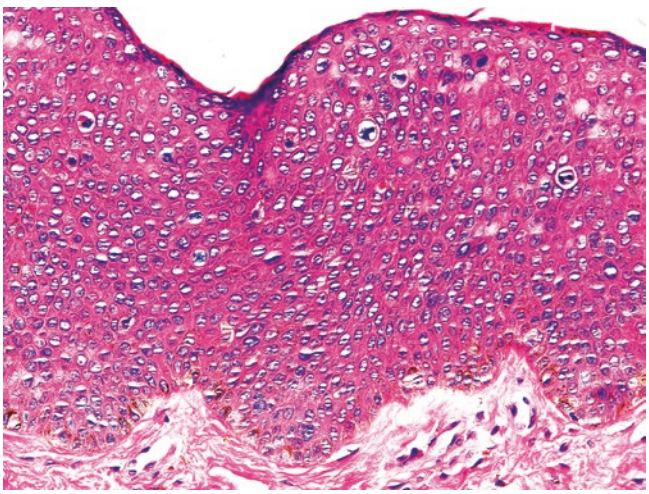

Fig. 1-5-2 Some of epidermal cells are large, hyperchromatic and pleomorphic, and atypical mitoses (HE stain, ×100)

1.6 Asymmetric Periflexural Exanthema [6]

- Asymmetric periflexural exanthem (APE) occurs mostly in children. Digestive or upper respiratory tract prodromes are reported preceding the onset of APE, providing clues of a viral origin.
- Typically, the lesions are multiple, discrete erythematous coalescent maculopapules distributed unilaterally near the axillae, the same side of the trunk and the medial surface of the arm.
- The exanthema usually reaches its greatest intensity in 2–3 weeks and then gradually disappears over 4–6 weeks without residual abnormal changes.

Fig. 1-6-1 Erythemas and papules were densely distributed on the right thorax and abdomen, some of which were tend to be coalesced

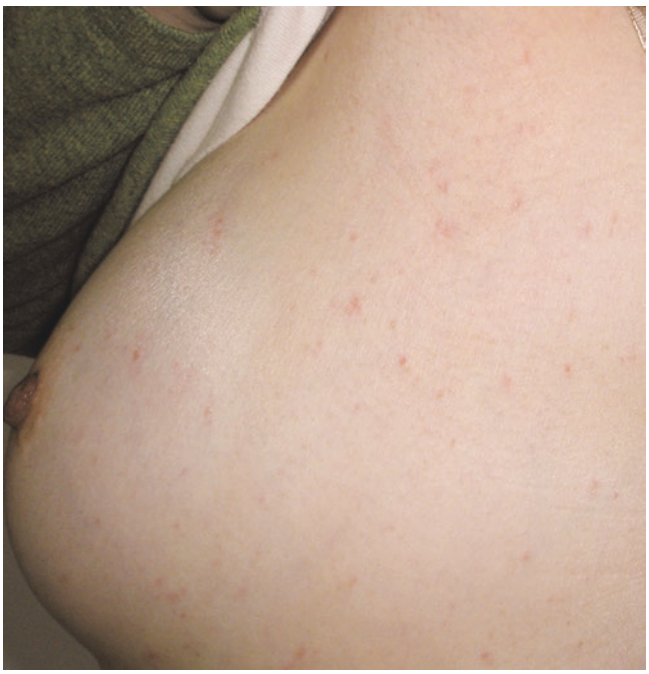

Fig. 1-6-2 Similar lesions were sparsely distributed on the left trunk

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