

Table. Classification of Differential Diagnosis of Sacral Mass

Congenital and developmental masses	Sacrococcygeal teratoma, anterior sacral meningocele, developmental cysts, cystic lymphangioma, lipoma
Neurogenic masses	Neuroblastoma, ganglioneuroblastoma, ganglioneuroma, neurofibroma, schwannoma
Inflammatory masses	Ulcerative colitis, Crohn disease, perirectal abscess, granuloma
Mesenchymal masses	Rhabdomyosarcoma and undifferentiated sarcomas, vascular mass, fibroma
Lymphomatous masses	Lymphoma (usually non-Hodgkin), posttransplantation lymphomatous disorder
Extension of sacral bone tumors	Sacral bone tumor, giant cell tumor, aneurysmal bone cyst, chondroma, osteoblastoma, Ewing sarcoma family, osteogenic sarcoma, hematoma, metastasis to the presacral space.
Other presacral masses	Hematoma, extension or metastasis to the presacral space from another site

the sacral bone. It usually presents in the first decade of life with symptoms related to mass effect, neurologic compromise, meningitis, or rupture. Neuroblastoma is the most common neoplasm of infancy; however, only 2% to 3% are found in the pelvis/sacral region.⁴ Only 1% to 5% of spinal schwannomas originate in the sacrum. Pelvic abscesses may be secondary to complicated appendicitis, inflammatory bowel disease, or post-operative complications. Rhabdomyosarcoma is an aggressive cancer, accounting for 4% to 8% of all pediatric malignancies. Less than 5% of rhabdomyosarcomas originate from nongenitourinary pelvic sites. Presentation of non-Hodgkin lymphoma with an isolated presacral mass is rare. Primary bone tumors and sacral metastasis are very uncommon.⁵

Imaging is important in the diagnosis and management of children presenting with sacral masses. Ultrasonography, computed tomography, and MRI are usually performed alone or in

combination^{6,7} to obtain superior anatomic and tissue delineation, including extension to surrounding organs and tissues. ■

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Periungual Warts

Alexander K. C. Leung, MD

University of Calgary, Alberta, Canada

Benjamin Barankin, MD

Toronto Dermatology Centre, Toronto, Ontario, Canada

A 17-year-old young adult presented with hyperkeratotic papules that had coalesced into a plaque on the periungual region of right middle finger. They had been present for approximately 10 months. The lesion was asymptomatic. The patient had a habit of nail biting. Family history was negative for similar skin lesions.

Physical examination revealed multiple, whitish to yellow-

ish, hyperkeratotic papules on the tip of and around the medial nail fold of the right middle finger. Tiny black dots were visible on the surface of the lesion. There was an absence of skin lines crossing the verrucous surface. No similar lesions were observed elsewhere on the body. The rest of the examination findings were unremarkable.

Based on the appearance and location of the lesion, a clinical diagnosis of periungual wart (verruca) was made. The patient was treated with liquid nitrogen by canister every 2 weeks and home therapy with a salicylic acid preparation; after approximately 4 months of treatment, the wart resolved.

Periungual warts are warts that cluster around the fingernail or toenail. They may extend under the nail plate and may lie adjacent to the nail matrix. Periungual warts pose a management challenge because of poor accessibility, recalcitrance, the possibility of cosmetic disfigurement of the nail, and a high recurrence rate.¹

Periungual warts most often are caused by human papillomavirus (HPV) types 1, 2, and 4 that are trophic to the epithelial tissues of the human skin.²

HPV is transmitted by close physical contact, including person-to-person contact and autoinoculation. The virus, however, does not seem to spread to histologically dissimilar sites, such as the oral cavity and genitalia. Moist environments

and disruption of epidermal barrier increase the chance of infection. Children with a family member or classmates with periungual warts have a higher risk of developing warts themselves. The risk of developing periungual warts is increased by trauma to the area, such as cuticle picking and nail biting. Although the condition primarily is seen in healthy individuals, those with atopic dermatitis and immunodeficiency are at increased risk.³

Typically, periungual warts present as multiple, firm, rough, yellow-brown or flesh-colored papules that may coalesce into a cauliflower-like plaque with the lesions around a nail. They may become fissured, as illustrated in the case presented here, and thus can be somewhat sore. The absence of dermatoglyphics crossing the verrucous surface is characteristic.² Tiny black dots may be visible at the surface of the wart; these black dots represent thrombosed, dilated capillaries and are pathognomonic of warts. The lesions generally are asymptomatic but can be painful when compressed.⁴ The wart may extend around and underneath the nail plate. Thus, what appears to be a small periungual wart actually may have a large subungual component.

The diagnosis is mainly clinical, based on typical morphologic features. If the diagnosis is in doubt, scraping off the hyperkeratotic surface of the lesion reveals thrombosed capillaries.

