for some period before the host can mount an effective immune response.4 This finding is further supported by the reported effectiveness of imiquimod, an immunomodulator known to be a potent PDC activator through its effect on TLR-7, in clearing orf.5,6

Dana Saadeh, MD
Mazen Kurban, MD
Abdul-Ghani Kibbi, MD
Ossama Abbas, MD

Author Affiliations: Department of Dermatology, American University of Beirut Medical Center, Beirut, Lebanon.

Accepted for Publication: April 8, 2014.

Corresponding Author: Ossama Abbas, MD, Department of Dermatology, American University of Beirut Medical Center, PO Box 11-0236, Riad El Solh/Beirut 1107 2020, Beirut, Lebanon (ossamaabbas2003@yahoo.com).


Author Contributions: Dr Abbas had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

Study concept and design: All authors.

Acquisition, analysis, or interpretation of data: All authors.

Drafting of the manuscript: Saadeh, Kurban, Abbas.

Critical revision of the manuscript for important intellectual content: Kibbi, Abbas.

Statistical analysis: Kurban, Abbas.

Administrative, technical, or material support: All authors.

Study supervision: Abbas.

Conflict of Interest Disclosures: None reported.

Additional Contributions: Myxovirus protein A was purchased from Otto Haller, MD, University of Freiburg, Germany.


OBSERVATIONS

Granuloma Inframammary Adultorum

Granuloma inframammary adultorum represents a variant of erosive papulonodular dermatosis (EPND) with predominant clinical components of papules and nodules. We describe herein a patient who presented with worsening skin lesions.

Report of a Case | A woman in her 60s with a history of inverse psoriasis presented with 2 months of “draining sores” under her breasts. Prior to the development of the sores, she had experienced a progressive burning sensation and tenderness in the affected areas and had been self-treating the inframammary skin with betamethasone valerate, 0.1%, ointment. Physical examination revealed foul-smelling, well-demarcated, erythematous, macerated plaques with multiple eroded reddish-purple papules and nodules beneath her pendulous breasts extend-
Granuloma gluteal adultorum is a multifactorial irritant dermatitis caused by prolonged contact of urine or feces and infrequent diaper changing. Lesions present as granulomatosus-appearing nodules in areas of occlusion. Occlusion from topical steroids and anesthetics like benzocaine, powder, paper napkins, plastic pants, detergents, and infections like candidiasis are also aggravating factors. Our patient demonstrated characteristic lesions of EPND in an unusual location in the setting of these well-known exacerbating factors.

The predominant clinical components of the lesions of our patient were painful papules, nodules, and erosions resembling granulomas clinically. These lesions were probably caused by sweat retention, which caused swelling of keratin in the sweat ducts and inflammation. The histologic findings were compatible with those of irritant dermatitis, similar to those reported in descriptions of EPND. Also note that granulomas exhibit atypical microscopic characteristics in this condition.

Topical corticosteroids are used to treat a variety of acute and chronic dermatoses, including psoriasis. Our patient applied betamethasone valerate to an intertriginous area, resulting in an unusual clinical presentation of an inframammary eruption similar to granuloma gluteal adultorum, or EPND. Once the corticosteroid application was discontinued, the lesions began to resolve, leading to marked improvement after a few weeks. Our treatment with topical calcipotriene and acetic acid, 0.25%, soaks resulted in resolution of the lesions. The effectiveness of calcipotriene may have resulted from inhibition of epidermal proliferation and stimulation of differentiation of epidermal cells. Acetic acid likely helped restore the acidic pH of the stratum corneum, helping restore normal barrier function.

Based on our patient’s history, physical examination, pathologic findings, and clinical course, she most likely had an inframammary variant of EPND.

Discussion | Granuloma inframammary adultorum represents a multifactorial irritant dermatitis. When skin is covered with cream or ointment and occluded by clothing, dermatitis can result, especially in cases of prolonged contact. In our patient, the risk factors leading to her condition were the application of corticosteroids, occlusive effects, friction from her brassiere rubbing the skin, and obesity. Long-term contact with clothing wet from perspiration caused by heat retention during hot weather months, infrequent cleaning of affected areas, and history of psoriasis could also have contributed to the development of lesions.

Figure. A Case of Granuloma Inframammary Adultorum Before and After Resolution of the Lesions

A. Erythematous, macerated papules, nodules, and plaques are evident beneath the breasts extending onto the upper abdomen. B. The affected skin has returned to normal after resolution of the papules, nodules, and plaques.
A Unilateral Orbital Mass

Orbital fat herniation frequently presents as a prominent unilateral mass near the lateral canthus of the eye, where it poses a fundamental question: benign or malignant? As dermatologists, we will encounter this seldom-described benign mass. The differential diagnosis, pathophysiology, and treatment options are discussed in the context of a patient case.

Report of a Case | A nonobese man in his 80s with a history of 10 nonmelanoma skin cancers was seen in the dermatology clinic for an annual skin examination. Examination revealed a 1-cm yellow, glistening nodule at the superotemporal quadrant of the left eye. The nodule was most prominent when the patient turned the gaze of the involved eye medially (Figure). The patient had been aware of the asymptomatic mass for approximately 1 year. It did not interfere with his vision. There was no history of infection, trauma, or surgery to the orbit or adjacent skin. Examination of the right eye did not reveal a similar finding.

Discussion | Orbital fat herniation is a rarely described benign condition with a well-delineated pathophysiology. From the optic nerve to corneal limbus, a thin elastic membrane envelops the globe and is called a Tenon capsule. This capsule is surrounded by orbital fat, filling the orbital socket where it stabilizes globe motion.1 Orbital fat can, however, herniate through an acquired weakening in the Tenon capsule into the anterior portion of the eye.

Acquired weakness in the Tenon capsule has been associated with aging, trauma, and infection.2-3 A few small case series have shown that it is more common in older men.3,4 In a report of 12 patients with orbital fat herniation, the average patient age was 57 years (range, 3.5-82 years); 75% were men; and 58% of herniations were unilateral.2 It has also been suggested to be associated with obesity, although there are limited supporting published data.2

Clinically, orbital fat herniation presents, as it did in this case, as a yellow, soft, convex mass with superficial blood vessels. It most commonly occurs in the superotemporal quadrant of the orbit, but it can also occur in the superonasal and inferior quadrants.2 Biopsy and imaging are usually not necessary given its distinct clinical appearance.

Orbital fat herniation may be clinically misdiagnosed as dermolipoma or orbital lymphoma.2 A dermolipoma is a benign congenital lesion arising from an embryonic deviation of fat. It usually presents at a young age with a white-pink to yellow, concave, indurated mass that may contain fine hairs.5 Orbital lymphoma presents as a salmon-colored, firm, immobile mass.

The histopathology of herniated orbital fat has been uncommonly described. It shows fairly uniform-sized lobules of mature adipocytes separated by fibrous septae. The adipocytes have small intranuclear vacuoles and express CD34, S100, and vimentin. Within the fibrous septae, there are multinucleated giant cells (with nuclei in a wreath-like configuration), fibroblastic cells, and collagen.3 The multinucleated giant cells express CD34 and vimentin.3

Treatment of orbital fat herniation is usually unnecessary. Rarely it can cause visual obstruction (it can increase in size with time), pruritus, and epiphora.3 In these cases, it can be surgically treated via an incision through the conjunctiva under local anesthesia in an outpatient procedure.5

Looking so closely at patients when examining their skin, it is not unlikely that we as dermatologists will find orbital fat herniation. Recognizing it will provide comfort to patients, and an unnecessary referral to ophthalmology may be avoided.

David Khalil, MD
Brett King, MD, PhD

Author Affiliations: Department of Dermatology, Yale University School of Medicine, New Haven, Connecticut.

Corresponding Author: Brett King, MD, PhD, Department of Dermatology, Yale University School of Medicine, 333 Cedar St, LGI S01, PO Box 208059, New Haven, CT 06520 (brett.king@yale.edu).


Conflict of Interest Disclosures: None reported.