

Table 1 Mucosa-Associated Lymphoid Tissue (MALT) Lymphoma in Patients Receiving Biologic Therapy.

Reference	Sex/Age, y	Disease	Previous IS Therapy	Current Treatment	Latency, mo	MALT Lymphoma	Management	Response, mo
Thonhofer et al. ⁸	F/64	RA	Methotrexate Sulfasalazine	Infliximab Methotrexate	21	Paranasal sinus	Interruption of infliximab and methotrexate Eradication <i>Hp</i> therapy	Complete, 3
Girard et al. ⁹	M/50	Psoriasis	PUVA Ciclosporin Methotrexate Etanercept Efalizumab	Infliximab	13	Stomach	Interruption of infliximab Eradication <i>Hp</i> therapy Methotrexate (psoriasis)	Partial, 1
Current case	M/68	Psoriasis	PUVA Methotrexate Efalizumab	Ustekinumab	32	Stomach	Radition therapy Interruption of ustekinumab	Complete, 4

Abbreviations: F, female; *Hp*, *Helicobacter pylori*; IS, immunosuppressant; M, male; PUVA, psoralen plus UV-A therapy; RA, rheumatoid arthritis.

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Phrynoderma After Biliopancreatic Diversion[☆]



Frinoderma asociado a derivación biliopancreática

Current surgical techniques for the treatment of morbid obesity can lead to major systemic complications. Biliopan-

creatic bypass surgery is a mixed restrictive-malabsorptive type of bariatric surgery that combines partial gastrectomy with a gastroileal anastomosis, causing the bile and pancreatic secretions to mix with the foods only in the final 50 cm of the small bowel. In the long term, this considerably reduces the absorption of vitamins, oligoelements, and essential fatty acids.

Our patient was a man of 46 years of age, with a history of obesity, hypertension, tuberculous lymphadenitis in 2005, a biliopancreatic bypass operation in 1999, and operations for an anal fistula and to perform dermolipectomy in the hypogastrium and flanks. He was on treatment with valsartan, venotonic agents, ferrous sulfate, and Dayamin-

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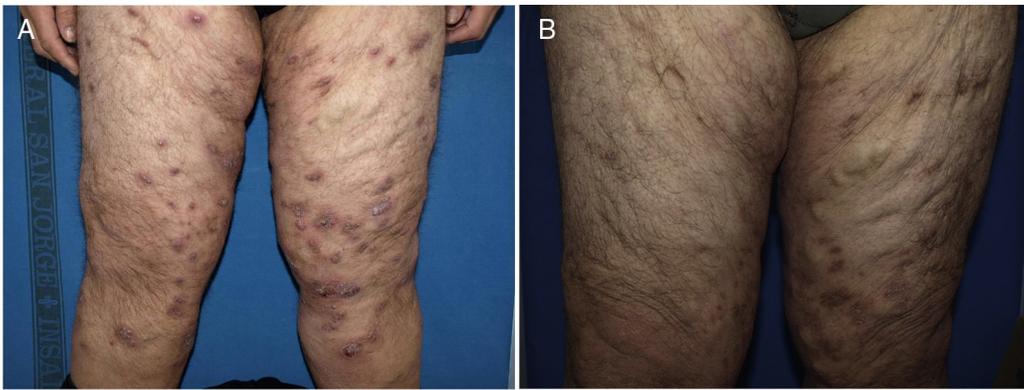


Figure 1 A, Violaceous, suppurating papular and tuberoses lesions, some with scabs. B, Resolution of the phrynoderma lesions.

eral (a vitamin and mineral supplement). He was seen in dermatology in 2012 for suppurating lesions on the lower limbs. The lesions had appeared when he started to lose weight after the bariatric surgery and they had gradually spread to the trunk and upper limbs. The diagnoses from 2 skin biopsies performed in 2003 were folliculitis and furuncle, respectively. Cultures for bacteria, fungi, and mycobacteria were repeatedly negative and various oral antibiotic treatments did not resolve the condition. On physical examination there were violaceous papular and tuberoses lesions, some with scabs, situated mainly on the thighs and on the medial aspect of the knees, but with isolated lesions on the abdomen and on the proximal areas of the upper limbs (Fig. 1A). Histopathology revealed the presence of intense hyperkeratosis in the pilosebaceous follicles, giving rise to the formation of keratin cysts. There was also a small abscess with residues of fragmented collagen and the presence of macrophages and neutrophils (Fig. 2). No fragmentation of elastic fibers was detected. Special techniques did not reveal the presence of fungi or of mycobacteria. A provisional diagnosis of phrynoderma was made based on these findings. Blood tests confirmed the deficit of vitamin A (0.15 mg/L [normal range, 0.30-1 mg/L]), as well as of vitamin E (4.9 µg/mL [normal range, 5-20 µg/mL]), Vitamin D₃ (14.18 ng/mL [normal range, 20-32 ng/mL]), and zinc (43 µg/dL), as well as a low hemoglobin level (11.4 g/dL) and low hematocrit 34%. Oral treatment was therefore prescribed as follows: vitamin A (1000 IU/d); vitamin E (20 mg/d); calcifediol (1 ampoule of 3 mg/1.5 mL per week); Hidroxil-B₁₂-B₆-B₁; Dayamineral, 1 tablet once a day; ferrous iron (80 mg/d); and oil rich in medium-chain triglycerides. After 7 months of treatment the skin lesions had not improved and the serum levels of vitamin A (0.11 mg/L) and vitamin E (5.1 µg/mL), Zn (52 µg/dL), the hemoglobin level (11.0 g/dL), and the hematocrit 33% were still low. Intravenous iron (500 mg of iron), intramuscular vitamin A (100 000 IU/mo) and zinc sulfate (22.5 mg/d) were therefore added to the patient's treatment. Three months later the vitamin levels were normal (vitamin A, 0.38 mg/L), the anemia had resolved, and only residual areas of hyperpigmentation were present on the skin (Fig. 1B).

Phrynoderma is the characteristic dermatosis associated with a deficiency of vitamin A, a fat-soluble vitamin involved in numerous body functions. Although this vitamin deficiency

is common in Africa and southeast Asia, phrynoderma is rare in Spain, where it is associated with malabsorptive states, such as pancreatic insufficiency, colectomy, and chronic giardiasis, or arises as a complication of bariatric surgery.¹

Vitamin A deficiency is very common among patients who have undergone bariatric surgery and it has been associated with low prealbumin levels, leading to a suggestion to use vitamin A levels as a marker of protein-energy malnutrition in these patients.²

Phrynoderma is characterized by the presence of follicular hyperkeratosis, mainly affecting the extensor surfaces of the limbs, the abdomen, and back. It is often associated with xerosis and hyperpigmentation, as well as extracutaneous manifestations such as night blindness. The majority of reports of phrynoderma secondary to biliopancreatic bypass surgery describe atypical lesions that are larger and more inflammatory and tend to arise in atypical sites, as occurred in our patient.³ Deficits of many other essential oligoelements and vitamins observed in these patients may contribute to this atypical presentation, particularly if we consider that phrynoderma does not appear to have a single etiology.¹ For example, furunculosis has been described in association with iron deficiency and has improved after

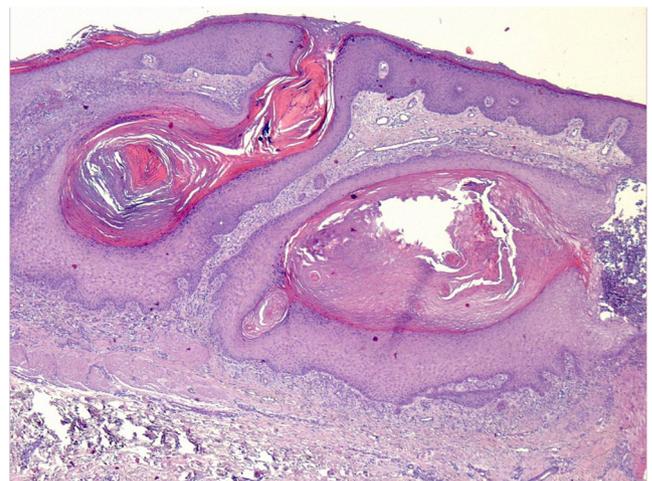


Figure 2 Dilation of the follicular infundibulum with central keratotic plugs (hematoxylin and eosin, original magnification x20).

restoring normal iron levels⁴; this diagnosis had to be considered in our patient as the first biopsies were compatible with this skin disorder.

From a clinical point of view, the differential diagnosis must include other skin conditions that have been described in association with bariatric surgery, such as dermatosis-arthritis syndrome, neutrophilic dermatosis attributed to the formation of circulating immune complexes produced in the blind loop of bowel,⁵ and acrodermatitis related to zinc deficiency.⁶ We also considered the perforating dermatoses, although no association with bariatric surgery has been reported.

The increase in obesity in western society means that bariatric surgery will become more common. The conclusion from the present case is that patients undergoing bariatric surgery must be followed up closely by a multi-disciplinary team that is aware of the nutritional risks and complications, as well as the appropriate therapeutic strategies that patients must follow for life.

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Herpes Zoster in Children Vaccinated Against Varicella-Zoster Virus: Experience in our Hospital[☆]



Herpes zóster en niños vacunados contra el virus varicela zóster: experiencia en nuestro hospital

To the Editor:

The introduction of the varicella zoster virus (VZV) vaccine was expected to eliminate herpes zoster (HZ) in vaccinated children. However, several years later we continue to treat cases of HZ in children. We describe 8 cases of pediatric HZ that were recorded between 2010 and 2013 during duty shifts at the dermatology service of Hospital Universitario Fundación Alcorcón. During this period the population living in the catchment area of the hospital corresponded to 247 000 inhabitants. The clinical and epidemiological characteristics of the patients are shown in [Table 1](#) and [Figure 1](#). A slight male predominance was observed, with a male to female ratio of 6:2. Ages ranged from 18 months to 5 years

(mean, 3.5 years). All the patients had been vaccinated with a single dose between 15 and 17 months of age. The mean time from vaccination to HZ onset was 2.2 years, with the earliest case detected only 3 months after vaccination. Polymerase chain reaction (PCR) for VZV was performed in 2 cases, both of which were positive. The necessary technique for differentiation between the vaccine and wild strain was unavailable in our hospital. The most frequently affected dermatomes were those of the lower limbs. Treatment varied depending on the extent and duration of the lesions, and the discomfort reported by the patients. Treatment with oral acyclovir was required in 5 of the 8 cases; the remaining patients received topical treatments consisting of astringent soaks and antibiotic ointments. None of the patients had risk factors for immunosuppression or associated comorbidities. Just 3 patients had atopic dermatitis, but none of them had required oral corticosteroid therapy in the preceding year. Six of the 8 patients had undergone laboratory testing in the preceding month, with no abnormalities detected. A favorable clinical course was observed with the prescribed treatments. Subsequent follow-up revealed no complications such as scarring and postherpetic neuralgia or recurrences.

The VZV vaccine is a live attenuated vaccine derived from the Oka strain of VZV. Its use in children under 12 years was approved in 2003 (Varivax). Although the latest guidelines of the Spanish Association of Pediatrics recommend administering 2 doses (the first at 12–15 months and the second at 2–3 years), this dosing schedule is used by only 3 autonomous communities (Ceuta, Melilla, and Navarra).

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