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CASE REPORT

Rapid Remission of Psoriasis After Sleeve Gastrectomy

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Abstract Psoriasis is a multifactorial, inflammatory chronic skin condition affecting 1–3 % of the population worldwide. Obesity is more common in patients with psoriasis. Psoriasis and obesity are linked via a mechanism of chronic inflammation. There are reports on improvement of psoriasis after obesity surgery. Role of sleeve gastrectomy in psoriasis improvement is not fully elucidated yet. In this article, we describe two obese patients with psoriasis who had improvement of their skin lesions 1 month after sleeve gastrectomy. To our knowledge, this is the first report of psoriasis remission after sleeve gastrectomy in current medical literature.

Keywords Obesity · Psoriasis · Sleeve gastrectomy · Roux-en-Y gastric bypass

Introduction

Psoriasis is a multifactorial, inflammatory skin disease affecting 1–3 % of the population worldwide [1]. Obesity is more commonly seen in patients with psoriasis, and patients with higher body mass index (BMI) are more prone to develop psoriasis [2]. There are reports on remission of psoriasis after Roux-en-Y gastric bypass (RYGB) for morbid obesity, but there are not any reports in medical literature about effects of sleeve gastrectomy (SG) on psoriasis [3].

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In this article, we describe two obese patients with psoriasis who had improvement of their psoriatic skin lesions 1 month after SG.

Case 1

A 49-year-old female patient presented to our obesity outpatient clinic with complaint of inability to lose weight despite diet attempts. Her body mass index was 66.2 kg/m^2, and she had diabetes, hypertension, obstructive sleep apnea, psoriasis, and psoriatic arthritis. The patient was on etanercept, sulphasalazine, diclofenac sodium, valsartan, and insulin. Her blood work was normal except elevated serum lipids. She reported that she was obese and had psoriasis since childhood. Her lesions were mainly on her extremities (Fig. 1), but she reported she also had lesions on torso before she started using etanercept. The patient underwent a successful laparoscopic tight SG using 36F bougie. On the first month of follow-up, she lost 9 kg and her psoriatic lesions were improved (Fig. 1). On the fourth month of follow-up, her weight loss was 28 kg and the psoriatic lesions were improved markedly. The patient also reported subjective improvement in joint movements and relative ease of daily activities when compared to preoperative period. On the seventh month of follow-up, she had lost 42 kg and stopped using etanercept and was put on steroid cream only for her psoriasis.

Case 2

A 40-year-old female patient presented to our obesity outpatient clinic with a BMI of 40.3 kg/m^2. She had multiple diet attempts with regain of weight. She had a prior

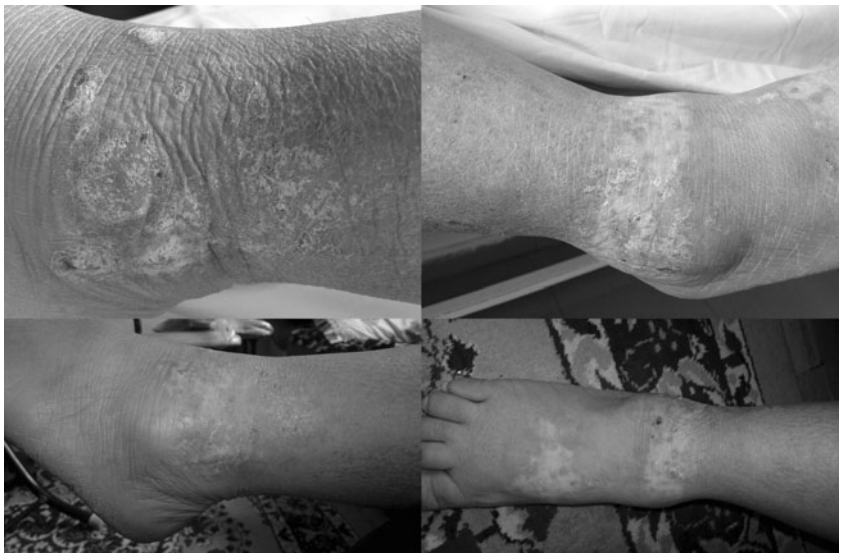

Fig. 1 Psoriatic lesions of the first patient. Preoperatively (*upper row*) and postoperative first month (*lower row*)

abdominoplasty. She did not have any accompanying diseases other than psoriasis with lesions located on her extremities and abdominoplasty scar (Fig. 2). The patient was on corticosteroid cream for psoriasis. The patient underwent a successful laparoscopic tight SG using 36F bougie. On the first month of follow-up, she lost 13 kg and her lesions improved despite discontinuation of her psoriasis medication (Fig. 2).

Discussion

Psoriasis is a chronic dermatological disease characterized by epithelial hyperplasia and increased epithelial turnover. The lesions of psoriasis usually appear as symmetrical white scales covering erythematous papules and plaques mostly localized on nails, scalp, elbows, and knees [4]. Genetic and environmental factors such as stress, alcoholism, smoking, and obesity play a role in psoriasis [5].

Psoriasis and obesity have a common background via a pathway of chronic inflammation [6]. Tumor necrosis factor alpha (TNFα) is the inflammatory cytokine responsible for the pathogenesis of psoriasis. Increased levels of TNFα mRNA were also shown in adipose tissue biopsies from patients with high BMI. The expression of this particular cytokine decreases with weight loss. This factor is the most plausible explanation for improvement of psoriasis after weight loss in our patients.

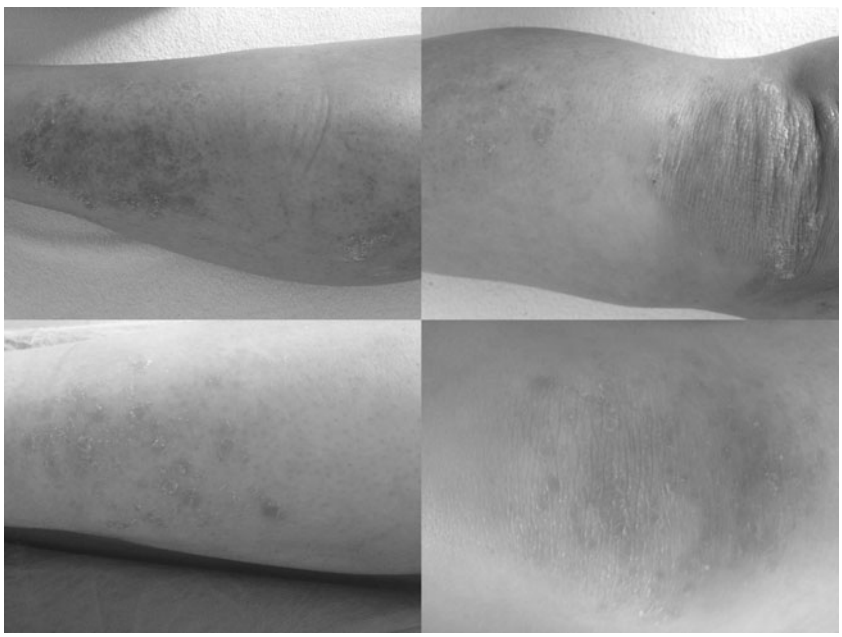

Fig. 2 Psoriatic lesions of the second patient. Preoperatively (*upper row*) and postoperative first month (*lower row*)

The development of psoriatic lesions on scars is named as Koebner phenomenon. This phenomenon has been shown to occur in 20 to 76 % of psoriatic patients [7]. Neither of our patients had trocar site involvement of psoriasis postoperatively.

Although psoriasis is rarely life-threatening, it is associated with chronic lesions causing physical and psychological effects on patients. For obese patients, this adds up to the social isolation caused by their weight. Thus, obesity surgery and in particular SG should be considered as a definitive treatment for psoriasis. As our cases show, RYGB sleeve gastrectomy also helps in the improvement of psoriasis with decrease or discontinuation of psoriasis medications which have multiple side effects.

Conclusion

Despite previous reports [8] showing no change or worsening of psoriasis after SG, our cases showed improvement of psoriasis after SG. To our knowledge, this is the first report of psoriasis remission after SG in current medical literature.

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Conflict of Interest The author declares no competing interests.

References

1. Granstein R (2001) New treatments for psoriasis. N Engl J Med 345: 284–7
2. Setty AR, Curhan G, Choi HK (2007) Obesity, waist circumference, weight change, and the risk of psoriasis in women: nurses' health study II. Arch Intern Med 167:1670–5
3. Higa-Sansone G, Szomstein S, Soto F, Brasecsco O, Cohen C, Rosenthal RJ (2004) Psoriasis remission after laparoscopic Roux-en-Y gastric bypass for morbid obesity. Obes Surg 14:1132–4
4. Finlay AY, Khan GK (1994) Dermatology Life Quality Index (DLQI)—a simple practical measure for routine clinical use. Clin Exp Dermatol 19:210–6
5. Raychaudhuri S (2000) Psoriasis risk factors: role of lifestyle practices. Cutis 66:348–52
6. Boehncke WH, Schön MP (2005) Psoriasis. N Engl J Med 352: 1899–912
7. Behranwala KA, Gui GPH (2002) The Koebner phenomenon in a myocutaneous flap following immediate breast reconstruction. Br J Plast Surg 55:267–8
8. Farias MM, Achurra P, Boza C, Vega A, de la Cruz C (2012) Psoriasis following bariatric surgery: clinical evolution and impact on quality of life on 10 patients. Obes Surg 22:877–880