

# Five Crohn's Disease Patients Treated with Vedolizumab for Pyoderma Gangrenosum

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## Introduction

- Management of pyoderma gangrenosum (PG) is complex due to limited data from studies to guide treatment options.
- Vedolizumab (VDZ) is a promising new biologic that has shown benefit in treating PG based on case reports.
- We performed a retrospective chart review to investigate the role of VDZ for the treatment of Ulcerative Colitis (UC) or Crohn's Disease (CD) associated PG.

## Methods

- Using the McKesson billing database, we identified patients with UC or CD-associated PG treated with VDZ between January 1, 2016, and December 31, 2019, at Baystate Medical Center, a 715-bed teaching hospital in western Massachusetts.
- Sixty-two charts came up in the search and were reviewed manually.
- Five met our inclusion criteria, and a chart review of these patients' clinical histories was performed with patient characteristics recorded in Table 1.

	Case #1	Case #2	Case #3	Case #4	Case #5
Age	38	65	33	44	47
Sex	Female	Male	Female	Female	Male
BMI	49.8	36.1	27.8	34.9	24.4
IBD type	CD	CD	CD	CD	CD
Montreal Classification	A2 L2 B3	A2 L2 B2	A2 L2 B3p	A2 L3 B3p	A2 L2 B3p
Duration of IBD	8 years	Unknown	10 years	26 years	17 years
Associated medical conditions	Morbid obesity, obstructive sleep apnea, iron deficiency anemia, thyroid nodule	Varicose veins	Depression, hypertension, hyperlipidemia, psoriasis, irritable bowel syndrome	Type 2 diabetes	Insomnia, alcohol use
Other extra intestinal manifestations	Arthralgias	None	Arthralgias	None	None
PG site(s)	Face, peristomal, legs	Peristomal	Legs	Breasts, perineum, labia	Peristomal
Failed biologic therapy	Adalimumab, infliximab	Adalimumab	Infliximab, adalimumab, ustekinumab, certolizumab pegol	Adalimumab, infliximab, certolizumab pegol	Infliximab, adalimumab
PG response to VDZ	Improved	Not improved	Not improved	Not improved	Improved

Table 1. Patient Characteristics

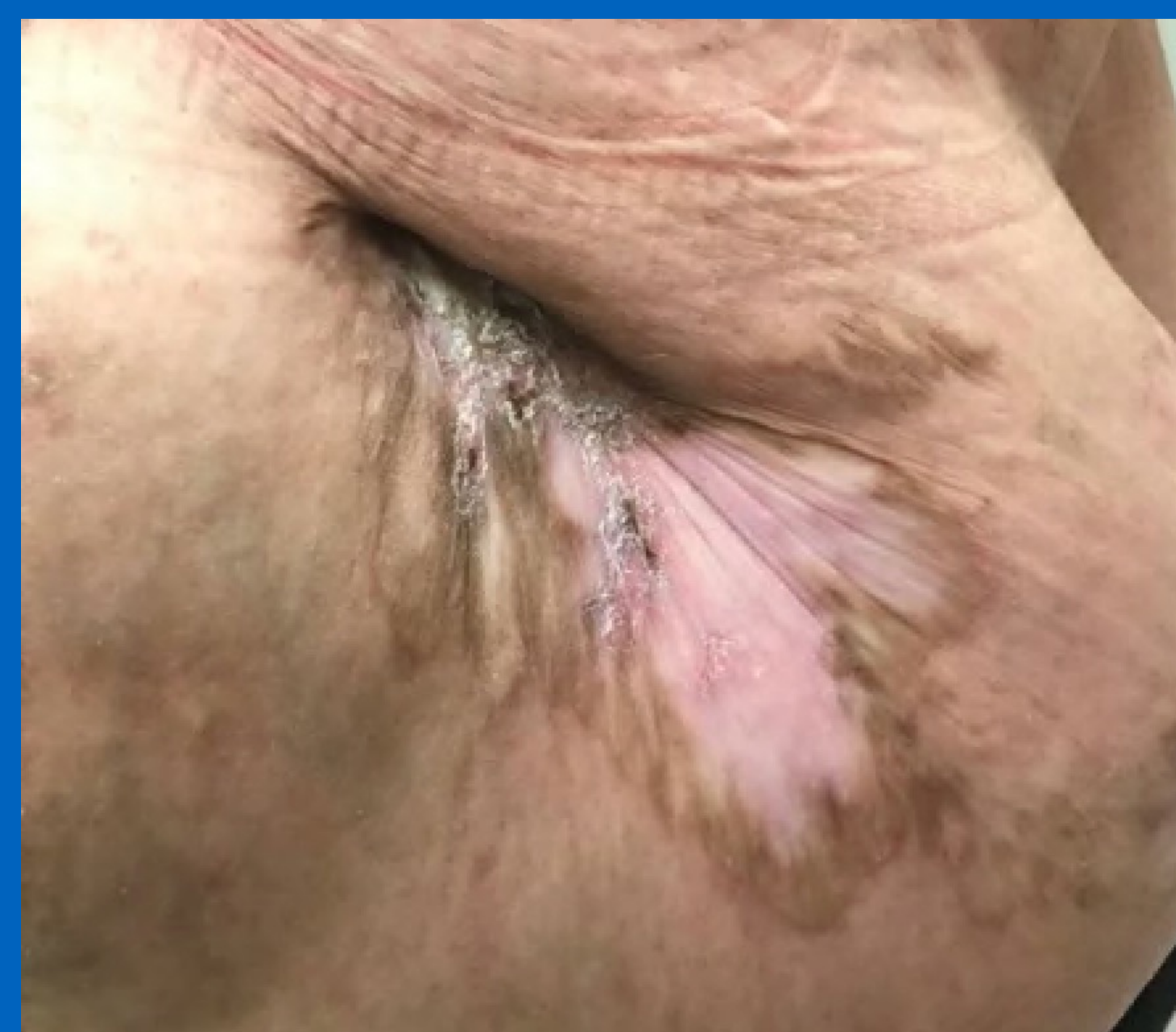


Figure 1. Case #1's peristomal PG prior to starting VDZ



Figure 2. Case #1's improved leg PG after taking VDZ

## Results

- Case #1 was a 38-year-old woman with colonic CD diagnosed at age 30, status post subtotal colectomy with end ileostomy, complicated by arthralgias and severe PG of her face, legs, and peristoma, who was followed for CD and recurrent PG. (Figure 1)
- She was steroid dependent for nearly the entire duration of her disease, unable to wean below 20 mg daily prednisone without her PG flaring. Adalimumab, infliximab, and sulfasalazine failed to control her PG.
- She was started on VDZ, and after her fourth induction dose, her PG lesions were in complete resolution / remission. After three months of maintenance infusions, she was tapered to 5 mg daily prednisone. Three years later, her PG remains in remission with VDZ. (Figure 2)
- Cases #2 to #4 were CD patients whose PG did not improve with VDZ therapy.
- Case #5 was a 47-year-old man with colonic CD, diagnosed at age 30, complicated by anorectal stricture and fistulization, status post multiple seton placements and left hemicolectomy with Colovesical fistula repair and a right transverse colostomy, who had peristomal PG that did not improve with adalimumab for eight months and mesalamine.
- He was started on VDZ, and at his four-month follow-up, he reported complete resolution of his peristomal PG.
- He has remained on VDZ therapy for the last five years with no recurrence of PG reported.

## Discussion

- In conclusion, 2 out of 5 of our CD patients with PG had a favorable response of PG in response to VDZ therapy.
- Our case series suggests that VDZ can be an effective treatment for refractory PG in CD patients; however, given the paucity of data, larger studies are needed.