

Introduction

- Hidradenitis Suppurativa (HS) is a chronic, debilitating inflammatory disease arising from follicular occlusion and rupture of apocrine glands, clinically manifesting as painful deep-seated nodules, abscesses, and sinus tracts with purulent discharge.¹
- Physical symptoms frequently precipitate severe psychosocial sequelae (Figure 1 & 2), including social withdrawal and body dysmorphia, which correlates with reduced quality of life and potential disease exacerbation.²⁻⁵
- Patient **motivation** has been linked to surgical outcome success.⁶
- We believe that a patient's psychological resilience is a critical determinant of surgical efficacy for HS.
- This case underscores the necessity of integrating psychological health into the preoperative multidisciplinary planning for HS to optimize surgical and functional outcomes.

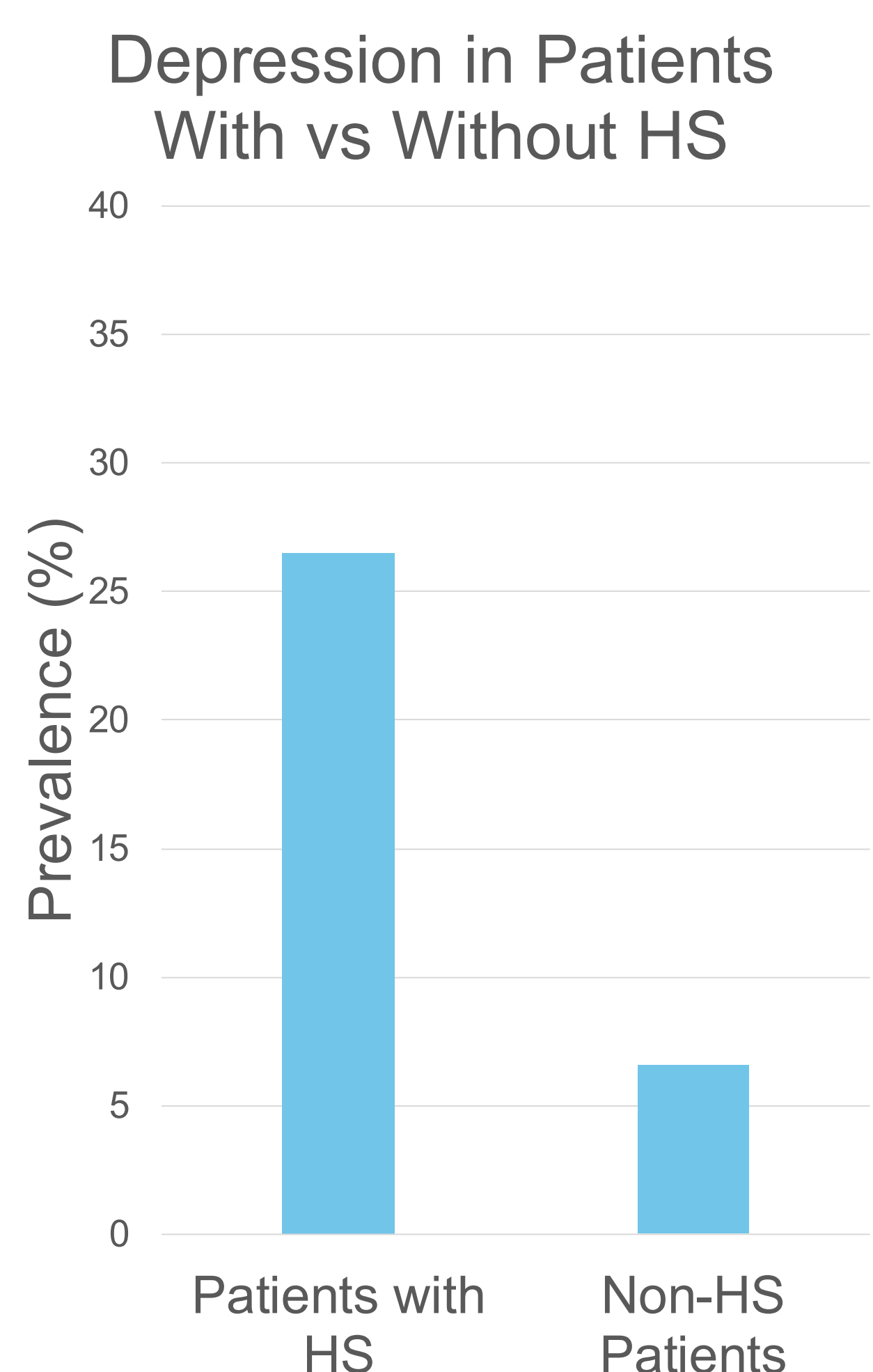


Figure 1: The prevalence of depression is higher in HS patients (20-30%) compared to patients without HS (6.6%), and about 20% have suicidal thoughts.²

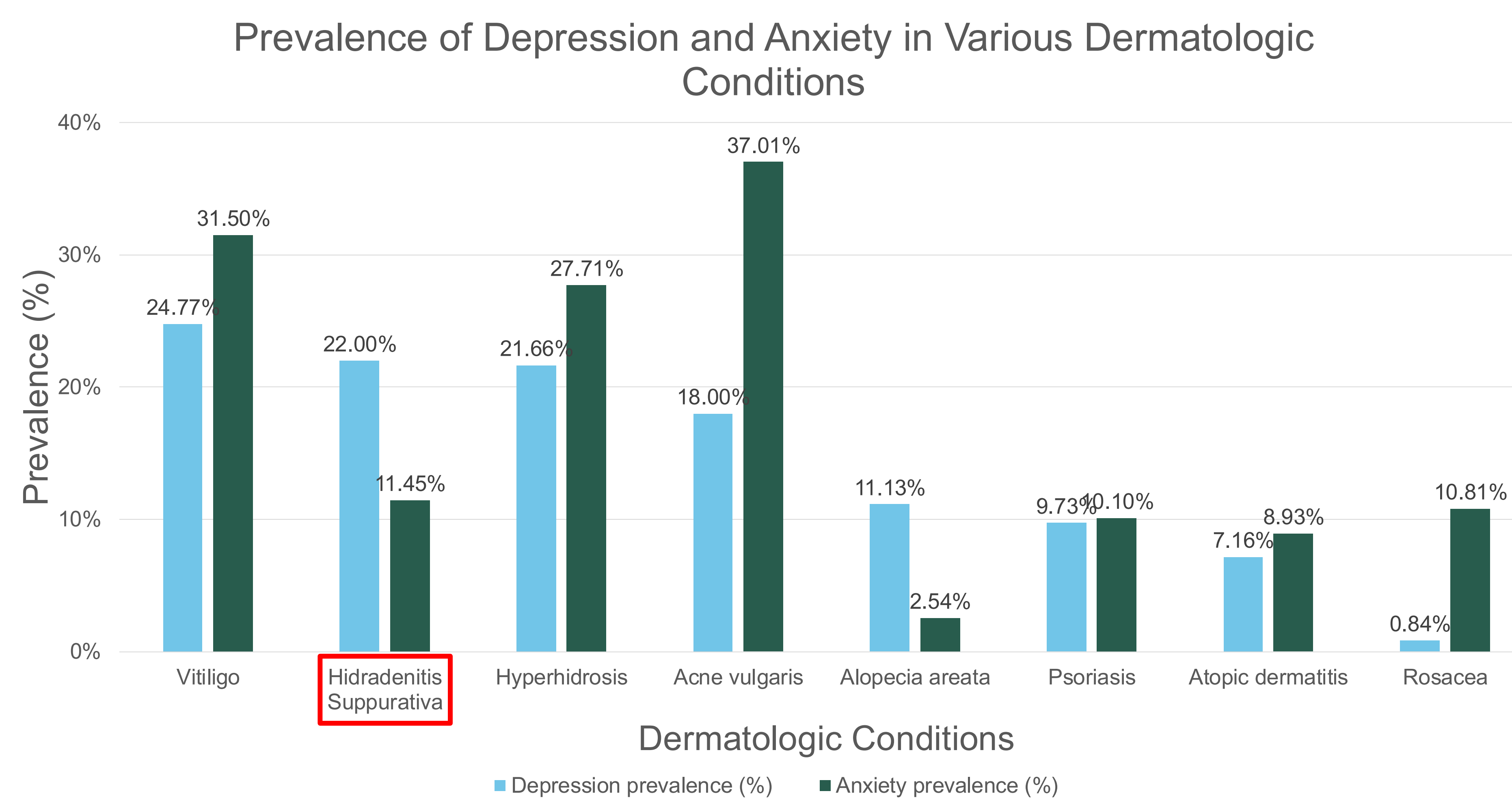


Figure 2: HS has one of the highest rates of depression in patients compared to many other dermatologic diseases. A meta-analysis published in 2025 listed the results, as shown in the bar graph above, with prevalences (%) and total number of patients studied (n) for depression and anxiety, respectively, as follows: vitiligo (24.77%, 2201; 31.5%, 1554), HS (22.0%, 200,718; 11.45%, 78,795), hyperhidrosis (21.66%, 45,274; 27.71%, 45,204), acne vulgaris (18.0%, 9533; 37.01%, 1635), alopecia areata (11.13%, 20,964; 2.54%, 13,992), psoriasis (9.73%, 54,853; 10.1%, 454,110), atopic dermatitis (7.16%, 198,446; 8.93%, 13,760), and rosacea (0.84%, 14,134,057; 10.81%, 99,483)²

Key Pearls

- About one of every four HS patients experience **Major Depressive Disorder**
- Motivated patients have more successful surgical outcomes**
- Pre-operative targeted mental health therapy can help optimize surgical outcomes for HS patients by improving motivation and reducing distress**

Conclusion

- While staged reconstructive surgery, medical management, and preoperative weight loss were pivotal, addressing the profound emotional distress associated with HS proved equally vital to this patient's recovery and final outcome.
- Major Depressive Disorder, along with other **mood disorders, represents a significant comorbidity** in debilitating diseases such as HS, warranting aggressive management when risk-stratifying patients for surgery.⁷
- This case demonstrates that both preoperative **medical and psychiatric optimization** are critical to facilitating optimal surgical outcomes.
- Ultimately, **surgical intervention, coupled with a holistic, patient-centered approach**, can yield transformative outcomes in patients with advanced cases of HS (Figure 5).

Case Presentation

- 31-year-old female presenting with Hurley Stage III HS, characterized by extensive disease burden, chronic drainage, and significant functional impairment

Methods

- The patient underwent **bariatric surgery** for weight optimization and subsequently presented to the plastic surgery service for a multistage reconstructive plan.
- She engaged in **targeted mental health therapy** to address chronic pain-induced distress, body image disturbance, and social isolation that had previously necessitated her withdrawal from a PhD program.

References

- (1) Shukla R, Karagaiah P, Patil A, et al. Surgical Treatment in Hidradenitis Suppurativa. *J Clin Med*. 2022;11(9):2311. doi:10.3390/jcm11092311 (2) Shan HD, Huffman SS, Bovill JD, et al. Psychiatric Influences on Hidradenitis Suppurativa: A Call for Help. *Arch Plast Surg*. 2024;51(3):304-310. doi:10.1055/a-2258-2438 (3) Caccavale S, Tancredi V, Boccellino MP, Babino G, Fulgione E, Argenziano G. Hidradenitis Suppurativa Burdens on Mental Health: A Literature Review of Associated Psychiatric Disorders and Their Pathogenesis. *Life (Basel)*. 2023;13(1):189. doi:10.3390/life13010189 (4) Wong JH, Garg KS, Bui JK, Huang JM, Greer ME, Hussain A. Mental health burden in dermatologic conditions: A scoping review of anxiety and depression prevalence in adults. *JAAD Reviews*. 2025;4:123-125. doi:10.1016/j.jdrv.2025.03.013 (5) Jemec GBE. Hidradenitis Suppurativa. *New England Journal of Medicine*. 2012;366(2):158-164. doi:10.1056/NEJMc1014163 (6) Voom MJJ, Jetten EEJ, Franssen C, et al. Optimizing Lifestyle Before and After Surgery: A Qualitative Stakeholder Analysis Among Healthcare Professionals. *Am J Lifestyle Med*. Published online June 29, 2025:15598276251355917. doi:10.1177/15598276251355917 (7) Sabat R, Jemec GBE, Matusiak L, Kimball AB, Prens E, Wolk K. Hidradenitis suppurativa. *Nat Rev Dis Primers*. 2020;6(1):18. doi:10.1038/s41572-020-0149-1

Results

Stage One (of Five)

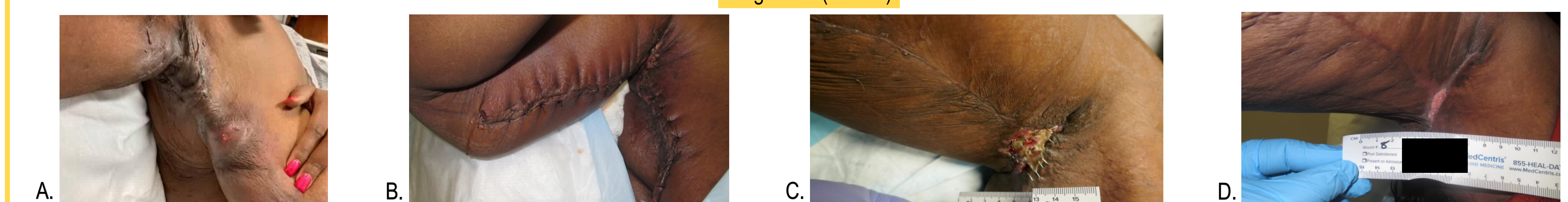


Figure 3: Stage One (9/2023: Bilateral Axillae, Breasts, and Abdomen). Right axilla shown above. A) pre-operative photo of right axilla and breast B) 3 week post-operative photo C) 6 week post-operative photo with outside wound clinic D) 3 month post-operative photo with outside wound clinic of healed wound

Stage	Location	Date of Procedure	Defect Size	Repair
Stage 1	Chest & Bilateral Axillae	2023-09	R Axilla - 10x7cm, 15x10cm L Axilla - 7x6cm, 15x10cm R Chest/Breast - 5x6cm L Chest/Breast - 3x6cm	Local Adv and Rotation Flap
Stage 2	Abdomen	2023-11	55x17x3cm	Local Adv Flap
Stage 3	Groin/Bilateral Thighs	2024-01	R Groin/Thigh - 27x32cm L Groin/Thigh - 26x29cm	Local Adv and Rotation Flap
Stage 4	Groin/Bilateral Thighs	2024-02	R Groin/Thigh - 14x5cm (donor site for skin graft) L Groin/Thigh - 4x1cm, 5x2cm Labia - 6x2cm	Skin Graft
Stage 5	Buttocks & Abdomen	2024-04	R Buttocks - 5x2cm L Buttocks - 8x4cm, 6x3cm, 5x2cm Abdomen - 22x7cm, 29x8cm, 6x2cm	Local Adv Flap

Figure 4: Table of All Five Reconstructive Stages. This patient successfully completed five stages of reconstructive surgery without any major complications.

1. Medical/Surgical Outcomes

- Completed **five-staged** reconstructive procedures without major complications (Figure 3 & 4)
- Wound care follow-up was coordinated with outside clinic and completed until all post-operative wounds fully healed

2. Metabolic/Bariatric Outcomes

- 100 lbs weight loss** achieved pre-operatively via bariatric surgery

3. Psychosocial & Functional Outcomes

- Resumed **doctoral studies**
- Joined a local **running club** (demonstrates physical recovery and social reintegration)
- Patient-reported: "never felt better" with an improvement in quality of life that exceeds baseline function prior to disease onset
- Restored autonomy, confidence, and daily functioning

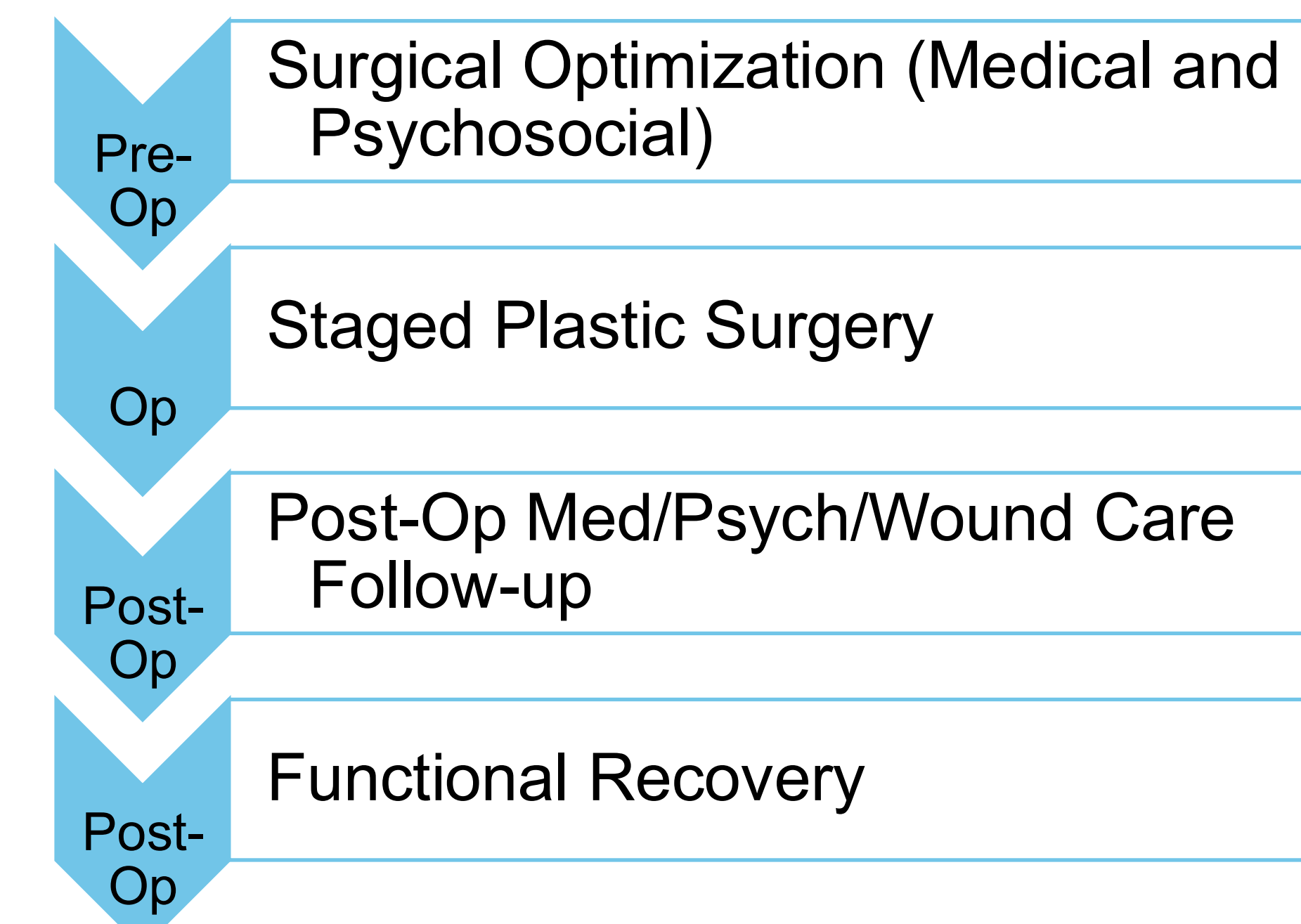


Figure 5: A holistic approach to treating HS patients, like the patient presented, can improve surgical outcomes which can in return augment the positive transformative impact of surgical intervention. For example, because surgical outcomes were optimized with a multidisciplinary pre-operative plan, this patient was able to maintain motivation post-operatively and further improve in various aspects of her life.