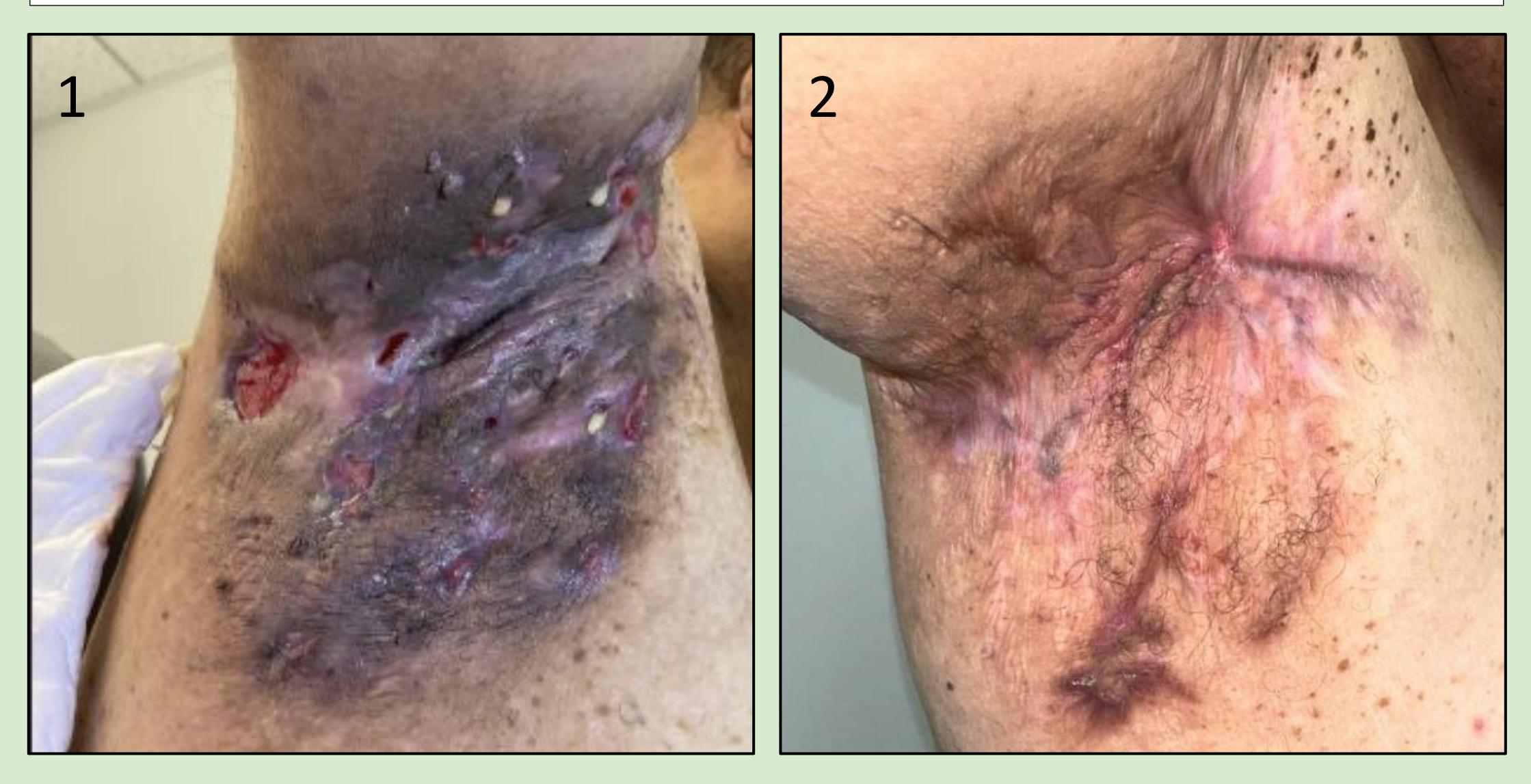
RUSH UNIVERSITY MEDICAL CENTER

Background

Non-MITHS Surgical Techniques:

- Incision and Drainage: Can be effective in reducing acute pain but is associated with significant risk of recurrence approaching 100%.
- Traditional Deroofing (DR): Often results in increased recurrence rates and post-operative challenges, with poor cosmetic results.
- Radical or Wide Local Excision: Requires reconstruction to maintain function, reduce contracture, and provide good aesthetic outcomes.



MITHS Surgical Techniques:

- Hydrosurgical debridement: Faster healing rates, reduction in need for additional debridement procedures, and lower rates of postoperative scarring compared to conventional methods.
- Low-frequency ultrasonic debridement (LFUD): Improvements in wound appearance, wound closure, and reduction in pain.

Bringing Hidradenitis Suppurativa to the 21st Century: A Paradigm Shift for Surgical and Lifestyle Interventions for a Difficult-to-Treat Condition

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Introduction

 The treatment of hidradenitis suppurativa (HS) follows three main pillars:

. patient education (hygiene, smoking cessation, weight loss, and dietary modifications)

- 2. anti-inflammatory medications, and
- 3. surgical therapy.
- Surgery is the only potentially curative measure for HS, but options are limited to incision and drainage, radical excision, or deroofing.
- Recently, minimally invasive technologies such as hydrosurgical debridement and low-frequency ultrasonic debridement have been developed to treat hard-to-heal wounds of various soft tissue diseases.
- We aim to broaden their application to the treatment of HS which we refer to as minimally invasive treatment for HS (MITHS).

Figures 1 & 2 (to the left): Photographs of the same patient taken (1) preoperatively and (2) postoperatively using MITHS

Methods

- Data collection focused on three primary outcomes: lifestyle factors, medication history, and patient experience with MITHS surgical intervention.
- References

Results

- Most respondents (71.4%) had an HS recurrence with remissions ranging from 1 week to 34 months
- 78.6% of respondents recommended MITHS.
- The greatest perceived benefits included improved flare control (85.7%), pain improvement (35.7%), and aesthetics (14.3%).
- Drawbacks included inadequate flare control (21.4%), post-operative pain (28.6%), and prolonged recovery time (7.1%).
- 21.4% of respondents preferred MITHS over DR while 14.3% indicated the opposite preference.
- 57.1% could not respond as they had only undergone MITHS.

	Recurrence of HS at	Recurrence of HS at MITHS			Greatest Percieved Benefit of	Greatest Percieved Drawback of	Preference for MITHS
tID#	any location	surgical site	Length of remission	Recommend MITHS?	MITHS	MITHS	versus DR
	1 Y	N	6 months	Yes	control flares, aesthetics	Post-op pain	n/a
	2 Y	Υ	3 weeks	No	control flares, pain improvement	Inadequate flare control	n/a
	3 Y	Υ	3 weeks	No	pain	Inadequate flare control	DR
	4 Y	N	16 months	No	control flares	Post-op pain, recovery time	MITHS
3	5 Y	N	34 months	Yes	control flares	Post-op pain	DR
2	6 N	N/A	none	Yes	control flares	none	MITHS
	7 Y	N	7 months	Yes	control flares, pain improvement	postop complications	MITHS
3	8 N	N/A	none	Yes	control flares	post-op pain	n/a
	9 N	N/A	none	Yes	control flares	Post-op pain	n/a
1	0 N	N/A	none	Yes	control flares, pain improvement	none	n/a
1	1 Y	Υ	1 week	Yes	aesthetics	Inadequate flare control	n/a
1	2 Y	N	10 months	yes	control flares, pain improvement	none	n/a
1	3 Y	γ	14 months	Yes	control flares, pain improvement	none	n/a
1	4 Y	Υ	12 months	yes	control flares	none	no preference
	Any Recurrence	Recurrence at surgical site					
	71.4%	50%		Recommend MITHS 78.6%	Control Flares 85.7%	Inadequate flare control 21.4%	No Preference 7.1%
	None 28.6%	Recurrence at other site 50%		Do not recommend 21.4%	Pain Improvement 35.7%	Post-op pain 28.6%	DR Preference 14.3%
					Aesthetics 14.3%	Recovery time 7.1%	MITHS Preference 21.4
						None 35.7%	N/A 57.1%

Table 1 (below): Post-MITHS outcomes and preferences

Discussion

- HS is a chronic, multi-factorial disease, which often requires a combination of medical and surgical interventions for symptoms and flare management.
- Among these is the use of novel surgical technologies such as LFUD and hydrosurgical debridement to target disease flares, known as MITHS.
- In combination with lifestyle modifications and medications have shown great promise in reducing wound healing times, pain/discomfort, and most importantly increasing patient satisfaction rates as compared to traditional debridement techniques.

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