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ODAC Sneak Peak
Hidradenitis Suppurativa: Cases & "Discuture"™

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Disclosures

- Consultant: Janssen, Unilever
- Grant: Pfizer
- Advisory Board: UCB, Pfizer, Novartis
- Off-label uses of medications/devices

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Objectives

- Case #1: A Pregnant Patient with Hidradenitis Suppurativa
  - Discuss the natural history of HS in pregnancy
  - Discuss the management of HS during pregnancy
- Case #2: Squamous Cell Carcinoma associated with Hidradenitis Suppurativa
  - Discuss the risk factors associated with SCC development in patients with HS
  - Discuss diagnostic and management pearls

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Which of the following monoclonal antibodies does NOT cross the placenta?

A. Adalimumab
B. Certolizumab
C. Infliximab
D. None of the above cross the placenta

Answer: B

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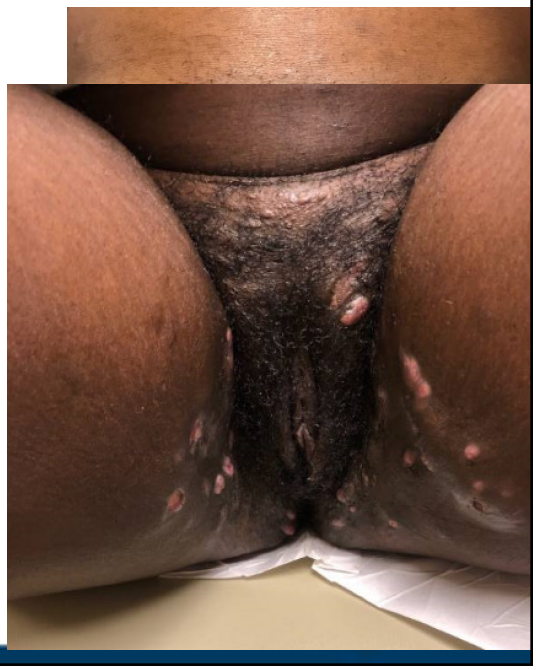
Case #1

Thank you to Dr. Jenny Hsiao for case/ photos



- 23 yo woman with a history of atopic dermatitis and HS, both dramatically worsened during pregnancy
- Presented at 19 weeks GA for an HS flare involving her axillae, breasts, pubic region, inner thighs, and buttocks
- All treatment options were discussed, including biologics, but she was hesitant to start a biologic, and opted for oral antibiotics
- Treated with cephalexin 500mg PO BID
  - Moderate improvement 3 weeks later
- Pregnancy was otherwise uncomplicated; she went on to deliver a healthy baby at term
- HS improved somewhat after delivery but then flared again →currently on long-term treatment with biologics

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HS & Pregnancy

Wide variation in disease activity during pregnancy
- 24% improve during pregnancy
- 20% worsen during pregnancy

56% of patients have ongoing or worsening disease during pregnancy
- Patients who report peri-menstrual HS flares may be more likely to have disease exacerbation during pregnancy

~60% of patients experience a post-partum flare

Seivright JR, Villa NM, Grogan T, Parvataneni RK, Thompson AM, Shi VY, Hsiao JL. Dermatology. 2021 Aug 17;1-7

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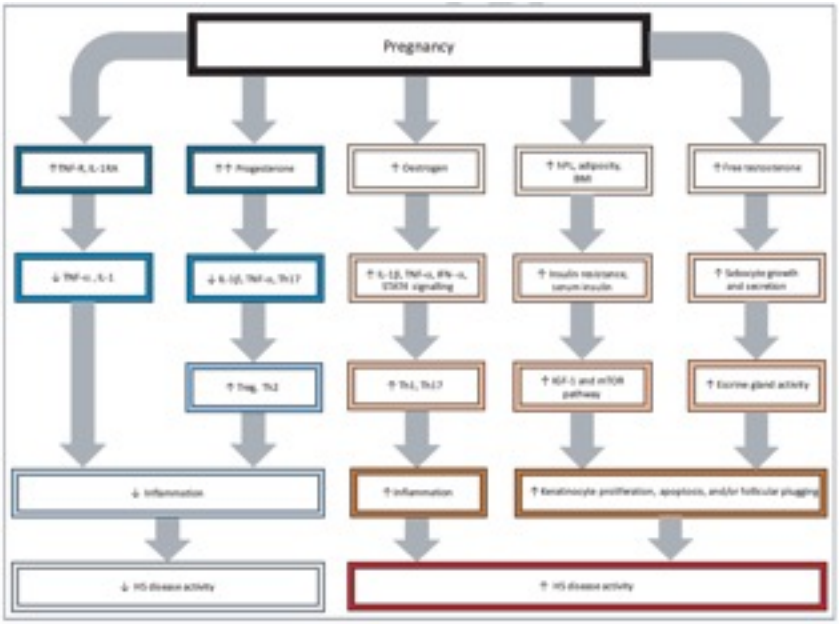

Perng P, Zampella JG, Okoye GA. Br J Dermatol. 2018J;178(1):e13-e14.

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Why does HS change during pregnancy?

Hormonal changes

- pregnancy-induced immunosuppressive state should improve HS?

Weight gain and increased friction in the intertriginous areas

- Adipocytes have been shown to promote the secretion of pro-inflammatory cytokines including TNF-α

Patients may have discontinued HS therapy prior to conception:

- OCPs, spironolactone, tetracyclines

J. Seivright et al. Dermatology. 2021 Aug 17;1-7

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Pregnancy Outcomes in Patients with HS

Pregnant patients with HS have higher odds of:

- Elective terminations
- Cesarean delivery (even after adjusting for confounders)
- Preeclampsia/eclampsia and gestational hypertension
  - These share comorbidities with HS, e.g. metabolic syndrome, obesity

SM Sakya, Hallan DR, Maczuga, SA, Kirby, JS. JAAD 2021 Jun 18;S0190-9622(21)01984-8

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Management of HS during Pregnancy

- Antibiotics
  - Topical clindamycin ; oral clindamycin 300mg po BID
  - Cephalexin 500mg po BID
  - Azithromycin 500mg three times per week
- Metformin up to 2000mg per day
- Laser hair removal (Nd:YAG 1065 nm)
- Intralesional injections of steroids (triamcinolone acetonide 20-40mg/cc)
- De-roofing of painful nodules
- Prednisone
- Biologics: TNF-alpha inhibitors

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Management of HS during Pregnancy

Adalimumab

- Monoclonal antibody crosses the placenta in the 3rd trimester
  - Some providers discontinue adalimumab at 24 weeks GA
- No known increase in birth defects, spontaneous abortion, preterm delivery, pre and post-natal growth deficiency, infections or malignancies
  - *Compared to cohorts with the same inflammatory disease (eg IBD, RA)*
- Anti-TNFα treatment may be associated with a higher risk of overall maternal complications (including infection)*
  - BUT… Stopping it is associated with increased maternal morbidity due to disease flares
- There was no increased infection/malignancy risk for children up to 1 year of age.*

CD Chambers et al. PLoS One. 2019 Oct 18;14(10):e0223603 / M Luu et al. Am J Gastroenterol. 2018 Nov;113(11):1669-1677*

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Management of HS during Pregnancy

- Infliximab can also be used with the usual dosing: 5-10mg/kg q 4-8 weeks
  - Not preferred due to need for pre-medications in some patients (e.g. acetaminophen)
- Average time for drug clearance in infants :
  - 4 months for adalimumab
  - 7 months for infliximab
  - Neither drug was detected in infants after 12 months of age
- ***Live vaccines should be avoided in exposed infants for up to 12 months unless drug clearance is documented***

Julsgaard M et al Gastroenterology 2016;151(1):110-119*

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Management of HS during Pregnancy

Certolizumab *off label*

- 400mg sq injection every 2 weeks
  - More improvement may be seen with weekly dosing
- Pegylated monoclonal antibody - does not cross the placenta
- Analysis of pregnancy outcomes in 1,137 patients did not indicate a teratogenic effect or increased risk of fetal death compared to the general population*

*MEB Clowse et al. Arthritis Rheumatol. 2018 Sep;70(9):1399-1407

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In your opinion, which of the following is the largest contributor to SCC development in HS?

A. HPV infection

B. Chronic Inflammation

C. Iatrogenic immunosuppression

D. Smoking

This is a true poll. There's no correct answer. I want to see where people are leaning

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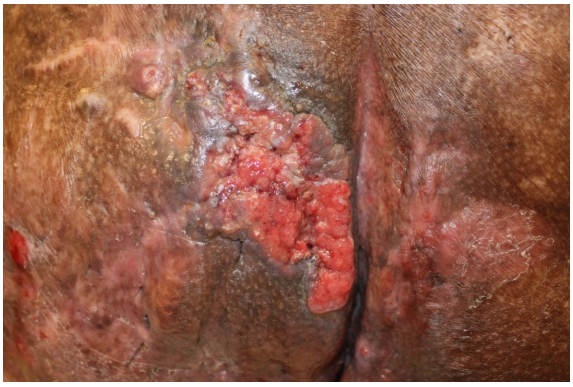
Case #2: HS & SCC

- 69 yo man with a long history of HS (>50 years), s/p multiple (non-biologic) medical therapies and multiple surgical excisions
- History also significant for HTN and 40-yr h/o smoking cigars
- Presents with an exquisitely painful, friable plaque on the buttock



Jourabchi N, Fischer AH, Cimino-Mathews A,Waters KM, Okoye GA. Int Wound J 2017; 14:435–438

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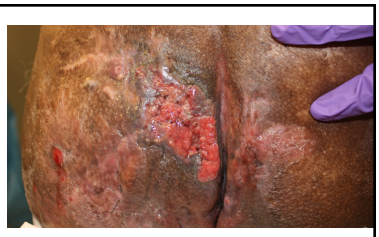
Case #2: HS & SCC



- Initial punch biopsy done in dermatology clinic: "atypical squamous proliferation" with granulation tissue
  - Deeper wedge biopsy done in surgery clinic → well-differentiated SCC
- Wide excision done & 2 enlarged LNs in the groin biopsied
  - 25cm x 25cm of tissue removed
  - Moderately differentiated SCC
  - 18.5 cm wide
  - Invasion depth 1.9 cm
    - Within 1mm of deep margin
- 2 LNs negative for SCC

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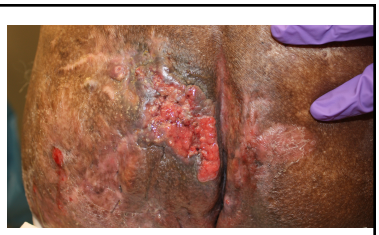
Case #2: HS & SCC



- VAC dressing
  - Fecal soilage and subsequent wound infection
  - Debridement
  - Diverting colostomy; complicated by prolapse
- Wound contracted → STSG done 2 months later; 40% of graft did not take
- Team decided not to do adjuvant radiation (morbidity, wound healing, localization of field, colostomy diversion etc.)
- SCC recurrence noted on biopsy 8 months after 1st biopsy
  - CT shows involvement of anus and right and left gluteal muscles
- Repeat wide excision → all margins positive
  - Rapid progression despite radiation therapy → sepsis → patient expired

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HS and Squamous Cell Carcinoma (Marjolin's ulcer)

As of early 2021, in the literature: 95 patients with a total of 122 SCCs within HS lesions

- Average age at diagnosis: 53 yo

More common in **men** with long-standing **perianal, and gluteal** disease

- Men represent >75% of patients reported
- > 66% of cases occurred on the buttocks/perianal area
- Average time from HS diagnosis to SCC diagnosis: 25 years

Lavogiez et al. Dermatology. 2010;220(2):147-53 | Sachdeva M et al. Int J Dermatol June 2021

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HS and Squamous Cell Carcinoma (Marjolin's ulcer)

Outcomes:

- 55% developed visceral metastases
- 41% developed recurrences
- **59% mortality** (metastasis and sepsis most common causes of death)

Lavogiez et al. Dermatology. 2010;220(2):147-53 | Sachdeva M et al. Int J Dermatol June 2021

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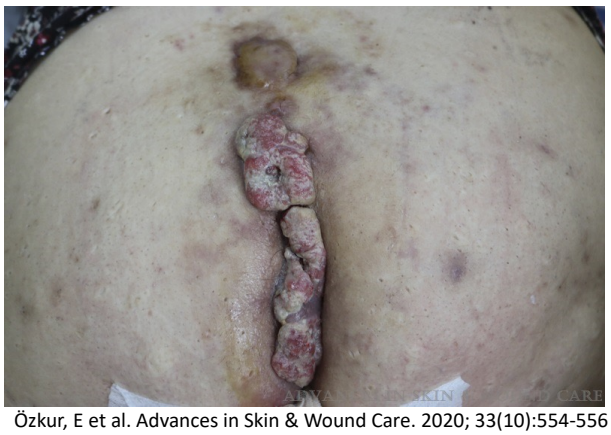
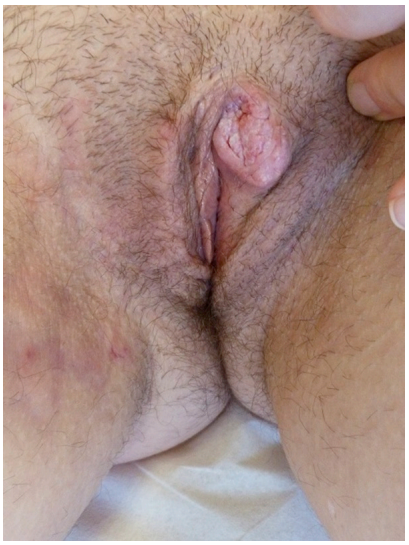


Özkur, E et al. Advances in Skin & Wound Care. 2020; 33(10):554-556



Sevray et al. JAAD Case Rep. 2019 Nov; 5(11): 999–1001.

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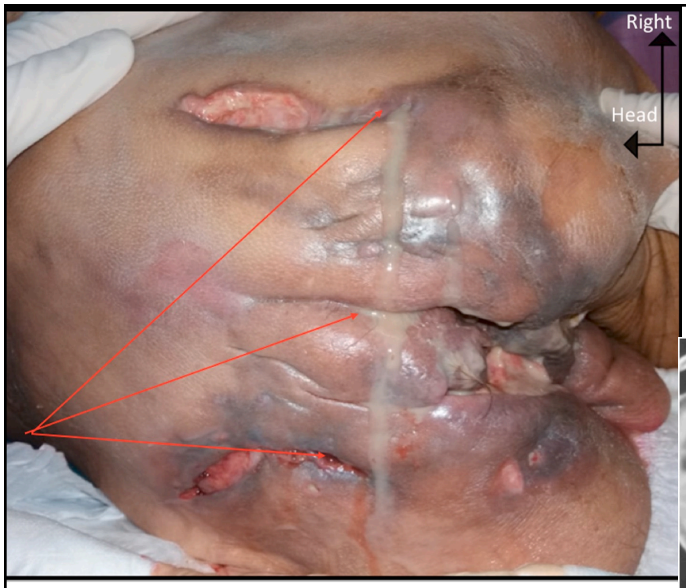

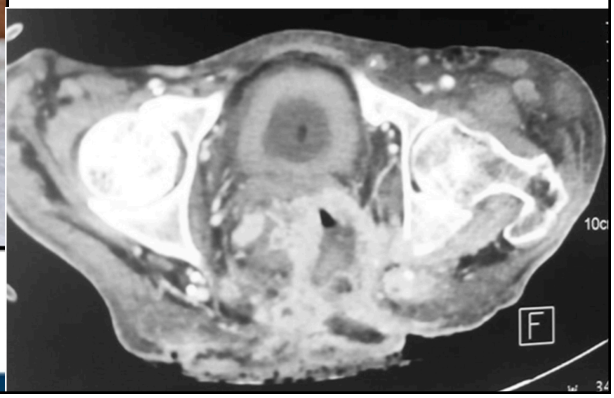

Atri, S et al. Annals of Medicine and Surgery. Volume 64, April 2021

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HS and Squamous Cell Carcinoma: Issues to Consider

Delays to diagnosis
- Difficult to distinguish disease process from malignant transformation

False negative biopsies
- Superficial biopsies can be falsely negative
  - Send for surgical wedge excisions
  - Do multiple biopsies

Local recurrence & metastasis
- Spread of SCC along sinus tracts → disease may be more extensive than it appears
  - Consider pre-op MRI or CT scan to establish true extent of disease
  - Wide local excision with at least 2 cm margins
  - Sentinel lymph node dissection

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HS and Squamous Cell Carcinoma: Issues to Consider

Questions to consider?

- What is the role of HPV in HS-associated SCCs?
  - High risk HPV-16,-18,-68 have been found in some SCCs arising within HS lesions*
- Is the malignant transformation seen in HS due to chronic inflammation or HPV infection, or both?
  - If due to the former, why do most SCCs occur in the groin/buttocks?
- We treat HS with immunosuppressive medications
  - Do these medications decrease the risk of SCC by decreasing chronic inflammation?
  - Or, do they increase the risk of SCC?
    - ~8 cases in the literature of SCCs developing shortly after anti-TNFa therapy^

*Lavogiez et al. Dermatology. 2010;220(2):147-53 |
^Maalouf et al. Ann Dermatol Venereol. 2006;133(5 Pt 1):473-4. Cooper S et al. Cutis 2021; 107(4)

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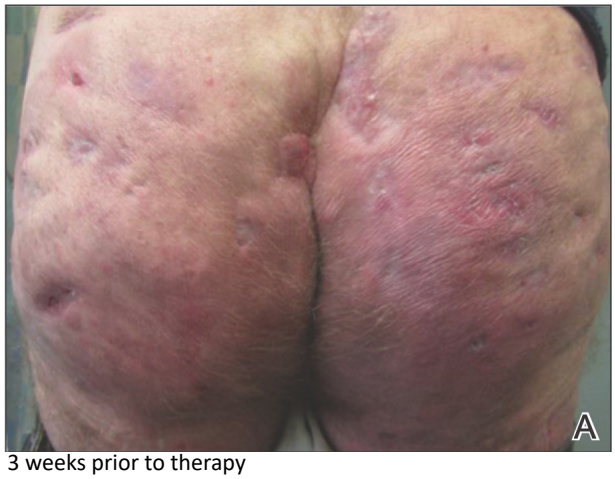
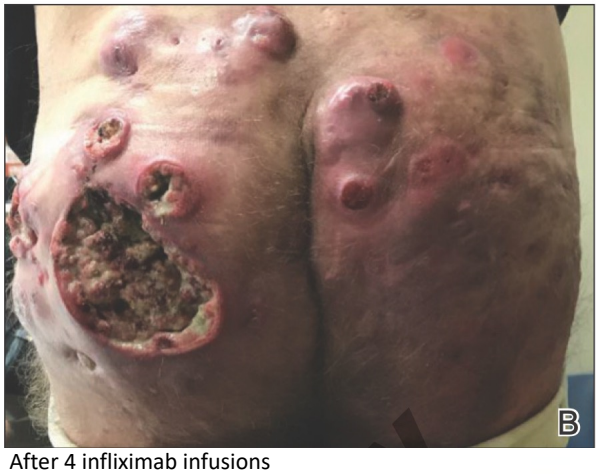


3 weeks prior to therapy



After 4 infliximab infusions

Cooper S et al. Cutis 2021; 107(4)

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Thank you!

Big shout-out to **Dr. Jenny Hsiao** for sharing her case with me,
and to everyone who takes the time to care for patients living with HS

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