International Journal of Science and Research (IJSR)
ISSN: 2319-7064
Impact Factor 2024: 7.101

Occipital Hidradenitis Suppurativa with Secondary Myiasis and Ulceration: A Rare Presentation

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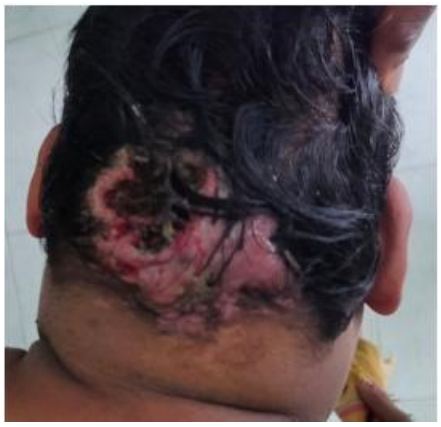
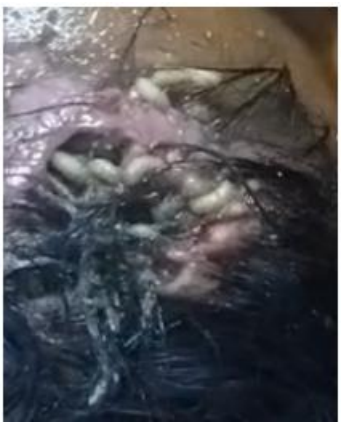
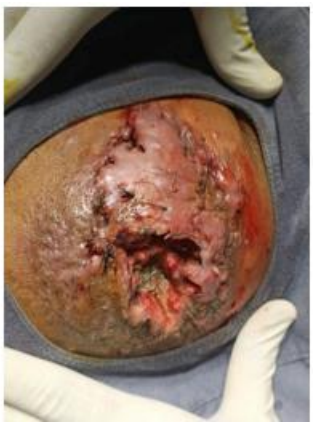
Abstract: ***Introduction: Hidradenitis suppurativa (HS) remains an under-recognized chronic inflammatory disorder with a recurrent and often debilitating course, manifesting most commonly in apocrine gland-bearing regions but, in rare presentations, extending to atypical sites such as the occipital scalp. In my view, this case report of a 33-year-old male with a long-standing, maggot-infested ulcerative lesion of the scalp underscores the disease's complex pathology and the potential for severe tissue destruction when diagnosis and intervention are delayed. The detailed account not only traces the clinical journey from presentation to surgical excision but also places it within the broader therapeutic spectrum—ranging from topical agents and systemic antibiotics to biologics, hormonal modulation, and advanced surgical approaches. It is evident that HS management demands an integrative strategy that addresses both physical and psychological dimensions, given its profound influence on patient quality of life. This suggests that timely detection, patient-specific treatment planning, and vigilant follow-up can substantially reduce the risk of serious complications, including malignant transformation in chronic cases. The discussion also draws on established research to highlight the roles of lifestyle modification, targeted pharmacotherapy, and post-operative care, making this report a meaningful contribution to the nuanced understanding of HS in uncommon anatomical locations.***

Keywords: hidradenitis suppurativa, scalp ulcer, chronic inflammation, surgical excision, case report

Pathogenesis

The 2 leading causes of HS are follicular occlusion and mechanical friction.

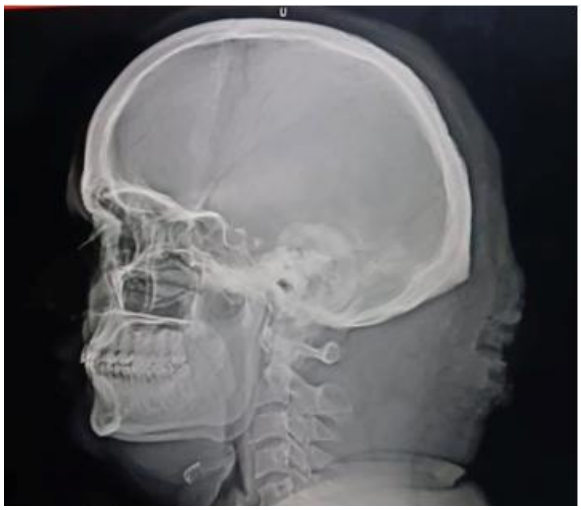
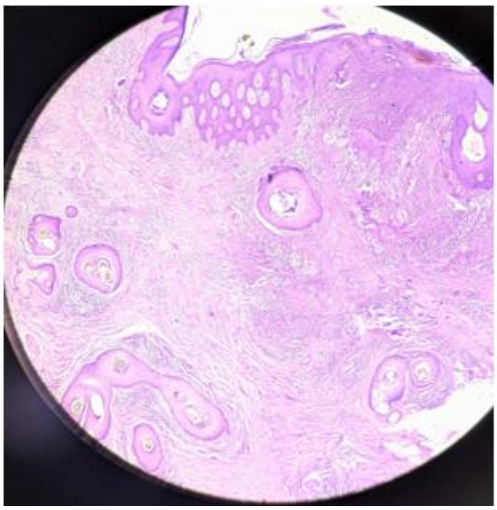
Clinical details

A 33 year old male presented with complaints of swelling over occipital region since 3 years. It was associated with pain, foul smelling bloodstained discharge, itching, hair loss and maggot infestation. On examination a large boggy swelling of 20x10cm, with partial ulceration measuring 6x6x3cm, with ill-defined edges, raised margins, filled with maggots, slough, purulent discharge, sinus tracts and alopecia.

All blood parameters were in normal range, except TC - 14,400/ccmm

HPE was reported as chronic non specific ulcerative lesion.

Bacterial culture showed Klebsiella oxytoca growth.

Operative findings
Maggots were cleared using turpentine oil from ulcerative lesion.

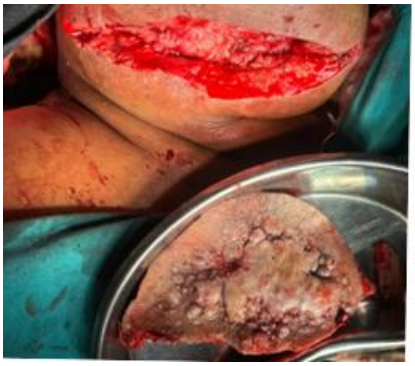
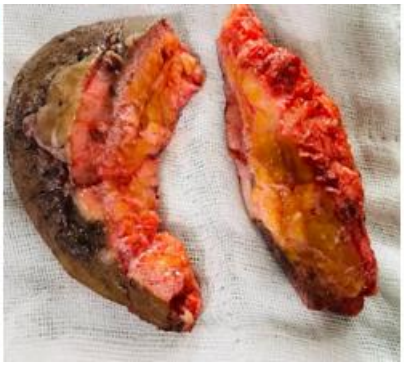
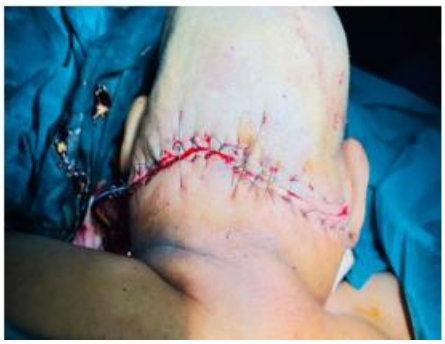
Wedge biopsy of ulcerative lesion of swelling done.

A transverse elliptical incision including the lesion was given with a margin of 2cm extending to the base of scalp involving all layers and the mass excised.

Mass was highly vascular.

Incision extended, flaps are advanced into wound, skin and underlying layers approximated.

Sample sent for HPE, culture and sensitivity- bacterial and fungal

General Recommendations

Smoking
According to retrospective research, 92.2% of HS patients smoked, while non-smoking patients were more likely to report clinical remission.

Weight Reduction
Obesity or overweight are measured as frequent comorbidities of HS.

Psychological Support
HS carry significant influence on life of patient and may necessitate professional help as a result of painful lesions, purulent discharge, chronic recurrent course. According to Esmann et al., shame and a fear of stigmatization enhance the possibility of social isolation.

Medical Therapy
- Topical clindamycin effectively decreased inflammatory lesions.
- One topical agent that has keratinolytic, antipruritic, and anti-inflammatory qualities is resorcinol, which can be used 2 times a day to inflammatory lesions that are actively developing.
- Topical JAK1/JAK2-inhibitor ruxolitinib.
- When an immediate decrease in inflammation is required, intra-lesional injections of glucocorticosteroids, like triamcinolone acetonide, might be taken into consideration to treat acute solitary inflammatory nodules.

Systemic Therapies
In HS, zinc salt like zinc gluconate exhibitanti inflammatory impacts, potentially involving anti-androgen factors, cytokine expression modulation, and inhibition of neutrophil granulocyte chemotaxis.

Systemic Antibiotic Therapy
Patients suffering Hurley stage II along with moderate to severe disease, clindamycin or rifampicin are suggested with first line treatment. If oral tetracycline treatment is ineffective, clindamycin or rifampicin are advised as second line therapy.

Hormonal Treatment Approaches

- Hormonal Treatment Approaches: The quality of life was enhanced and pain and inflammatory lesions were significantly reduced after using spirolactone.
- As an adjuvant treatment option, metformin may help control the disease in HS because it demonstrated excellent clinical response rates.

Retinoids

Retinoids affect cell differentiation as well as might pose helpful influence in HS via decreasing keratinocyte proliferation.

Adalimumab and Other TNFα Inhibitors

As of right now, one biologic therapy authorized to treat of moderate to severe HS in older individuals or adolescents aging same or more than12 and up is adalimumab, completely human IgG1 monoclonal antibody specific for TNFα.

Chimeric mouse or human IgG1 monoclonal antibody infliximab carry strong affinity for both soluble or transmembrane bound TNFα.

Etanercept is the fusion protein that hinders TNFα signal by ligand binding competitively. It is made up of Fc region of human IgG1 along with extracellular ligand-binding domain of 75kDa TNFα receptor.

Surgical Treatment Options

Incision and Drainage- measured for acute pain relief, about 100% recurrence rates.

Deroofing - defines a superficial removal of the skin that covers a solitary sinus tract or inflammatory nodule, revealing the partially epithelialized lesion base, followed by the curettage of gelatinous granulation tissue.

Excision

Limited excisions - treatment of solitary sinus tracts in Hurley stages I and II, as well as recurring inflammatory nodules or abscesses, can be carried out in an outpatient setting under local anesthetic.

Wide excisions - surgical removal of affected tissue with perilesional skin and adjacent subcutaneous fat, providing a margin for resection.

Severe disease with many or confluent sinus tracts, intraoperative dye mapping techniques like methyl violet or iodine starch, or preoperative MRI or ultrasound-based imaging techniques can all help to increase the surgical site's visibility.

Laser-Based Therapies

CO2 (Carbon dioxide) laser operates at 10,600nm wavelength or could be utilized for tissue ablation in several modalities, such as excision as well as vaporization.

Postoperative Wound Management and Wound Closure Options

NPWT (Negative pressure wound therapy) was exhibited for enhancing wound healing and granulation by elevating tissue oxygenation as well as decreasing bacterial load.

Conclusion

Hidradenitis suppurativa, is a rare condition which is often left undiagnosed decreasing quality of life. One should be vigilant in early identification, diagnosis, treatment and to prevent the complications of the disease like squamous cell carcinoma in longstanding HS.

Conflicts of Interest

F.G.B. has received honoraria for participation in advisory boards, in clinical trials and/or as a speaker from AbbVie Inc., AbbVie Deutschland GmbH & Co. KG, Boehringer Ingelheim Pharma GmbH & Co. KG, Novartis Pharma GmbH, UCB Pharma, Incyte Corporation and JanssenCilag GmbH, MoonLake. The other authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

References

[1] Garg, A.; Kirby, J.S.; Lavian, J.; Lin, G.; Strunk, A. Sex- and Age-Adjusted Population Analysis of Prevalence Estimates for Hidradenitis Suppurativa in the United States. JAMA Dermatol. 2017, 153, 760–764. [CrossRef] [PubMed]

[2] Theut Riis, P.; Pedersen, O.B.; Sigsgaard, V.; Erikstrup, C.; Paarup, H.M.; Nielsen, K.R.; Burgdorf, K.S.; Hjalgrim, H.; Rostgaard, K.; Banasik, K.; et al. Prevalence of Patients with Self-Reported Hidradenitis Suppurativa in a Cohort of Danish Blood Donors: A Cross-Sectional Study. Br. J. Dermatol. 2019, 180, 774–781. [CrossRef] [PubMed]

[3] Jfri, A.; Nassim, D.; O'Brien, E.; Gulliver, W.; Nikolakis, G.; Zouboulis, C.C. Prevalence of Hidradenitis Suppurativa: A Systematic Review and Meta-Regression Analysis. JAMA Dermatol. 2021, 157, 924–931. [CrossRef]

[4] Jemec, G.B.; Heidenheim, M.; Nielsen, N.H. The Prevalence of Hidradenitis Suppurativa and Its Potential Precursor Lesions. J. Am. Acad. Dermatol. 1996, 35, 191–194. [CrossRef]

[5] Mac Mahon, J.; Kirthi, S.; Byrne, N.; O'Grady, C.; Tobin, A. An Update on Health-Related Quality of Life and Patient-Reported Outcomes in Hidradenitis Suppurativa. Patient Relat. Outcome Meas. 2020, 11, 21–26. [CrossRef] [PubMed]