



International Journal of Medical and Pharmaceutical Case Reports

8(2): 1-6, 2016; Article no.IJMPCR.25006
ISSN: 2394-109X, NLM ID: 101648033



SCIENCEDOMAIN *international*
www.sciencedomain.org

Hidradenitis Suppurativa: Two-case Reports

Khalifa Y. Hassan^{1*}

¹Faculty of Medicine, Alzaiem Alazhari University, Sudan.

Author's contribution

The sole author designed, analyzed and interpreted and prepared the manuscript.

Article Information

DOI: 10.9734/IJMPCR/2016/25006

Editor(s):

(1) Rafik Karaman, Bioorganic Chemistry, College of Pharmacy, Al-Quds University, Jerusalem, Palestine.

Reviewers:

(1) Ajit Gangawane, Parul University, India.

(2) Kanokvalai Kulthanon, Mahidol University, Thailand.

(3) Mateusz Cybulski, Medical University of Bialystok, Poland.

(4) Nesrin Ceylan, Yuzuncu Yil University School of Medicine, Turkey.

Complete Peer review History: <http://www.sciencedomain.org/review-history/17218>

Case Report

Received 12th February 2016
Accepted 6th October 2016
Published 12th December 2016

ABSTRACT

Hidradenitis suppurativa (HS) is a common (though rarely diagnosed) disease affecting the apocrine glands. It is chronic in nature and mainly found in areas rich in apocrine glands like axillae, groins, under the breast, buttocks and the gluteal region. The main features of HS are multiple abscesses, sinus tracts, wet oozing lesions and secondary infections. The disease is chronic in nature and negatively affects the quality of life of patients.

HS disorder should be put in mind when a patient has intertrigenous lesions. It could be differential diagnosis, along with the fungal, viral and other bacterial infections.

Keywords: Micoabscesses sinus tracts; apocrine glands; axillae genital area.

1. INTRODUCTION

Hidradenitis suppurativa [1,2] is a disease affecting both females and males after puberty, where apocrine glands are active. Apocrine glands got inflamed. Lesions of multiple abscesses, papules, nodules, vesicles and

sinus tracts may develop. Lesions are usually painful. Female to male ratio is 3:1. The disease has familial trait in about 30% of patients, and is characterized by painful flares, then may subside within few days to weeks. HS is not a rare disease and chronic in nature [3,4,5].

*Corresponding author: E-mail: khalifahassan455@yahoo.com;

Although HS is common in early 20s patients, is also found in prepubertal and post menopausal women. The occurrence of the disease declines with age [4,6,7,8].

In comparison with other chronic diseases like; psoriasis or chronic dermatitis, in terms of Dermatology Quality Life Index, (DQLI) HS is considered of a great negative impact on affected patients [9-11,12]. HS is found to be associated with sever acne, acne conglobata, and pilonodal cysts [1]. A 50% increased risk of developing cancer is also associated with HS compared to general population [13]. About 17% of patients affected by Crohn's disease develop HS [14].

1.1 Pathogenesis

HS is characterized histologically by sebaceous glands atrophy, hyper keratosis, early lymphocytic infiltrate then lately by destruction of hair follicles, granuloma formation and healed by scarring and sinus tract formation [15,16,17,18,12,19]. HS is considered to have an immunological basis since cytokines like interleukins 12 and 23 (IL 12, IL 23) and tumor necrosis factor α (TNF- α) are involved in its pathogenesis [20,21].

1.2 Hurley Stages

Stage 1 - Lesions are composed only of one or many abscesses. No scarring or sinus tracts.

Stage 2 - There is one or many abscesses and sinus tracts.

Stage 3 - Large area is covered with many sinus tracts and abscesses [22,23].

1.3 Treatment

1.3.1 Lifestyle

Washing or bathing with hot water or vinegar and skipping foods that can trigger inflammation could lessen the severity of the disease [24].

1.3.2 Medication

Many antibiotics e.g (tetracycline rifampicin clindamycin and minocycline) when used for 8 to 12 weeks are found effective in about 75% of patients [25,22]. Use of keratolytic and antiseptic agents which contain 15% resorcinol. Waxes oils or creams are useful [26]. Injectable intralesional steroids are found beneficial. Antiseptic soaps and lotions plus antibiotics are used [22,23].

The FDA approved Humira (adalimumab) for the treatment of moderate to severe hidradenitis suppurativa (HS) on September 16, 2015 for patients who were irresponsive to or intolerant of oral antibiotics [27,28].

In chronic cases of HS surgical excision is indicated and skin grafts may be used [8]. Pollock procedure also may be used as electrocoagulation and excision with primary closure [29]. Complete wide excision with the use of flaps and grafts are needed in some cases e.g Thiersch split-thickness grafts, meshed grafts, or Wolfe full-thickness grafts [30,31]. Flaps may be rotation flaps or free flaps [32].

Nd:YAG, and carbon dioxide lasers, anakinra are used as IL-1 inhibitors were found beneficial in treatment of HS [33,28].

1.4 Prognosis

Some complications may occur in chronic untreated cases of HS like squamous cell carcinoma anemia, many infections, amyloidosis, contractures in the axillae and groins and lymphedema in the lower limbs [34].

2. PATIENTS AND METHODS

Two patients came to me, a female of 17 years old complaining of multiple papules, vesicles and erosions on her both axillae and genital area for more than one year. The other patient is a 22 years old male, complaining of very itchy and burning pimples on both axillae for more than two years. The two patients are cousins. Specimens were taken from both patients for culture and sensitivity. No growth from both specimens was found. Histopathology was done, for the female patient; there was multiple coalescing abscesses, sinus tracts, atrophy of the apocrine sweat glands hyperkeratosis and dermal lymphocytosis. For the male patient; also there was multiple abscesses, normal areas of skin in between the the affected areas, and mild dermal lymphocytosis.

2.1 Treatment

Treatment started with cleansing of the affected areas by antiseptic soap and potassium permanganate solution. A cream of combined topical antibiotic and potent steroid was given twice a day, systemic antibiotic and intralesional injectable steroid were prescribed. Temporary improvement occurred, but recurrence after 6

months for both patients occurred. I referred the patients to the surgical department for resection and drainage. Both patients improved. Then medical treatment for maintenance and prophylaxis was continued.



Photo 1. Left axilla of female patient



Photo 2. Right axilla of female patient

3. RESULTS AND DISCUSSION

The above 2-case report; their age falls within the common age for the disease (Hidradinitis Suppurativa) HS [6,7]. The area affected was the axillae and the genital area, which is compatible with mentioned area in the literature [3]. The lesions were painful and affecting the psychological status of both patients. For staging of the disease according to Harley Staging System, for the female patient, can be classified as stage 3, because the disease affected both axillae and the genital area, and there are multiple nodules, abscesses, sinus tracts, erosions, and cysts. For the male patient can be classified as stage 2 [22,23], because only the axillae are affected, and it contained abscesses,

nodules and no sinus tracts. Our patients were relatives, so genetic basis may be sought [35,36].



Photo 3. Right axilla of male patient



Photo 4. Left axilla of male patient



Photo 5. Genital area of female patient

The use of antibiotics like rifampin-moxifloxacin-metronidazole, and ceftriaxone were used in the treatment of our patients, and also may be used singly or in combination with each other in

chronic and resistant cases [37]. In United Kingdom, infliximab was found to be used by many dermatologists and other physicians for the treatment of HS in their top 10 treatments [38,39]. Other biological drugs like etanercept and adalimumab also were tried for the treatment of HS but more randomized studies are needed [39,40]. For our patients we used a combination of clindamycin, rifampin and metronidazole plus intralesional steroids, but we couldn't use biological drugs because they are unavailable in our locality. Early diagnosis is important, as to avoid complications which may be serious. [41,42].

The condition of both patients, was monitored and evaluated according to the Dermatology Life Quality Index (DLQI) and was found to be improved [12]. Hyperbaric oxygen therapy was tried to increase the healing of the lesions of HS in combination with some antibiotics like rifampicin and clindamycin and was found to be effective according to one study [43]. In our patients, we prescribed rifampin and clindamycin but we were not able to apply hyperbaric oxygen therapy. The need for surgical intervention should be assessed in all patients depending on the type and extent of scarring [27]. In our patients, the male and the female, both of them, need surgical intervention, because they were classified as Herly stage 2 and stage 3 respectively, and other modalities of treatment should be considered [44].

Laser treatment was not tried, because it is very expensive, and the biological treatment was not tried because of its unavailability in Sudan.

4. CONCLUSION

HS disease is found to be chronic in nature and adversely affects the patient's quality of life. Since these two patients, were relatives, genetic factor may be implicated. Different modalities of treatment may be applied, including, detergents, antibiotics, intralesional corticosteroids, surgical removal and psychological support. Biological and laser treatment could be used in our area in the future.

CONSENT

Consent as per university policy was taken from the two patients for publishing the results but without revealing their features.

ETHICAL APPROVAL

It is not applicable as per university policy.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Alikhan Ali, Lynch Eisen. Hidradenitis suppurativa: A comprehensive review. *J Am Acad Derm.* 2009;60(4):539–561. DOI: 10.1016/j.jaad.2008.11.911 PMID [19293006](#)
2. Mayo Clinic Staff. Causes. Mayo Clinic. Retrieved 19 September 2012.
3. Mayo Clinic Site. Retrieved 2013-12-07.
4. HS-USA: What is hidradenitis suppurativa? Retrieved 2013-07-20.
5. Attanoos RL, Appleton MA, Douglas-Jones AG. The pathogenesis of hidradenitis suppurativa: A closer look at apocrine and apoeccrine glands. *Br J Dermatol.* 1995;133(2):254-8. [Medline]
6. HS-USA: Prevalence of hidradenitis suppurativa. Retrieved 2007-07-08.
7. Medline Plus. Hidradenitis suppurativa. U.S. National Library of Medicine; 2012. Retrieved 19 September 2012
8. Schwartz's principles of surgery, 8th edition, self assessment an board review, chapter 15, the skin and subcutaneous tissue, question 16.
9. DermNet acne/hidradenitis-suppurativa; 2007.
10. HSF – What is hidradenitis suppurativa? What is HS? Retrieved 2007-07-08.
11. Slade DEM, Powell BW, Mortimer PS. Hidradenitis suppurativa: Pathogenesis and management. *Br J Plast Surg.* 2003;56(5):451–61. DOI: 10.1016/S0007-1226(03)00177-2 PMID [12890458](#)
12. Barth JH, Kealey T. Androgen metabolism by isolated human axillary apocrine glands in hidradenitis suppurativa. *Br J Dermatol.* 1991;125(4):304–8. DOI: 10.1111/j.1365-2133.1991.tb14162.x PMID [1954117](#)
13. Koning A, Lehmann C, Rompel R, Happle R. Hidradenitis suppurativa. *Dermatology.* 1999;198(3):261–4. DOI: 10.1159/000018126 PMID [10393449](#)

14. Morgan WP, Leicester G. The role of depilation and deodorants in hidradenitis suppurativa. *Br J Surg.* 1979;66(12):853–6.
DOI: 10.1002/bjs.1800661206
PMID 509057
15. Stellan AJ, Wakeling M. Hidradenitis suppurativa associated with use of oral contraceptives. *Br Med J.* 1989;298(6665): 28–9.
DOI: 10.1136/bmj.298.6665.28
16. Gupta AK, Knowles SR, Gupta MA, Jaunkalns R, Shear NH. Lithium therapy associated with hidradenitis suppurativa: Case report and a review of the dermatologic side effects of lithium. *J Am Acad Dermatol.* 1995;32(2 Pt 2):382–6.
DOI: 10.1016/0190-9622(95)90410-7
PMID 7829746
17. Medscape: Medscape access.
Available: Emedicine.medscape.com
Retrieved on 2011-11-06.
18. Der Werth JM, Williams HC, Raeburn JA. The clinical genetics of hidradenitis suppurativa revisited. *Br J Dermatol.* 2000;142(5):947–53.
DOI: 10.1046/j.1365-2133.2000.03476.x
PMID 10809853
19. Sartorius K, Lapins J, Emtestam L, Jemec GB. Suggestions for uniform outcome variables when reporting treatment effects in hidradenitis suppurativa. *Br J Dermatol.* 2003;149(1):211–213.
DOI: 10.1046/j.1365-2133.2003.05390.x
PMID 12890229
20. Wolkenstein P, Loundou A, Barrau K, Auquier P, Revuz J. Quality of life group of the French Society of Dermatology. Quality of life impairment in hidradenitis suppurativa: A study of 61 cases. *Journal of the American Academy of Dermatology.* 2007;56(4):621–3.
DOI: 10.1016/j.jaad.2006.08.061
PMID 17097366
21. Martinez F, Nos P, Benlloch S, Ponce J. Hidradenitis suppurativa and Crohn's disease: Response to treatment with infliximab. *Inflammatory Bowel Dis.* 2001;7(4):323–326.
DOI: 10.1097/00054725-200111000-00008
PMID 11720323
22. Clemmenson OJ. Topical treatment of hidradenitis suppurativa with clindamycin. *Int J Dermatol.* 1983;22(5):325–8.
DOI: 10.1111/j.1365-4362.1983.tb02150.x
PMID 6347922
23. Boer J, Jemec GB. Resorcinol peels as a possible self-treatment of painful nodules in hidradenitis suppurativa. *Clin Exp Dermatol.* 2010;35(1):36–40.
DOI: 10.1111/j.1365-2230.2009.03377.x
PMID 19549239
24. Gener G, Canoui-Poitrine F, Revuz JE, et al. Combination therapy with clindamycin and rifampicin for hidradenitis suppurativa: A series of 116 consecutive patients. *Dermatology (Basel).* 2009;219(2):148–54.
DOI: 10.1159/000228334
PMID 19590173
25. Scheinfeld N. Hidradenitis suppurativa: A practical review of possible medical treatments based on over 350 hidradenitis patients. *Dermatology Online Journal.* 2013;19(4):1.
PMID 24021361
26. Yamauchi PS, Mau N. Hidradenitis suppurativa managed with adalimumab. *J Drugs Dermatol.* 2009;8(2):181-3. [Medline]
27. Short KA, Kalu G, Mortimer PS, Higgins EM. Vulval squamous cell carcinoma arising in chronic hidradenitis suppurativa. *Clin. Exp. Dermatol.* 2005;30(5):481–3.
DOI: 10.1111/j.1365-2230.2005.01875.x
PMID 16045671
28. Alharbi M, Perignon D, Assaf N, Qassemyar Q, Elsamad Y, Sinna R. Application of the inner arm perforator flap in the management of axillary hidradenitis suppurativa. *Ann Chir Plast Esthet.* 2014;59(1):29-34. [Medline]
29. Pink AE, Simpson MA, Desai N, Trembath RC, Barker JN. Gamma-Secretase mutations in hidradenitis suppurativa: New insights into disease pathogenesis. *J Invest Dermatol.* 2013;133(3):601-7. [Medline]
30. van Rappard DC, Mooij JE, Mekkes JR. Mild to moderate hidradenitis suppurativa treated with local excision and primary closure. *J Eur Acad Dermatol Venereol.* 2012;26(7):898-902. [Medline]
31. Yamashita Y, Hashimoto I, Matsuo S, Abe Y, Ishida S, Nakanishi H. Two-stage surgery for hidradenitis suppurativa: Staged artificial dermis and skin grafting. *Dermatol Surg.* 2014;40(2):110-5. [Medline]
32. Jianbing T, Biao C, Qin L, Yanhong W. Topical negative pressure coupled with split-thickness skin grafting for the treatment of hidradenitis suppurativa: A case report. *Int Wound J;* 2013. [Medline]

33. Xu LY, Wright DR, Mahmoud BH, Ozog DM, Mehregan DA, Hamzavi IH. Histopathologic study of hidradenitis suppurativa following long-pulsed 1064-nm Nd: YAG laser treatment. Arch Dermatol. 2011;147(1):21–8. DOI: 10.1001/archdermatol.2010.245 PMID [20855672](#)
34. Talmant JC, Bruant-Rodier C, Nunziata AC, Rodier JF, Wilk A. Squamous cell carcinoma arising in Verneuil's disease: Two cases and literature review. Ann Chir Plast Esthet (in French). 2006;51(1):82–6. DOI: 10.1016/j.anplas.2005.11.002 PMID [16488526](#)
35. van der Zee HH, Jemec GB. New insights into the diagnosis of hidradenitis suppurativa: Clinical presentations and phenotypes. J Am Acad Dermatol. 2015; 73(5 Suppl 1):S23-6. [Medline]
36. Boer J, Jemec GB. Resorcinol peels as a possible self-treatment of painful nodules in hidradenitis suppurativa. Clin Exp Dermatol. 2010;35(1):36-40. [Medline]
37. Saunte DM, Boer J, Stratigos A, et al. Diagnostic delay in hidradenitis suppurativa is a global problem. Br J Dermatol. 2015;173(6):1546-9. [Medline]
38. Yildiz H, Senol L, Ercan E, Bilgili ME, Karabudak Abuaf O. A prospective randomized controlled trial assessing the efficacy of adjunctive hyperbaric oxygen therapy in the treatment of hidradenitis suppurativa. Int J Dermatol. 2016;55(2): 232-7. [Medline]
39. Ingram JR, McPhee M. Management of hidradenitis suppurativa: A U.K. survey of current practice. Br J Dermatol. 2015;173(4):1070-2. [Medline]
40. Ingram JR, Woo PN, Chua SL, Ormerod AD, Desai N, Kai AC, et al. Interventions for hidradenitis suppurativa: A Cochrane systematic review incorporating grade assessment of evidence quality. Br J Dermatol. 2016;32(2):204-5. [Medline]
41. Jemec GB, Heidenheim M, Nielsen NH. Hidradenitis suppurativa--characteristics and consequences. Clin Exp Dermatol. 1996;21(6):419-23. [Medline]
42. Wang SC, Wang SC, Alavi A, Alhusayen R, Bashash M, Sibbald RG. Hidradenitis suppurativa: A frequently missed diagnosis, Part 2: Treatment options. Adv Skin Wound Care. 2015;28(8):372-80; quiz 381-2. [Medline]
43. Kimball AB, Sobell JM, Zouboulis CC, Gu Y, Williams DA, Sundaram M, et al. HiSCR (Hidradenitis suppurativa clinical response): A novel clinical endpoint to evaluate therapeutic outcomes in patients with hidradenitis suppurativa from the placebo-controlled portion of a phase 2 adalimumab study. J Eur Acad Dermatol Venereol. 2015;27(6):528-9. [Medline]
44. Zouboulis CC, Desai N, Emtestam L, Hunger RE, Ioannides D, Juhász I, et al. European S1 guideline for the treatment of hidradenitis suppurativa/acne inversa. J Eur Acad Dermatol Venereol. 2015;29(4): 619-44. [Medline]

© 2016 Hassan; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
<http://sciencedomain.org/review-history/17218>