

### Clinical Aspects and Surgical Methods in Perianal Hidradenitis Suppurativa

Do Yeon Hwang, MD., Won Kap Park, MD., Jong Ho Lee, MD., Jong Sup Yoon, MD., Kyung A Cho, MD., Hyun Shig Kim, MD., Jong Kyun Lee, MD., Kwang Yun Kim, MD.

Department of Surgery, Songdo Colorectal Hospital, Seoul,

**Purpose:** Hidradenitis suppurativa is a chronic suppurative and cicatricial inflammatory disease involving apocrine bearing areas including the axilla, groin, and perianal regions. Recurrence after surgery is not rare, and there is much debate about operative methods. This study analyzed the clinical characteristics and the relationship between different surgical methods and recurrences of perianal hidradenitis suppurativa.

**Methods:** A retrospective study of 20 patients with perianal hidradenitis suppurativa was done. The clinical characteristics were examined. The patients were divided into several groups (acute, chronic regional, chronic extensive) according to lesion status; then, different operative methods and recurrence rates were compared.

**Results:** All of the patients were male smokers. The age of onset was 28.4 years. The mean duration of disease was 10 years. The total number of operations, including incision and drainage, was 29 cases. Only 4 patients were overweight or obese. The most common symptom was pus discharge (52%). The recurrence rate after final operation was 30.0%. After incision and drainage in the acute group, 7 of 8 cases (87.5%) recurred. In the chronic regional group, 5 of 9 cases (55.6%) experienced recurrence after excision and primary repair. After excision and healing by secondary intention, 1 of 7 cases (14.3%) had recurrence. In the case of one unroofing and marsupialization, there was no recurrence. In the chronic extensive group, recurrence was noted in 4 unroofings and marsupializations.

**Conclusions:** In the case of abscess, proper incision and drainage is needed, but further definitive surgery is not ideal for decreasing the recurrence rate. If the lesions are extensive, unroofing and marsupialization is

recommended. JKSCP 2001;17:20-25

**Key Words:** Perianal hidradenitis suppurativa, clinical aspects, Recurrence rate, Surgical methods

(apocrine gland)

1833 Velpeau가 , , , 1854

Verneuil

가

1995 3 2000 7 22

가 20

Harrison<sup>1</sup>

(Body mass index=

(kg)/ (meter)<sup>2</sup> 20

, 25 30 , 30

A/G ratio

: , 3 366-144

( : 100-453)

Tel: 02-2231-0900, Fax: 02-2237-5335

E-mail: jeilgs@chollian.net

20 가 10 가 , 10  
 4 , 40 3 , 30 2 , 50 1  
 (Fig. 1B).

10 (3 35 )

13 (52%) 가

6 , (swelling) (mass)가

(Fig. 2).

3)

가 20

25 30 가

3 30 ( ) 1 ,

(Fig. 3).

1)

20 ,  
 24 61 38.4  
 . 20 30 가 6 가 40 가 5 13  
 , 50 가 2 , 60 1 (Fig. 1A).

2)

28.4 (18 56 )

4)

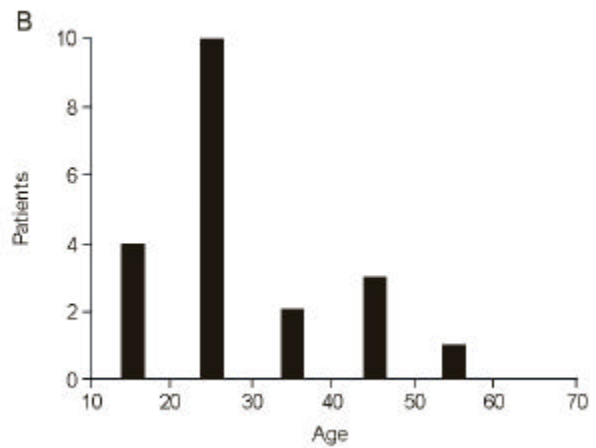
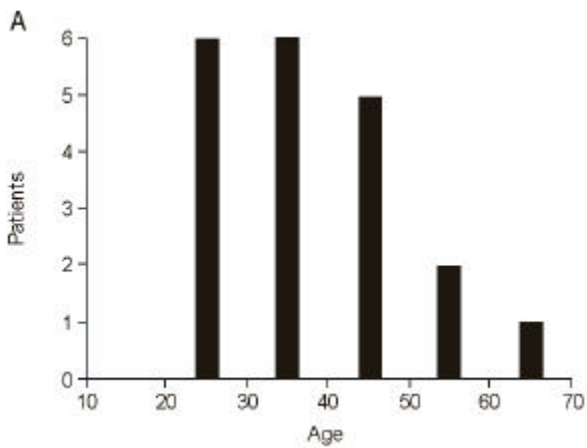


Fig. 1. A. Age distribution of hospital visit. B. Age distribution of symptom onset.

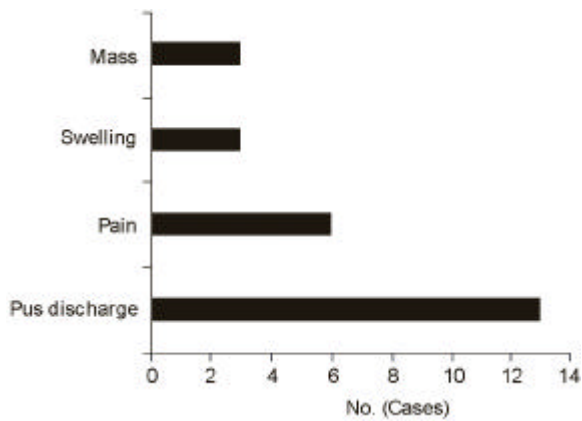


Fig. 2. Chief complaints.

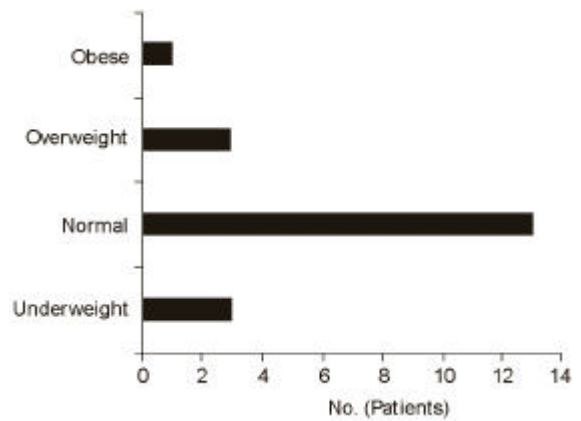


Fig. 3. Relation with obesity.

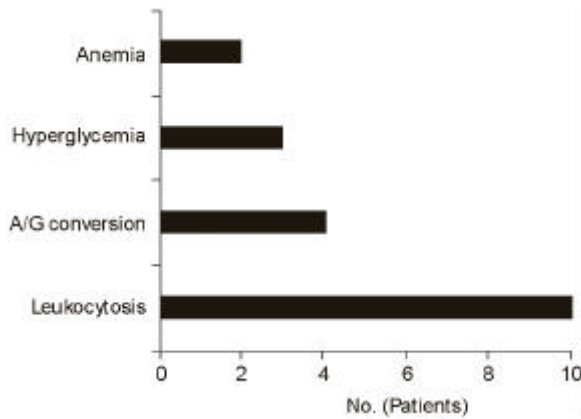


Fig. 4. Laboratory studies & associated condition.

Table 1. Classification and recurrence rate according to operation methods

Operation methods	Acute	Chronic	
		Regional	Extensive
Incision & drainage	7/8 (87.5%)		
Excision & primary repair		5/9 (55.6%)	
Excision & secondary intention		1/7 (14.3%)	
Unroofing & marsupialization		0/1	1/4

4 A/G ratio가  
 가가 10 (Fig. 4).  
 가 가 5  
 가 2  
 5) 20 29 가  
 , unroofing marsupialization  
 unroofing marsupia-  
 lization  
 6) 23.4 (3 66 가  
 ) 6 (30%) , nsting<sup>7</sup>  
 5 (25%)  
 8 7 (87.5%)  
 9 , 7  
 55.6% (5/9), 14.3% (1/7)  
 unroofing marsupialization 1  
 unroofing marsupialization 4  
 1 (Table 1).

Brown<sup>2</sup> 가  
 가  
 (submammary fold), , , , ,  
 2 16%  
 3  
 A isotretinoin,<sup>5</sup> 6  
 가  
 가 Bru-  
 nsting<sup>7</sup>  
 Yu<sup>8</sup> Boer<sup>9</sup>  
 가  
 가  
 ,<sup>10</sup> Mortimer<sup>11</sup>  
 가가

, Farrell <sup>12</sup>

가  
가가

Morgan <sup>13</sup>

가

, Harrison <sup>1</sup>  
가

(maceration)

가

가

, Jemec <sup>14</sup>

**Table 2.** Clinical criteria for diagnosis of hidradenitis suppurativa

Major criteria
1. Recurrent deep seated inflammatory nodules in skin bearing apocrine glands persisting for a minimum period of three months, not always discharging or fluctuating, and with a tendency for cord like coalescence
2. Comedones in skin bearing apocrine glands and the ear lobes
Minor criteria
1. An association with acne vulgaris
2. Exacerbation with menses, in women

가 2

가

가

(20%)

4

20

5

, Wiltz

<sup>15</sup>

가

, Highet <sup>4</sup>

*Streptococcus milleri*, *Staphylococcus aureus*, anaerobic streptococcus

*Streptococcus milleri*

가

, O'Loughlin <sup>16</sup>

가

15

4

(A/G ratio)

*Strepto-*

*coccus milleri*

erythromycin tetracycline

cyproterone acetate

<sup>4,6</sup> A

isotretinoin

<sup>5</sup>

, 5- reduc-

tase inhibitor

finasteride

<sup>12</sup>

가

3

0.3 4%

<sup>17</sup>

20

20 가

가

, Banerjee<sup>19</sup>

14 (70%) 가

10 20 가

, Mengesha <sup>18</sup>

2

Mortimer <sup>11</sup> (com-

edon)

Table 2

, unroofing marsupialization

Jemec<sup>20</sup>

가

가

가

Broadwater<sup>21</sup>

가

가

가

Jemec<sup>22</sup>

30%

가

가가

가

2% iodine-starch<sup>19</sup>

가

in alcohol

. Endo<sup>23</sup>

가

Brown<sup>2</sup>

가

가

unroofing marsupialization

unroofing

REFERENCES

fing

unroo-

Banerjee<sup>19</sup>

가

가

Wiltz<sup>15</sup> 31%

30%

. Harrison<sup>24</sup>

(skin maceration)

가

가

1. Harrison BJ, Read GF, Hughes LE. Endocrine basis for the clinical presentation of hidradenitis suppurativa. *Br J Surg* 1988;75:972-5.
2. Brown SC, Kazzazi N, Lord PH. Surgical treatment of perineal hidradenitis suppurativa with special reference to recognition of the perianal form. *Br J Surg* 1986;73:978-80.
3. Gregory SW, Heidi N. Perianal hidradenitis suppurativa. In: David EB, Steven DW, editors. *Fundamentals of anorectal surgery*. 2nd ed. Philadelphia: W.B. Saunders; 1998. p.233-6.
4. Hight AS, Warren RE, Weekes AJ. Bacteriology and antibiotic treatment of perineal suppurative hidradenitis. *Arch Dermatol* 1988;124:1047-51.
5. Brown CF, Gallup DG, Brown VM. Hidradenitis suppurativa of the anogenital region: response to isotretinoin. *Am J Obstet Gynecol* 1987;158:12-5.
6. Mortimer PS, Dawber RPR, Gales MA, Moore RA. A double-blind controlled cross-over trial of cyproteron acetate in females with hidradenitis suppurativa. *Br J Dermatol* 1986;115:263-8.

7. Brunsting HA. Hidradenitis suppurativa: abscess of the apocrine sweat glands. *Arch Derm Syphil* 1939;39:108-20.
  8. Yu CC, Cook MG. Hidradenitis suppurativa: a disease of follicular epithelium, rather than apocrine glands. *Br J Dermatol* 1990;122:763-9.
  9. Boer J, Weltevreden EF. Hidradenitis suppurativa or acne inversa. A clinicopathological study of early lesions. *Br J Dermatol* 1996;135:721-5.
  10. Von Der Werth JM, Williams HC, Raeburn JA. The clinical genetics of hidradenitis suppurativa revisited. *Br J Dermatol* 2000;142:947-53.
  11. Mortimer PS, Dawber RPR, Gales MA, Moore RA. Mediation of hidradenitis suppurativa by androgens. *Br J Med* 1986;292:245-8.
  12. Farrell AM, Randall VA, Vafae T, Dawber RPR. Finasteride as a therapy for hidradenitis suppurativa (correspondence). *Br J Dermatol* 1999;141:1138-9.
  13. Morgan WP. The role of depilation and deodorants in hidradenitis suppurativa. *Arch Derm* 1982;118:101-2.
  14. Jemec GBE, Heidenheim M, Nielsen NH. Hidradenitis suppurativa-characteristics and consequence. *Clin Exp Dermatol* 1996;21:419-423.
  15. Wiltz O, Schoetz DJ, Murray JJ, Roberts PL. Perianal hidradenitis suppurativa. The Lahey clinic experience. *Dis Colon Rectum* 1990;33:731-4.
  16. O'Loughlin S, Woods R, Kirke PN, Shanahan F, Byrne A, Drury MI. Hidradenitis suppurativa. Glucose tolerance, clinical, microbiologic, and immunologic features and HLA frequencies in 27 patients. *Arch Dermatol* 1988;124:1043-6.
  17. Brown TJ, Rosen T, Orengo IF. Hidradenitis suppurativa. *South Med J* 1998;91:1107-14.
  18. Mengesha YM, Holcombe TC, Hansen RC. Prepubertal hidradenitis suppurativa: two case reports and review of the literature (case reports). *Pediatr Dermatol* 1999;16:292-6.
  19. Banerjee AK. Surgical treatment of hidradenitis suppurativa. *Br J Surg* 1992;79:863-6.
  20. Jemec GBE. Effect of localized surgical excisions in hidradenitis suppurativa. *J Am Academy Dermatol* 1988;18:1103-7.
  21. Broadwater JR, Bryant RL, Petrino RA, Mabry CD, Westbrook KC, Casali RE. Advanced hidradenitis suppurativa-review of surgical treatment in 23 patients. *Am J Surg* 1982;144:668-70.
  22. Jemec GBE, Gniadecka M. Ultrasound examination of hair follicles in hidradenitis suppurativa. *Arch Dermatol* 1997;133:967-70.
  23. Endo Y, Tamura A, Ishikawa O, Miyachi Y. Perianal hidradenitis suppurativa: early surgical treatment gives good results in chronic or recurrent cases. *Br J Dermatol* 1998;139:906-10.
  24. Harrison BJ, Mudge M, Hughes LE. Recurrence after surgical treatment of hidradenitis suppurativa. *Br Med J* 1987;294:487-9.
-