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THE NEED FOR GRADUAL SURGICAL TREATMENT IN VERNEUIL'S DISEASE

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ABSTRACT:

VERNEUIL'S DISEASE IS A CHRONIC, SUPPURATIVE, AND OFTEN SCARRING INFLAMMATORY CONDITION OF THE APOCRINE GLANDS, OFTEN FOUND IN REGIONS OF THE BODY WHERE THE NUMBER OF THESE GLANDS IS INCREASED.¹⁰ THEREFORE THE AREAS OF CHOICE IN WHICH THIS CONDITION MAKES ITS PRESENCE FELT ARE THE ARMPIT, THE ANOGENITAL REGION AND RARELY THE SCALP. IT CAN OFTEN BE ASSOCIATED WITH CONGESTED ACNE AND DISSECTING SCALP FOLLICULITIS, WHICH HAS LED PILLSBURY AND HIS CO-WORKERS TO INCLUDE THEM IN A SINGLE NAME: „FOLLICULAR OCCLUSION TRIAD”.¹¹ FREQUENT ASSOCIATION WITH PILONIDAL CYST HAS TRANSFORMED THE TRIAD INTO AN ACNE TETRAD.¹² SYNONYMS OF VERNEUIL'S DISEASE ARE CHRONIC HYDROSADENITIS (+/- SUPPURATIVE), SWEAT GLAND ABSCESSSES, APOCRINITIS OR REVERSED ACNE. BEING A MOTHER-DAUGHTER DISEASE, IT AFFECTS WOMEN WITH A SLIGHT

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¹⁰ Onderdijk A.J, van der Zee HH, Esmann S, Lophaven S, Dufour DN, Jemec GB, Boer J. Depression in patients with hidradenitis suppurativa. JEADV 2013; 27: 473-478;

¹¹ Verneuil's disease clinical, evolutiv an therapeutic aspetes of four clinical cases, V. Pătrașcu, Ana-Maria Picleanu, DermatoVenerol. (Buc.), 58: 165-181

¹² Plewig G, Steger M Acne inversa (alias acne triad, acne tetrad, or hidradenitis suppurativa). In: Marks R, Plewig G, eds. Acne and Related Disorders. London: Martin Dunitz Ltd; 1989: 343-57

PREVALENCE, AND AS A LOCATION THE AXILLARY FORM IS MUCH MORE COMMON.¹³ THE PATHOGENESIS OF THIS DISEASE REMAINS UNKNOWN, BUT THE ETIOLOGICAL FACTORS INVOLVED ARE : OBESITY, HYPERANDROGENISM, BACTERIAL INFECTIONS, GENETIC PREDISPOSITION TO ACNE, IMMUNOLOGICAL FACTORS SUCH AS IL-12, IL-23 AND TNF- α .^{14,15}

KEY WORDS: VERNEUIL'S DISEASE, FOLLICULAR OCCLUSION TRIAD, INFLAMMATORY CONDITION, APOCRINE GLANDS.

CLINICAL CASES

We start by presenting the case of a 43-year-old patient, coming from urban environment, smoking, without associated diseases, which addressed to the Outpatient Surgery Department for the insidious appearance about 18 months ago of numerous, sensitive inflammatory nodules, some recently fistulated, others with retractable scars, disseminated at the level of the anogenital region.

As a prodromal symptom of the appearance of skin lesions, in the respective region the patient presented paresthesias, pruritus, burning sensation or even pain. Later, painful skin nodules appeared, some with spontaneous evolution towards healing within about 2 weeks, others with numerous inflammatory recurrences or even abscess, with the formation of chronic fistulas.



Figure 1. Preoperative aspect

¹³ U, Koch A, Nowak A. Acne inversa (Hidradenitis suppurativa): A review with a focus on pathogenesis and treatment. *Indian Dermatol Online J* 2013; 4(1): 2–11;

¹⁴ Lapins J, Ye W, Nyrén O, Emtestam L. Incidence of Cancer Among Patients With Hidradenitis Suppurativa. *Arch Dermatol.* 2001; 137(6): 730-734;

¹⁵ Gregor B.E, Jemec G. Hidradenitis Suppurativa. *New England Journal of Medicine* 2012; 366: 158-164;



Figure 2. Preoperative aspect

The local clinical examination revealed at the level of the gluteal regions and in the buttock sulcus an area of approximately 10/10 cm with congested, swollen skin, on the surface of which 4 fistulous holes are discovered (2 on the left buttock, 1 on the right buttock and 1 in the buttock groove) through which, on expression, a purulent white-greenish, creamy, odorless secretion is externalized; congested scrotum, discreetly painful, with sclerosing cord, hyperpigmented, about 4 cm long and multiple fistulous orifices; in the suprapubic region are 4 other holes with the same appearance.



Figure 3. Preoperative aspect: sclerosus scrotal cord

Biological examinations have showed up a chronic inflammatory syndrome (Leukocyte - 12800/mmc, CRP 5, VSH at 1h 50) thrombocytosis (Platelets - 617000/mmc) and bacteriological examination of the purulent lesions revealed the presence of *Staphylococcus aureus*, according to the antibiogram, sensitive to Penicillin, Ceftazidime, Augumentin, Phosphomycin, Tetracycline, Erythromycin. Drug therapy with Cefort 1g was

initiated at 8 h and after a minimal rebalancing, surgery was performed under spinal anesthesia.

Intraoperative, by injection of methylene blue and catheterization with the stylet, multiple fistulous trajectories were discovered, some joining the skin orifices, others losing blindness in the buttock fat. All these fistulous tracts were identified and excised to healthy tissue, leaving tortuous wounds behind.

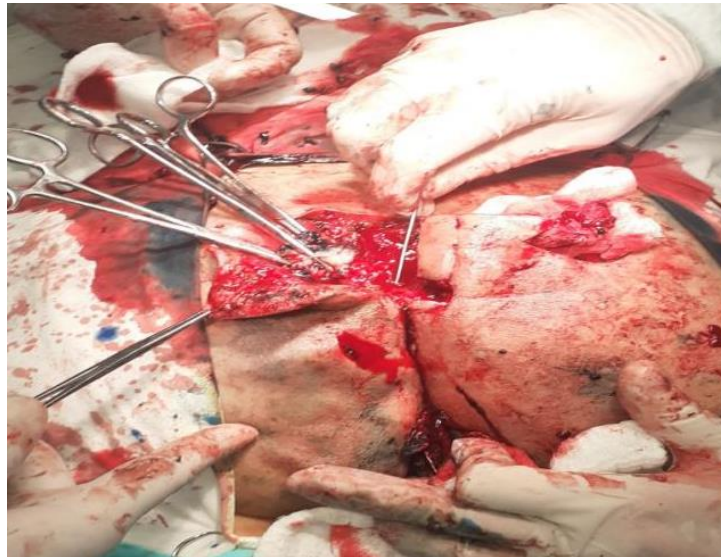


Figure 4. Intraoperative aspect: catheterization of fistulous tracts

Tissue destruction was considered very high, which is why the excision of the fistulous tracts was resorted in several times operators, with the consent of the patient. In the first intervention, the removal of the fistulous tracts from the posterior perineum was performed, and about a month later the patient was operated for excision of the lesions in the scrotum and pubic region.



Figure 5. Intraoperative aspect : curettage of wounds



Figure 6. Intraoperative aspect : excisional debridement of wounds

Postoperative, the daily surgical bandage of the wounds was performed with hydrogen peroxide and betadine, ointments with antibiotics specific to the microbial spectrum, and systemic drug therapy was continued. The postoperative evolution was slowly favorable, and the patient was discharged on the 12th day with the recommendation to return periodically for the specialized surveillance of the wounds. At discharge, the postoperative wounds were clean, with smooth border and granular tissue present.



Figure 7. Postoperative aspect : 6 month after



Figure 8. Postoperative aspect : 6 month after



Figure 9. Postoperative aspect : at six month



Figure 10. Postoperative aspect : 6 month later

The second case involved a 53-year-old, heavy smoker, known for 15 years with compensated diabetes, presented with symptoms similar to the first, but the lesions had started insidiously more than 2 years ago, with aggravation in the last 3 months. After a series of consultations and dermatological treatments, the patient was guided to surgery. The objective clinical examination revealed multiple painful nodules, centered by fistulous orifices, disseminated in the anogenital, suprapubic and root regions of the thighs, joined together by fibrous cords, interspersed with cardboard, even fluctuating skin.



Figure 11. Preoperative aspect

Purulent secretions was collected for bacteriological cultures, highlighting the presence of *Escherichia Coli*, which is sensitive, among other things, to cephalosporins. Drug

treatment with Cefuroxime 1g / day was initiated and surgery was performed. Given the spread of the disease, the surgeries were performed and this time repeatedly, in the first operative time, the excision of the fistulous tracts from the posterior perineum is performed. The wounds were left open, bandaged twice a day with antiseptic solutions, and 1% Retapamulin unguent was applied to the lesions at the root of the thigh.

The second operating time took place after a month and a half from the first operation.



Figure 12. Intraoperative aspect - posterior perineum and buttock region



Figure 13. 7 days postoperative



Figure 14. 90 days postoperative



Figure 15. Postoperative aspect - 9 months



Figure 16. Postoperative aspect - 9 months

DISCUSSIONS

Verneuil's disease is a chronic condition, most often caused by local recurrences. Complications of untreated *Verneuil's disease* includes cellulite, systemic infections, rectal, vaginal, bladder fistulas, lymphedema secondary to lymphatic obstruction, polyarthritis, squamous cell carcinoma, and last but not least, depression. The latter complication occurs as a result of the capricious evolution of the condition, leaving traumatic mental and physical marks with each flare. Therefore, these patients constantly need encouragement, because they become depressed by the nature of the disease, by the pain caused by the lesions, the pus that constantly flows from the skin lesions staining the lightness, the unpleasant smell, especially since they all affect areas with a strong emotional impact, anogenital region.

The treatment of this disease is complex, local and general. The local one associates the topics based on antibiotics and/or corticosteroids, with the excision. General treatment is based on the antibiotics Erythromycin, Clarithromycin, Doxycycline, Tetracycline, Metronidazole, Minocycline, Clindamycin and Rifampicin (in chronic forms the combination of the last two mentioned may be used for 10 weeks).¹⁶ Complementary therapies such as laser therapy or photodynamic therapy have been tried, but their results have not been as expected. Surgical treatment involves excision of the tissue lesions leaving free form. In the absence of these free margins, the recurrence rate increases substantially¹⁷.

CONCLUSIONS

Although multiple therapeutic protocols for *Verneuil's disease* have been developed in recent years, the reference treatment remains the surgical one. However, it is hard for patients to accept, especially in large forms that require large excisions with mutilating scars. The cases presented are clear evidence of the need for surgical treatment of patients with *Verneuil's disease* and that most of the time the interventions are performed progressive. This therapeutic approach assumes the involvement of the two partners in the doctor-patient relationship, in which the first one has the task of explaining the need for gradual surgical treatment, the limits of surgery, the advantages and perhaps the consequences (long duration of postoperative healing, additional costs, the need for patient compliance in wound care), and the second one has the task of accepting and assuming the therapeutic protocol.

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¹⁶ Khaled M, Tarek F, Ahmad M. Hidradenitis Suppurativa: Evaluation of treatment modality and patients' satisfaction. Egypt J Plast Reconstr Surg 2003; 2: 231-237.

¹⁷ Flavius-Cristian Mărcău, Sorin Purec, George Niculescu, „Study on the refusal of vaccination against Covid-19 in Romania” în Vaccines 2022, 10, 261. <https://doi.org/10.3390/vaccines10020261>

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