PERIANAL HIDRADENITIS SUPPURATIVA has been known as a disease entity for more than 100 years. The search for adequate therapy by investigators in dermatology, radiology and surgery has been intensive. Radiotherapy and antibiotics are ineffective in extensive, chronic cases. This presentation deals with a surgical method of treatment which has had gratifying results at the Henry Ford Hospital. Surgical treatment of diseases of the perianal region, perineum and buttocks should be attempted only by those familiar with working in the area. Cases of hidradenitis suppurativa are easily and often confused with ordinary fistula in ano or, when limited to the posterior anal space, with pilonidal disease.

"Hidradenitis" is derived from the Greek "hidros" (sweat), "aden" (gland) and "itis" (inflammation), and "suppurativa" from Latin "sub" (under) "puris" (pus). The lesions are caused by blockage of the apocrine sweat glands and superimposed secondary infection. Apocrine glands are found most frequently in the axilla, less often in the perianal region, and even less often in the scrotum, genitalia, areola, back of the neck, and groin. Men and women are affected in about equal numbers. The disease usually begins as a tender red papule, which rapidly evolves into a painful reddish-purple nodule. The nodule may rupture or may spread to adjacent areas, become confluent and form large indurated painful areas with pyogenic infection (staphylococci, streptococci, etc.), then suppurate and develop ulcers, deep and superficial indolent sinuses and fistulae (including anal). Many believe that endocrine factors are involved.

Most writers state that the spread of the pathologic process is usually lateral and seldom deep. In our experience, this does not hold true for the perianal, buttocks, coccygeal, sacral and perianal areas. In these areas, we have seen the process deep to and around vital nerves and vessels. We have found it deep in the anterior sacral and coccygeal regions. This fact alone makes total excision and skin grafting a very formidable procedure, at best.

Extensive chronic lesions often are accompanied by anemia and cachexia because of the severe chronic secondary infection, which seldom is helped by antibiotic therapy. In these extensive cases the patients have serious social problems because of the drainage and foul odor that usually accompany the disease. Frequently, this persists for many years despite many expensive failures of ineffective methods.

Treatment

The method of treatment used was suggested to me by Dr. Clarence S. Livingood, head of the Dermatology Department at the Henry Ford Hospital. It has been described by Mullins. My experience with similar technic for treating pilonidal cysts led me to try Dr. Livingood's method. When the
FIG. 1. Hidradenitis suppuritiva in a 26-year-old man. The disease had been present for many years and had resisted medical treatment. The patient was unable to sit comfortably, and drainage and odor were serious problems.

FIG. 2. Completion of unroofing procedure. Note that an extensive maze of pockets and tunnels, all of them interconnected, have been treated. The disease usually is much more extensive than would be expected from the appearance of the surface. Oxidized cellulose already has been placed in some areas.

FIG. 3. Two months postoperatively, the area is almost completely healed. The scars are extensive but will become pliable and soft.
lesions are isolated and few in number, local anesthesia may be used. However, most of our cases have been extensive in regard to the area involved, chronicity, and the depth of involvement. Because of this, spinal or general anesthesia has been used.

The operation can be started anywhere by unroofing one of the infected areas. Electrocoagulation (cutting) is used to remove tissue, and the coagulation current is used to control bleeding and to help destroy the cavity lining. A probe (I prefer the tip of a small curved hemostat) is inserted into the pocket. All of the skin and superficial tissue are removed with the cutting current, and the bleeding points are controlled by electrocoagulation. A careful search is made for connecting tunnels leading to adjacent pockets of infection. These tunnels likewise are completely unroofed. In the buttocks and perianal region, practically all the areas are connected, and it is necessary to be extremely careful not to overlook any of them. As stated before, this area is prone to deep tunnels and pockets; often these encircle vital nerves and vessels and closely approach the sphincter muscle. Few go through the sphincter muscle. We have seen many go well up between the coccyx and sacrum and the rectum. All must be searched for and unroofed carefully. All pockets and tunnels are then gently but thoroughly curetted (Figs. 1 and 2). These cavities are full of pus and sticky gelatinous material. Skin grafts are not necessary; they present serious technical problems in some of the deeper areas of infection. Where possible, small skin bridges may be preserved over the connecting tunnels; however, care must be taken to curette the lining of the tunnel that passes beneath. In the anorectal region, many of the tunnel systems cover very wide areas. The deep tissues are usually much more extensively involved than is evident from the appearance of the area prior to operation. Nevertheless, with patience, the maze of tunnels and pockets can be found. The electrocoagulation helps greatly in saving time and minimizing blood loss.

In many cases, the involvement extends into the perineum, scrotum and groin. These tunnels are much more superficial and are easily unroofed. Here, too, practically all will be connected, and all must be treated. At the conclusion of the operation, we prefer the liberal use of oxidized cellulose (cotton type) in the raw areas to control any oozing blood.

We do not use antibiotics routinely. Baths usually are started on the first or second postoperative day. Postoperative bleeding has been rare. When it is present, the bleeding is readily controlled with silver nitrate or plain catgut sutures. The dead tissue sloughs off in seven to ten days and the exposed areas begin to appear as healthy red granulation tissue. Complete healing usually occurs within four weeks to two months, but some of the very deep areas of infection take longer (Fig. 3). The discharge rapidly decreases and the odor disappears, and the patients are able to sit comfortably and not be socially embarrassed. When at times a few pockets have been overlooked or new isolated ones appear they can be readily treated using local anesthesia in the office. The extensive scars first are fairly firm and prominent, but in six to 12 months they become soft and pliable.

We have not had to resort to wide surgical excision and extensive skin grafting. Dermatologists see most of these patients originally, and they are pleased to get help with the anorectal areas of involvement, which usually are much deeper and more extensive than those elsewhere in the body. The procedure is superior to any other that we have tried.

**References**

1. Livingood, C. S.: Personal communication.