Hypertrophy of the Labia Minora

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Gynecologic disorders during childhood and adolescence have received relatively little attention. Since earlier sexual activity among teenage girls is becoming more common, it is desirable that those interested in the diseases of women keep abreast of the current developments in adolescent gynecology. Two patients with congenital hypertrophy of the labia minora are presented and the treatment is discussed.

GYNECOLOGIC disorders during childhood and adolescence have received relatively little attention. Despite modern medical publication, many gynecologists have failed to realize that dysfunctions, diseases, and anomalies do appear in adolescence and are sources of discomfort to the young patient. The earlier sexual activity of teenage girls has now stimulated parents to bring their daughters to the gynecologist. As Huffman[1] states: "It is highly desirable that those interested in the diseases of women should keep abreast of the current developments of adolescent gynecology."

The standard textbooks are replete with examples and treatment of gross abnormalities of the vulva, vagina, and uterus. It is only recently that some of the simpler modifications of development have been described and their treatment discussed.[2] While not usually serious, those abnormalities become important because they produce symptoms that are incompatible with comfort and personal hygiene. Corrective operative procedures are not complicated and are often most gratifying to the young girl and her parents.

As early as 1925, Schauffler[3] realized that the study of adolescent gynecology had been neglected and that only limited information was available in standard texts or medical publications. In addition, gynecologic problems of the young were not taught, either in medical school or during a specialized internship. In the past 21 years, gynecologic disorders in childhood and adolescence have gained increased attention. However, even now, recognition of disorders and their treatment is sketchy.

Capraro's[4] treatise on congenital anomalies outlines an excellent classification of congenital abnormalities in the adolescent (Table 1). Such entities as enlarged clitoris, fusion of the labia, reduplication of the vulva, and imperforate hymen received a major portion of the discussion. Hypertrophy of the labia minora, also listed, is presently of interest because of 2 such patients who were observed personally.

As in those young girls who lag in the development of secondary sex characteristics, abnormal growth also produces emotional stress. While most patients can be treated and reassured by the gynecologist and by their parents, psychiatric help can sometimes be beneficial. Proper physical and emotional stability begins in early childhood and adolescence. If delayed, emotional problems may develop.

Reports of 2 patients are presented here as illustrative of the various problems associated with marked hypertrophy of the labia minora.

CASE REPORTS

Case 1. The patient (BK) was aged 17, single, and para 0-0-0-0. She denied sexual exposure or masturbation. Menstrual periods began at age 12 and were regular every 28 days. For several years she had noticed marked protusion from the vulvar area. The protruberant tissue became irritated on walking, sitting, after voiding and having a bowel movement. She had difficulty with personal hygiene during menstrual periods. Because of increasing discomfort, the patient and her mother were eager to have a corrective procedure performed.

The family, past, and systemic histories were noncontributory. At physical examination the patient proved to be well developed and have well-developed secondary sex characteristics. There were no gross abnormalities indicative of endocrinopathy.

There was no hirsutism and only slight acne over the face and back. At general physical examination no deviation from the physiologic range could be detected. The pelvic examination, however, was interesting. The labia minora protruded

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in wing-like fashion from the vulva. The labia majora were of usual size, as was the clitoris. The hymen was readily dilatable and the vaginal orifice admitted 2 fingers with ease. The cervix was clean. The uterus was small, in anterior position, and freely movable. There were no palpable pathologic findings in either adnexal region. Cytologic smears were negative for malignancy. Serologic test for syphilis was negative.

Under general anesthesia both labia minora were resected and a plastic repair was done. The postoperative course was uneventful. Follow-up visits revealed normal female genitalia, and the problems previously experienced were solved.

Case 2. This patient (SR) was chronologically aged 14 but physiologically, an adult. She admitted to having had intercourse. There was no history of masturbation. For several years she had noticed marked protrusion from the vulva. Those protrusions interfered with intercourse. She had difficulty in sitting, walking, and with personal hygiene after voiding, having a bowel movement and during menstruation. The family, past, and systemic histories were noncontributory. Physical examination revealed a well-developed young woman. The secondary sex characteristics were also well developed. General examination revealed no positive somatic findings.

Pelvic examination indicated that there was regular sexual activity. Bartholin's gland, Skene's gland, and the urethra were normal. Protruding from the vulva were two wing-like projections which were identified as the labia minora. The clitoris was not enlarged. The vagina readily admitted 2 fingers. The cervix was clean. The uterus was small, in anterior position, and freely movable. There were no palpable pathologic findings in either adnexal region. Under general anesthesia both labia minora were resected and a plastic repair done. Subsequent examination revealed external genitalia that were normal in appearance. The labia minora were small; the patient was comfortable.

TABLE I. CLASSIFICATION OF CONGENITAL ANOMALIES IN ADOLESCENTS[4]

I. Vulva
- A. Enlarged clitoris
- B. Fused labioscrotal folds
- C. Hypertrophy of labia minora
- D. Cloaca
- E. Extrophy of bladder
- F. Ectopic ureter

II. Hymen
- A. Imperforate hymen
- B. Microperforate hymen
- C. Rigid hymen

III. Vagina
- A. Congenital absence
  - 1. Partial
  - 2. Complete
  - 3. With functioning uterus
  - 4. With nonfunctioning uterus
- B. Duplication—longitudinal septum
  - 1. Complete vaginal septum
  - 2. Partial vaginal septum
  - 3. One blind pouch
- C. Transverse annular septum
- D. Ectopic ureters opening in vagina

IV. Uterus
- A. Absence
- B. Septate
- C. Bicornuate
- D. Unicornuate
- E. Didelphys
- F. Blind horn

DISCUSSION

Sexual differentiation[5,6] of the external genitalia occurs at about 8 to 10 weeks of embryonic life. At that time the urethral groove enlarges and becomes the vulva. The genital fold forms the labia minora. The vulva, at birth, is different from that of the older child. There is a gradual increase in the size of the labia minora so that at adolescence the external genitalia are similar to those of the adult. The fat of the mons and labia majora appear as part of sexual development, and the labia minora and vaginal orifice are hidden. Occasionally, there is marked hypertrophy of the labia minora so that they become protruberant. Under those circumstances the labia may become edematous and uncomfortable as the child grows older.

The etiologic factors of hypertrophy of the labia minora are unknown except for infections such as *Filaria sanguinis hominis* or where efforts are made to produce the Hottentot apron.[7] Infections with *Filaria sanguinis* can hardly be considered a distinct disease.

In those cases there is a blocking of the lymph channels leading to the vulva which in turn results in a chronic edema. Most observers agree that the massive hypertrophy of the labia found in Oriental women is a postfilarial condition engendered by *a*) blocking of the lymphatic return, *b*) prostitution or excessive intercourse, *c*) lack of cleanliness, or *d*) racial predisposition to skin hypertrophy.

The Hottentot apron is not caused by stasis but by manipulations practiced on female children particularly by stretching of the parts manually or by weights.

Hypertrophy may be associated with local irritation, discomfort in walking, or sitting, and problems of personal hygiene during the menses or after bowel movements. Some have attributed the condition to masturbation or early sexual activity. Little substance has been placed in those causative factors. Sexual activity produces difficulty because of interference with the act and invagination of the tissue. Both patients reported here represent adolescent individuals with gross hypertrophy of the labia minora. That hypertrophy could hardly be classified as a growth process of maturity. Varied sizes of both labia minora and majora have been seen, but none similar to those presented here.

Since more and more teenagers and adolescents are

seen by the gynecologist today, it is important that those who treat the diseases of women should be alerted to abnormalities which heretofore have remained undetected. When lesions are symptom producing, they demand attention regardless of the patient's age.

REFERENCES

1. Huffman JW: Foreword, Gynecology of Adolescence. Clin Obstet Gynecol 14:961–962, 1971
2. Douglas CP: The labia syndrome. Proc Internat Soc Vulvar Diseases, First International Congress, Espapona, Spain, 1973
3. Schauffler GC: Pediatric Gynecology. Chicago, Yearbook Medical Publishers, 1942, p 7
4. Capraro VJ: Congenital anomalies. Clin Obstet Gynecol 14:988–1012, 1971
5. Gardner HL, Kaufman RH: Benign Diseases of the Vulva and Vagina. St. Louis, CV Mosby Co, 1969, p 20
6. Mussey E: Examination of the adolescent patient. Clin Obstet Gynecol 14:963–974, 1971
7. Taussig FJ: Diseases of the vulva. Gynecol Obstet Monographs, Vol. XIII, 1931, pp 104–106, 221

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