

VULVOVAGINITIS IN CHILDREN

T. FEDE

Obstetric and Gynecological Department
University of Padua (Italy)

Vulvovaginitis in children is seldom an isolated disease. It is often associated with urinary, gastrointestinal troubles or it is the consequence of repeated antibiotic therapies. Many agents are responsible for these affections: colibacilli, enterococci, strepto and staphilococci, pseudodiphtherics and so on. *Candida* infections can sometimes be ascribed to deficient immunitary mechanisms ⁽¹⁾.

Early diagnosis and timely therapy are particularly important being effective means to prevent urinary infections in this age group.

As a matter of fact, a high prevalence of microhematuria and positive urinoculture has been reported in young girls affected by vulvovaginitis ^(2, 3, 4) the main symptom often being dysuria.

MATERIAL AND METHODS

The study concerned 45 children between 2 and 10 years of age. They came upon request of their family doctor or pediatrician and were affected by vulvovaginitis, the most frequent symptoms being dysuria, itching and vulvar reddening. Only a 6 year girl presents enuresis (tab. 1).

All the patients underwent examination of the external genital apparatus, rectal gynecologic examination, bacteriologic examination of vaginal secretum, urinoculture with colony count (urinoculture with more than 100,000 colonies per ml were regarded as positive), and fecal examination for parasites.

Table 2 shows the microorganisms detected by cultural examination of vaginal secretum. The most frequent were: *E. Coli*, *Candida Albicans* and *Enterococcus*.

Bacteriologic examination of vaginal secretum was performed on the mothers of children affected by *Candida* vulvovaginitis and gave positive results in 7 out of 9 cases.

Table 3 shows the number of positive urinocultures: 11 (24.4%). The same bacteria were always found as detected in the respective vaginal secretum.

Only one fecal examination gave positive results owing to the presence of *Oxyures*.

The young patients underwent local specific disinfecting therapy and those with positive urinoculture were treated with antibiotics per os,

SUMMARY

The Author reports 45 cases of vulvovaginitis in children. In agreement with the literature the reported data show a fairly high prevalence of concomitant urinary infections.

Timely and correct treatment of genital and urinary inflammations can prevent relapses, new infections and reduce the incidence of more serious urinary phlogosis to a minimum.

Table 1. — *Symptomatology at the first check. (Tot. 45 cases).*

Symptomatology	No. cases	%
Dysuria	22	48.8
Itching and vulvar erythema	16	35.6
Leukorrhea	6	13.4
Enuresis	1	2.2
Total cases	45	100

Table 2. — *Microorganisms detected by vaginal tampon. (Tot. cases 45).*

Det. microorganism	No. cases	%
Enterococcus	8	17.9
Candida albicans	9	20
Staphylococcus	3	6.6
Proteus	2	4.4
E. Coli	19	42.3
Klebsiella	2	4.4
Mixed bsct. phlora	2	4.4
Total cases	45	100

Table 3. — *Positive urinocultures and coprocultures in the examined patients. (Tot. cases 45).*

Microorganisms det.	No. cases
E. Coli	6
Proteus	2
Enterococcus	3
Total cases	11 (24.4%)
Coproculture positive for oxyures	1

according to antibiogram indications, for 10 days. Urinary and vaginal secretum examinations were repeated after 10 days, 1 month and 3 months since the suspension of the treatment.

No vulvovaginitis relapsed. In two cases new urinary infections developed which were treated once again and whose respective urinocultures became negative after the second treatment cycle.

In all cases the obtained results prevented the need for urography to assess possible urinary malformations.

CONCLUSIONS

Over the last few years gynecologists have been increasingly confronted with diagnostic problems in children vulvovaginitis being one of the most frequent reasons for their consultation.

The diagnosis of the infective form and timely and target therapy usually achieve satisfactory results particularly when, during the treatment, mothers prove willing to cooperate and take hygienico-sanitary measures that are still too often neglected.

Furthermore, malformations of the urinary and genital apparatus, which are often discovered in adolescents or even adults, can be early diagnosed, since they must always be considered when correct and repeated therapies fail (2, 5, 6).

BIBLIOGRAPHY

- 1) Giannolo C., Tagliavia A., Calabrese S., Lentini V.: *Contracc. Fert. Sess.*, 9, 1, 89, 1982.
- 2) Boscia F. M., Mele G., Cantatore M., Penza R., Sorino P., Porcelli A.: *Contracc. Fert. Sess.*, 8, 2, 195, 1982.
- 3) Penza R., Carignella A. D., Pascazio A., Tricarico A., Bellantuono A., Roberto A., Nitti M., Boscia F. M., Cantatore M., Putignano G.: *Contracc. Fert. Sess.*, 9, 1, 71, 1982.
- 4) Altchek A.: *Clin. Pediatrica del Nord America*, 5, 994, 1975.
- 5) Hammerslag M. R.: *Pediatrics*, 62, 57, 1978.
- 6) Heink Marks A., Cohen M. I.: *J. Pediatr.*, 90, 634, 1977.