

Original Research

Assessment of common pediatric gynecological disorders

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ABSTRACT:

Background: Pediatric gynecology is a subspecialised area of gynecology which has not received its due attention. It is only for the last two decades that the concept of having separate clinics has emerged. The present study was conducted to assess common pediatric gynecological disorders. **Materials & Methods:** 70 pediatric patients with gynecological disorders in age ranged of 8-14 years were included. Pediatric gynecology disorders were recorded. **Results:** Age group 8-9 years had 8, 9-10 years had 10, 10-11 years had 20 and 11-12 years had 32 cases. Common gynecological problems were labial synechia was seen in 4, vulvovaginitis was seen in 6, perineal injury in 10, sexual assault in 12, puberty menorrhagia in 5, ambiguous genitalia in 3, hydrometrocolpos in 18, haematometocolpos in 7 and ovarian cyst/tumours in 5 cases. **Conclusion:** Common gynecological problems were labial synechia, vulvovaginitis, perineal injury, sexual assault, puberty menorrhagia, ambiguous genitalia, hydrometrocolpos, haematometocolpos and ovarian cyst/tumours.

Key words: Labial synechia, vulvovaginitis, perineal injury

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INTRODUCTION

Gynecological disorders which affect children are not similar to those that affect the adult. Knowledge of some of these conditions and an approach to management are, therefore, important for the gynecologist. Pediatric gynecology is a subspecialised area of gynecology which has not received its due attention.¹ It is only for the last two decades that the concept of having separate clinics has emerged. A pediatric patient undergoing her first gynecological examination should be treated with particular care. A gentle caring attitude enable the patient to relax at the time and during all future gynecological examinations.²

The examination and history of a pediatric gynecologic patient involve information gathering in order to limit anxiety for the child and optimize the ability to diagnose and treat her.³ Child abuse recognition is increasing, and its management requires special expertise. The early management of disorders of sexual development (DSDs) has changed with a focus towards early identification and consideration of delayed surgical management.⁴ The multidisciplinary

evaluation and management of the pelvic mass in the child involves careful preoperative evaluation to allow for conservative management.⁵ The present study was conducted to assess common pediatric gynecological disorders.

MATERIALS & METHODS

The present study comprised of 70 pediatric patients with gynecological disorders. All patients were in age ranged of 8-14 years. Parental consent was obtained before starting the study. Ethical clearance was obtained.

Data such as name, age etc. was recorded. In all patients' sibling history, mode of delivery, prenatal history and postnatal history were recorded. Nutritional status, immunization and mile stones of development were also noted. History of any medical disorders in the mother and any history of drug intake especially hormones were also elicited. Any history of consanguinity was recorded. Results thus found were assessed statistically. P value less than 0.05 was considered significant.

RESULTS

Table I: Age wise distribution of cases

Age group (Years)	Number	P value
8-9	8	0.05
9-10	10	
10-11	20	
11-12	32	

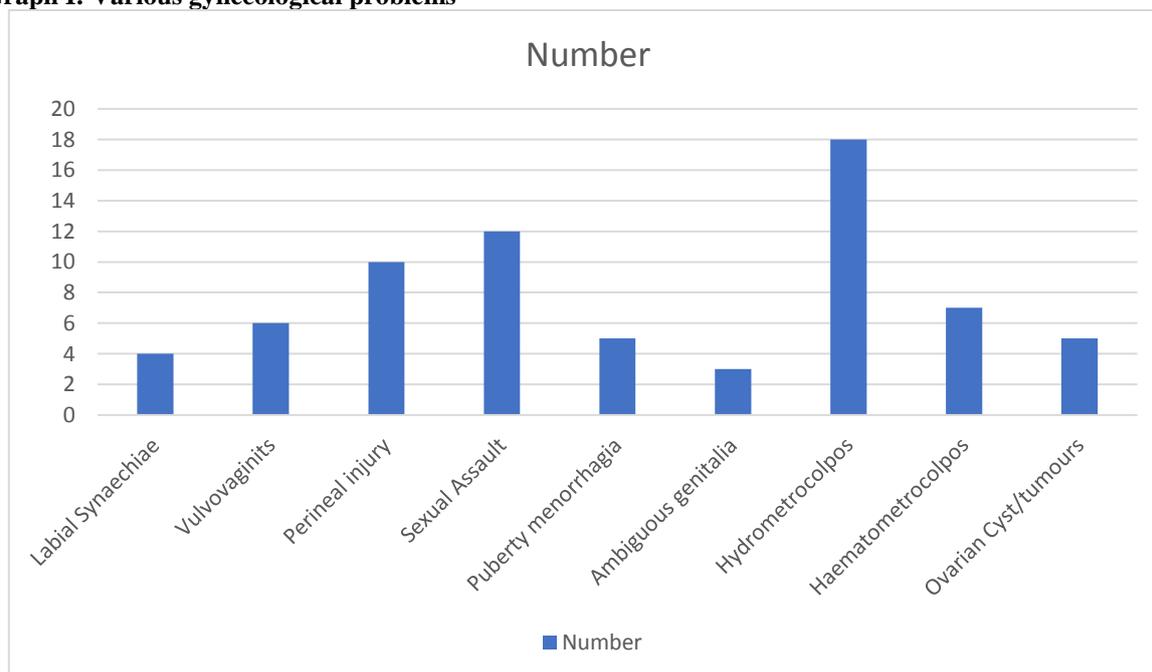
Table I shows that age group 8-9 years had 8, 9-10 years had 10, 10-11 years had 20 and 11-12 years had 32 cases. The difference was significant (P< 0.05).

Table II: Various gynecological problems

Gynecological problems	Number	P value
Labial Synaechiae	4	0.02
Vulvovaginitis	6	
Perineal injury	10	
Sexual Assault	12	
Puberty menorrhagia	5	
Ambiguous genitalia	3	
Hydrometrocolpos	18	
Haematometocolpos	7	
Ovarian Cyst/tumours	5	

Table II, graph I shows that common gynecological problems were labial synaechiae was seen in 4, vulvovaginitis was seen in 6, perineal injury in 10, sexual assault in 12, puberty menorrhagia in 5, ambiguous genitalia in 3, hydrometrocolpos in 18, haematometocolpos in 7 and ovarian cyst/tumours in 5 cases. The difference was significant (P< 0.05).

Graph I: Various gynecological problems



DISCUSSION

Pediatric and adolescent gynecology focuses on a unique subset of gynecologic disorders among younger females. In the pediatric patient, gynecologic issues often present as vulvar and vaginal problems, while in the adolescent patient, complaints of abdominopelvic pain and abnormal menstrual bleeding commonly result in a gynecologic evaluation.⁶ Inflammation of the vulvar and vaginal tissues and complaints of vaginal discharge are

common gynecologic problems. In children, the hypoestrogenic state of the vagina contributes to the susceptibility of infection.⁷ The vaginal mucosa is thin and the vagina has an alkaline pH, making it different from the vagina of adolescents and adults. Children are also at an increased risk from behavioral aspects, such as poor perineal hygiene leading to fecal contamination, poor hand washing, and frequent play that can allow dirt or sand to cause irritation or infection.⁸ A child may present with discharge,

irritation, pruritis, urinary symptoms, abnormal odor or erythema of the vulva. In adolescents, the increase in estrogen further develops the vaginal epithelium, making it more resistant to infection. Vaginitis, cervicitis and salpingitis are therefore more common than vulvovaginitis in this age group.⁹ The present study was conducted to assess common pediatric gynecological disorders.

In presents study, age group 8-9 years had 8, 9-10 years had 10, 10-11 years had 20 and 11-12 years had 32 cases. Gaytri et al¹⁰ in their study 50 cases with gynecological problems up to the age of 12 years attending the government general hospital, Guntur were studied. 96% of cases belonged to low socio-economic group. 42% were from urban areas 58% were from rural areas. Their educational status was very poor. Only 20% are attending the primary school. 30% never attended the school. Rest was drop outs before primary school. In this series, the incidence of labial –vulvar agglutination was 10%. The Gynecologist should be able to diagnose and treat pediatric gynecological problems. As the examination and investigations are difficult in children and needs expertise, the gynecologists should undergo training.

We found that common gynecological problems were labial synaechiae was seen in 4, vulvovaginitis was seen in 6, perineal injury in 10, sexual assault in 12, puberty menorrhagia in 5, ambiguous genitalia in 3, hydrometrocolpos in 18, haematometocolpos in 7 and ovarian cyst/tumours in 5 cases. In one prospective study evaluating vulvovaginitis in patients 12 months to 12 years of age, infections from streptococcus, particularly *S. pyogenes*, were the most common infection diagnosed. In another study of 80 prepubertal girls with vulvovaginitis, *S. pyogenes* was the pathogen in 59%. This infection should respond to appropriate oral antibiotic therapy, such as penicillin or ampicillin. Recurrent vulvovaginitis with *S. pyogenes* has been documented from asymptomatic bacterial carriage within the nasopharynx.¹¹

Laboratory assessment should begin with a pregnancy test and a complete blood count with platelet count to assess for anemia and thrombocytopenia.¹² Coagulation studies including prothrombin time and partial thromboplastin time are also generally indicated.¹³ On occasion, a patient may have heavy bleeding that is not reflected in the complete blood count, and the patient may present on initial assessment with a normal hemoglobin, hematocrit and platelet count. Therefore, a serum ferritin or reticulocyte count can be helpful, as a low ferritin with a normal hemoglobin count suggests depleted iron stores, and an elevated reticulocyte count can indicate increased blood loss.¹⁴ The partial thromboplastin time should be normal in patients with a platelet dysfunction and may also be normal in patients with VWD. If history indicates a bleeding disorder, if bleeding is severe, prolonged or associated

with menarche, or if the initial screen is abnormal, specific laboratories for coagulation defects should be tested.¹⁵

CONCLUSION

Authors found that common gynecological problems were labial synaechiae, vulvovaginitis, perineal injury, sexual assault, puberty menorrhagia, ambiguous genitalia, hydrometrocolpos, haematometocolpos and ovarian cyst/tumours.

REFERENCES

1. Shapiro RA, Schubert CJ, Siegel RM. Neisseria gonorrhoea infections in girls younger than 12 years of age evaluated for vaginitis. *Pediatrics* 104(6), e72 (1999).
2. Cuadros J, Mazon A, Martinez R et al. The aetiology of paediatric inflammatory vulvovaginitis. *Eur. J. Pediatr.* 163, 105–107 (2004).
3. Heymann W. Streptococcal vulvovaginitis. *J. Am. Acad. Dermatol.* 61, 94–95 (2009).
4. Hansen MT, Sanchez VT, Eyster K, Hansen KA. Streptococcus pyogenes pharyngeal colonization resulting in recurrent prepubertal vulvovaginitis. *J. Pediatr. Gynecol.* 20, 315–317 (2007).
5. Yerkes EB. Urologic issues in the pediatric and adolescent gynecology patient. *Obstet. Gynecol. Clin. North Am.* 36, 69–84 (2009).
6. Tibaldi C, Cappello N, Latino MA, Masuelli G, Marini S, Benedetto C. Vaginal and endocervical microorganisms in symptomatic and asymptomatic non-pregnant females: risk factors and rates of occurrence. *Clin. Microbiol. Infect.* 15(7), 670–679 (2009).
7. Jasper JM, Ward MA. Shigella vulvovaginitis in a prepubertal child. *Pediatr. Emerg. Care* 22(8), 585–586 (2006).
8. Caputo RV. Fungal infections in children. *Dermatol. Clin.* 4(1), 137–149 (1986).
9. Deligeorgiou E, Salakos N, Makrakis E, Chassiakos D, Hassan EA, Christopoulos P. Infections of the lower female genital tract during childhood and adolescence. *Clin. Exp. Obstet. Gynecol.* 31(3), 175–178 (2004).
10. Gayatri Anipindi, Vani Isukapalli. A study of pediatric gynecological problems in a tertiary hospital. *IAIM*, 2018; 5(1): 64-69.
11. Jones JG, Worthington T. Genital and anal injuries requiring surgical repair in females less than 21 years of age. *J. Pediatr. Adolesc. Gynecol.* 21, 207–211 (2008).
12. Abou-Jaoude W, Sugarman JM, Fallat ME, Casale AJ. Indicators of genitourinary tract injury or anomaly in cases of pediatric blunt trauma. *J. Pediatr. Surg.* 31(1), 86–90 (1996).
13. McAleer IM, Kaplan GW, Scherz HC, Packer MG, Lynch FP. Genitourinary trauma in the pediatric patient. *Urology* 42(5), 563–568 (1993).
14. Golan A, Lurie S, Sagiv R, Glezerman M. Continuous-flow vaginoscopy in children and adolescents. *J. Am. Assoc. Gynecol. Laparosc.* 7(4), 526–528 (2000).
15. Habek D, Kulas T. Nonobstetric vulvovaginal injuries: mechanism and outcome. *Arch. Gynecol. Obstet.* 275(2), 93–97 (2007)